

## Appendix C



### **TRAFFIC IMPACT ASSESSMENT RESIDENTIAL DEVELOPMENT 183 MAIN STREET E KINGSVILLE, ONTARIO**

PROJECT NO. 19-098

DATED: OCTOBER 15, 2019



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## 1. INTRODUCTION

BairdAE has been retained to prepare a Traffic Impact Assessment in support of proposed residential development for lands known municipally as 183 Main Street East in the Town of Kingsville. The subject lands are approximately 0.42 hectares (ha) in size and are bounded by Main Street E. to the north, agriculture land to the east and south, and residential development to the west.

The proposed development includes five (5) row townhouses and twenty-eight (28) unit condominium apartment building. A total of 47 parking spaces will be provided on site. The development will generate additional 233 daily, 17 morning peak and 21 evening peak traffic. The access to the development will be provided via Main Street East. The development location is shown in Exhibit 1 and Appendix A provides a proposed concept site plan.



**Exhibit 1 - Location Plan**

### 1.1 Scope

It is anticipated that the development will be built by 2021 and as a result, the following future horizon periods (conditions) are established as part of this study:

- 2021 Future Condition;
- 2026 Future Condition; and
- 2031 Future Condition

This study has considered impacts of the proposed development's generated traffic at the following intersections:

- Main Street East and Access Road/Kingsville School Access;
- Main Street East and Remark/Wigle Avenue; and
- Main Street East and Jasperson Drive/Kingsville Square Access.

## **1.2 Analysis Methodology**

A transportation analysis was completed to determine the existing and future operation conditions of intersection and individual turning movements. The operational analyses were primarily based on procedures set out in the Highway Capacity Manual (2010) with the assistance of Synchro 10. Several performance measures are used in the analysis of signalized and unsignalized intersections including the following:

- Level of Service (LOS) – a measure of the average vehicle delay experienced by the motorists attempting to travel through the intersection. LOS is measured from “A” to “F” with peak hour LOS in the “A” to “D” range being considered acceptable by most and a LOS of F representing unacceptable delays;
- Delay – the additional travel time experienced by a driver compared to free-flow conditions; and
- Queue Lengths – the Synchro Software measures both the 50th percentile and 95th percentile maximum queue lengths. The 50th percentile queue (the median) is the maximum back of queue length during a typical traffic cycle. The 95th percentile queue is the maximum back of queue length during a typical traffic cycle with 95th percentile traffic volumes. The 95th percentile queue measures the queue length that 95 percent of the sample lies below. The 95th percentile critical queue lengths were identified for movements where the queue surpassed the estimated length of the storage bay.

Taken together, these measures provide an indication of delay and the number of vehicles that can be accommodated through an intersection.

## **2.0 EXISTING CONDITION**

### **2.1 Road Network Characteristics**

**Main Street East** is an east-west arterial road with a posted speed of 50km/h within the vicinity of the proposed development. Main Street East has a three-lane cross section with dedicated left-turning lanes with central medians on the eastbound and westbound approaches.

**Remark Drive/Wigle Avenue** is the north-south minor collector road with a posted speed of 50km/h. Remark Drive has two-lane cross section with share turning lanes for the northbound and southbound approaches.

**Jasperson Drive** is the north-south collector road with a posted speed of 50km/h. Jasperson Dr has a three-lane cross section with dedicated turning lanes for the northbound and southbound approaches.

### **1.2 Key Intersections**

The intersection of Main Street E. with Jasperson Drive/Square Access Road is a 4-leg signalized intersection. The intersection has the following configuration:

- Eastbound and westbound lane have one left turn lane and one through-right shared lane.
- Southbound lane has one left turn land and one through-right shared lane.
- Northbound lane is private driveway and has one left-through-right shared lane.

The intersection Main Street E. with Wigle Avenue/Remark Drive is a 4-leg signalized intersection. The intersection has the following configuration:

- Eastbound and westbound lane has one left turn lane and one through-right shared lane.
- Northbound and Southbound lane has one left-through-right shared lane.

The intersection of Main Street E. with Kingsville School Access is a 3-leg unsignalized intersection. The north leg has limited access and use to enter the school to drop-off. The westbound and eastbound approach has one left turn lane and one through-right shared lane.

### ***2.3 Existing Traffic Volumes***

Traffic counts were obtained from RC Spencer Associated Inc traffic report dated 2019. Counts were taken on November 1, 2018 and recorded during a.m. peak, afternoon peak and p.m. peak hour. The existing traffic volumes and other relevant data are included in Appendix A.

## **3.0 DEVELOPMENT TRAFFIC**

This section will describe the development accesses, trip generation, and trip distribution and assignment.

### ***3.1 Development Access***

The intersection of Main Street E with Access Road/Kingsville School Access will be a 4-leg unsignalized intersection with stop control access road. The intersection has the following configuration:

- Eastbound and westbound lane will have one left turn lane and one through-right shared lane.
- Northbound and Southbound approach has one left-through-right shared lane.

It is noted that the north leg will be utilized as limited access until 2026. Once the school site is redeveloped into residential development, the north leg will have full access. A site plan is provided in Appendix D.

### ***3.2 Trip Generation***

The number of vehicle trips anticipated to be generated by the proposed development was calculated based on trip generation rates published by The Institution of Transportation Engineers (ITE) Trip Generation 9th Edition.

The trip generation of townhouse can be calculated from ITE 224. However, it is assumed that trip generated for townhouses are calculated from worst case scenario i.e. ITE 210 (Single Family Homes). The trip generation of condominium apartment units are based on ITE 221 (Low Rise Apartment) category.

Description of Land use, ITE codes, unit sizes, trip generation rate and trip generation for daily and peak hours are provided in Table 1. Appendix B provides all the relevant charts.

Table 1: Trip Generation

| Use                  | ITE | UNITS | AADT | Trip Generated |     |         |     |
|----------------------|-----|-------|------|----------------|-----|---------|-----|
|                      |     |       |      | AM Hour        |     | PM Hour |     |
|                      |     |       |      | In             | Out | In      | Out |
| 183 Main Street      |     |       |      |                |     |         |     |
| Row Townhouses       | 210 | 5     | 48   | 1              | 3   | 3       | 2   |
| Condominium Building | 221 | 28    | 185  | 3              | 10  | 11      | 6   |
| Total Trips          |     |       | 233  | 4              | 13  | 14      | 8   |

**Note:** *Italic font and underlined* – constructed

### ***3.3 Trip Distribution and Assignment***

The trip distribution of development traffic is based on the traffic study prepared by RC Spencer Associates Inc dated April 2019. It is assumed that the 52 percent of volume generated from the proposed development will travel to/from west of Main Street and 48 percent from/to east of Main Street E. The site development traffic distribution is shown in figures 1.2, 2.2 and 3.2 in Appendix B.

## **4.0 FUTURE CONDITION**

### ***4.1 Growth Rate***

For this study, a conservative growth rate of 2% per year was assumed to reflect growth in background traffic volumes. Similar growth rate is applied in the RC Spencer Associates Inc. traffic study. The projected traffic volumes are provided in Appendix B.

### ***4.2 Future Background Development***

In accordance with Town of Kingsville staff, the traffic study prepared by RC Spencer Associated Inc. dated April 2019 should be used as reference. Further, the selected horizon period in the report for analysis generally coincides with the full built-out of proposed development. The estimated future development traffic including expected construction are provided in Table 2:

Table 2: Future Development - Trip Generation

| Use                      | ITE      | UNITS        | Trip Generated 1 |            |            |            |
|--------------------------|----------|--------------|------------------|------------|------------|------------|
|                          |          |              | AM Hour          |            | PM Hour    |            |
|                          |          |              | In               | Out        | In         | Out        |
| <b>Constructed 2021</b>  |          |              |                  |            |            |            |
| Kingsville K-12 School   | 520      | See Report   | 304              | 162        | 84         | 226        |
| Van Minnen Development   | 221, 720 | 120, 1k sqft | 89               | 54         | 67         | 110        |
| Petretta Development     | 820, 221 | 24, 1k sqft  | 6                | 10         | 20         | 19         |
| Royal Oak Development    | 210      | 106          | 20               | 58         | 66         | 39         |
| OTIS – Ph1 Development   | 934, 820 | 1k sqft each | 108              | 99         | 133        | 131        |
| <b>Constructed 2026</b>  |          |              |                  |            |            |            |
| Remark Farms Development | 210      | 59           | 11               | 33         | 37         | 21         |
| OTIS – Ph2 Development   | 934, 820 | 1k sqft each | 56               | 49         | 90         | 91         |
| Petretta Development     | 221      | 36           | 3                | 10         | 10         | 6          |
| <b>Constructed 2031</b>  |          |              |                  |            |            |            |
| School Re-development    | 221      | 250          | 23               | 67         | 67         | 43         |
| Youssef Development      | 210      | 84           | 16               | 46         | 52         | 31         |
| Moavro Development       | 820, 221 | 95; 10k sqft | 17               | 30         | 50         | 43         |
| <b>Total Trips</b>       |          |              | <b>236</b>       | <b>735</b> | <b>811</b> | <b>470</b> |

Note: 1- Trips obtained from RC Spencer Traffic Report

A trip distribution of future development traffic is obtained from Traffic Impact Report prepared by RC Spencer Associates Inc. dated January 2019. Appendix B contain detailed development traffic in figures 1.2, 2.2 and 3.2.

There are no planned improvements to the transportation system that may impact traffic in the study area, within the considered horizon periods. Hence, it is expected that improvements to the cyclist/pedestrian infrastructure will occur in the near future.

### 4.3 Future Condition

Development traffic volumes were added to the forecasted (2021, 2026 and 2031) background traffic volumes to obtain corresponding total traffic volumes at intersections. The projected total future volumes are shown in figures 1.3, 2.3 and 3.3 (see Appendix B).

## 5.0 INTERSECTION OPERATIONS

The forecasted 2021, 2026 and 2031 traffic volumes for the study intersections are evaluated using the Synchro/Sim Traffic software which automates the procedures contained in the Highway Capacity Manual 2010.

The existing and future peak hours analysis results are included in Table 3, Table 4 and Table 5 and corresponding worksheets are included in Appendix C.

Table 3: 2021 Background Conditions – Level of Service

| Intersection                                               | A.M. Peak Hour |      |             | P.M. Peak Hour |      |             |
|------------------------------------------------------------|----------------|------|-------------|----------------|------|-------------|
|                                                            | LOS            | v/c  | Delay (sec) | LOS            | v/c  | Delay (sec) |
| Main Street E. and Access Road/School (Unsignalized)       |                |      |             |                |      |             |
| EB L                                                       | A              | 0.16 | 8.9         | A              | 0.06 | 9.8         |
| EB TR                                                      | A              | 0.37 | 0.0         | A              | 0.38 | 0.0         |
| WB L                                                       | A              | 0.0  | 9.7         | A              | 0.01 | 9.9         |
| WB TR                                                      | A              | 0.31 | 0.0         | A              | 0.44 | 0.0         |
| NB LTR                                                     | C              | 0.05 | 17.0        | C              | 0.02 | 15.5        |
| Overall LOS                                                | A              |      |             | A              |      |             |
| Main Street E. and Wigle Ave/Remark Dr (Signalized)        |                |      |             |                |      |             |
| EB L                                                       | A              | 0.02 | 4.6         | A              | 0.06 | 4.0         |
| EB TR                                                      | C              | 0.45 | 25.7        | B              | 0.73 | 19.7        |
| WB L                                                       | A              | 0.15 | 5.8         | A              | 0.17 | 4.4         |
| WB TR                                                      | B              | 0.48 | 12.6        | B              | 0.66 | 15.1        |
| NB LTR                                                     | B              | 0.25 | 13.9        | C              | 0.56 | 24.5        |
| SB LTR                                                     | B              | 0.10 | 14.6        | B              | 0.17 | 19.4        |
| Overall LOS                                                | B              |      |             | B              |      |             |
| Main Street E. and Jasperson Dr/Square Access (Signalized) |                |      |             |                |      |             |
| EB L                                                       | C              | 0.46 | 23.6        | D              | 0.65 | 40.3        |
| EB TR                                                      | C              | 0.73 | 21.8        | B              | 0.64 | 15.8        |
| WB L                                                       | B              | 0.08 | 10.8        | A              | 0.08 | 9.3         |
| WB TR                                                      | C              | 0.82 | 26.0        | C              | 0.87 | 26.6        |
| NB LTR                                                     | B              | 0.08 | 11.8        | B              | 0.14 | 15.6        |
| SB L                                                       | B              | 0.32 | 17.7        | C              | 0.48 | 24.0        |
| SB TR                                                      | A              | 0.16 | 6.2         | A              | 0.27 | 5.6         |
| Overall LOS                                                | C              |      |             | C              |      |             |

Table 4: 2026 Background Conditions – Level of Service

| Intersection                                               | A.M. Peak Hour |      |             | P.M. Peak Hour |      |             |
|------------------------------------------------------------|----------------|------|-------------|----------------|------|-------------|
|                                                            | LOS            | v/c  | Delay (sec) | LOS            | v/c  | Delay (sec) |
| Main Street E. and Access Road/School (Unsignalized)       |                |      |             |                |      |             |
| EB L                                                       | A              | 0.17 | 9.2         | B              | 0.07 | 10.4        |
| EB TR                                                      | A              | 0.42 | 0.0         | A              | 0.44 | 0.0         |
| WB L                                                       | B              | 0.0  | 10.2        | B              | 0.01 | 10.4        |
| WB TR                                                      | A              | 0.35 | 0.0         | A              | 0.53 | 0.0         |
| NB LTR                                                     | C              | 0.05 | 18.9        | C              | 0.03 | 17.6A       |
| Overall LOS                                                | A              |      |             | A              |      |             |
| Main Street E. and Wigle Ave/Remark Dr (Signalized)        |                |      |             |                |      |             |
| EB L                                                       | A              | 0.02 | 3.4         | A              | 0.08 | 4.5         |
| EB TR                                                      | B              | 0.71 | 17.9        | C              | 0.86 | 28.6        |
| WB L                                                       | A              | 0.14 | 3.9         | A              | 0.24 | 5.4         |
| WB TR                                                      | A              | 0.48 | 8.8         | C              | 0.78 | 20.2        |
| NB LTR                                                     | B              | 0.45 | 18.9        | C              | 0.60 | 25.6        |
| SB LTR                                                     | B              | 0.20 | 17.0        | B              | 0.18 | 18.9        |
| Overall LOS                                                | B              |      |             | C              |      |             |
| Main Street E. and Jasperson Dr/Square Access (Signalized) |                |      |             |                |      |             |
| EB L                                                       | C              | 0.56 | 31.2        | F              | 0.93 | 93.4        |
| EB TR                                                      | C              | 0.77 | 22.5        | B              | 0.68 | 16.4        |
| WB L                                                       | B              | 0.10 | 11.0        | A              | 0.09 | 10.0        |
| WB TR                                                      | C              | 0.86 | 28.1        | C              | 0.92 | 32.3        |
| NB LTR                                                     | B              | 0.09 | 12.1        | B              | 0.20 | 16.2        |
| SB L                                                       | B              | 0.36 | 19.2        | C              | 0.68 | 32.8        |
| SB TR                                                      | A              | 0.18 | 6.4         | A              | 0.36 | 8.3         |
| Overall LOS                                                | C              |      |             | C              |      |             |

During 2026 condition, the westbound turning movement at the intersection Talbot Street with Ure Street operate at LOS F in pm peak hour and no reserve found for this movement therefore mitigation measures are required. The intersection operates at overall acceptable LOS.

All other intersection with Main Street E operates at acceptable level of service.

Table 5: 2031 Background Conditions – Level of Service

| Intersection                                                | A.M. Peak Hour |      |             | P.M. Peak Hour |      |             |
|-------------------------------------------------------------|----------------|------|-------------|----------------|------|-------------|
|                                                             | LOS            | v/c  | Delay (sec) | LOS            | v/c  | Delay (sec) |
| Main Street E. and Access Road/Future Access (Unsignalized) |                |      |             |                |      |             |
| EB L                                                        | A              | 0.02 | 9.4         | B              | 0.06 | 11.1        |
| EB TR                                                       | A              | 0.46 | 0.0         | A              | 0.50 | 0.0         |
| WB L                                                        | B              | 0.0  | 10.5        | B              | 0.01 | 10.9        |
| WB TR                                                       | A              | 0.40 | 0.0         | A              | 0.60 | 0.0         |
| NB LTR                                                      | C              | 0.05 | 16.7        | C              | 0.03 | 20.4        |
| SB LTR                                                      | C              | 0.23 | 19.4        | D              | 0.21 | 25.4        |
| Overall LOS                                                 | A              |      |             | B              |      |             |
| Main Street E. and Wigle Ave/Remark Dr (Signalized)         |                |      |             |                |      |             |
| EB L                                                        | A              | 0.02 | 3.4         | A              | 0.13 | 5.5         |
| EB TR                                                       | C              | 0.82 | 23.5        | D              | 1.0  | 51.6        |
| WB L                                                        | A              | 0.18 | 4.2         | A              | 0.34 | 7.5         |
| WB TR                                                       | A              | 0.50 | 9.4         | C              | 0.92 | 31.6        |
| NB LTR                                                      | C              | 0.50 | 20.3        | C              | 0.63 | 26.8        |
| SB LTR                                                      | B              | 0.24 | 17.5        | B              | 0.19 | 18.2        |
| Overall LOS                                                 | B              |      |             | D              |      |             |
| Main Street E. and Jasperson Dr/Square Access (Signalized)  |                |      |             |                |      |             |
| EB L                                                        | D              | 0.67 | 44.8        | F              | 1.12 | 148.3       |
| EB TR                                                       | C              | 0.86 | 27.6        | C              | 0.79 | 22.1        |
| WB L                                                        | B              | 0.16 | 13.3        | B              | 0.14 | 12.5        |
| WB TR                                                       | C              | 0.89 | 30.0        | F              | 1.11 | 84.5        |
| NB LTR                                                      | B              | 0.10 | 12.3        | B              | 0.22 | 15.7        |
| SB L                                                        | C              | 0.49 | 22.2        | C              | 0.72 | 33.1        |
| SB TR                                                       | A              | 0.23 | 5.9         | B              | 0.41 | 12.9        |
| Overall LOS                                                 | C              |      |             | D              |      |             |

During 2031 condition, the eastbound and westbound turning movement at the intersection Main Street E. with Jasperson Drive operate at LOS F in pm peak hour and no reserve found for this movement, therefore mitigation measures are required. It is noted that numerous future developments are contributing to the need for improvements and not solely this proposed development. Further, Intersection improvements are mentioned in the RC Spencer Associates Inc. traffic study dated April 2019. With these improvements in place, the intersection will operate at acceptable level of service. Details of improvement and results are found in the Spencer report.

All other intersection with Main Street E. operates at acceptable level of service.

## 6.0 CONCLUSION

Based on our review, we provide the following comments for the proposed development:

- The development is expected to generate 17 two-ways trips during morning peak hour and 21 two-way trips during evening peak hour.
- The background growth rate of 2 percent is considered in the modelling as it represents worst case scenario.
- One access road is provided from Main Street E. for the development. The intersection is 4-leg intersection with “Stop” control on access road. Intersection northbound approaches will have one left-through-right shared lane and southbound will have limited access until 2026. In 2031, intersection will be full access consisting of one left-through-right shared lane.
- Under future conditions, the intersections of Main Street E. with Access Road/Kingsville School Access operate at acceptable level of service during 2021, 2026 and 2031 future conditions.
- Under future conditions, the intersections of Main Street with Wigle Avenue/Remark Drive operate at acceptable level of service during 2021, 2026 and 2031 future conditions.
- Under future conditions, the intersections of Main Street E. with Jasperson Dr/Square Mall Access road operate at acceptable level of service during 2021 condition. The level of service deteriorates in 2026 and 2031 future conditions. Intersection improvement are required and mentioned in RC Spencer Associate Traffic Study. With improvement in place intersection operate at actable level of service.

In conclusion, the intersections of Main Street E. with Access Road/Kingsville School Access remain unsignalized without further improvements.

All of which is respectfully submitted.

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|                    |                                           |             |  |
|--------------------|-------------------------------------------|-------------|--|
| DATE: OCT 11, 2019 | PROJECT NO: 19-098                        |             |  |
|                    | PROJECT TITLE: ROW TOWNHOUSES/CONDOMINIUM |             |  |
|                    | 183 MAIN STREET EAST, KINGSVILLE          |             |  |
|                    | SHEET TITLE: SURROUNDING DEVELOPMENT      |             |  |
| SCALE: NTS         |                                           | SHEET NO: 2 |  |
| DRAWN BY: D.B.     |                                           |             |  |
| CHECKED BY: S.T.   |                                           |             |  |
| DATE: OCT 11, 2019 |                                           |             |  |
| DATE: OCT 11, 2019 | REVISIONS                                 |             |  |
|                    |                                           |             |  |
|                    |                                           |             |  |
|                    |                                           |             |  |

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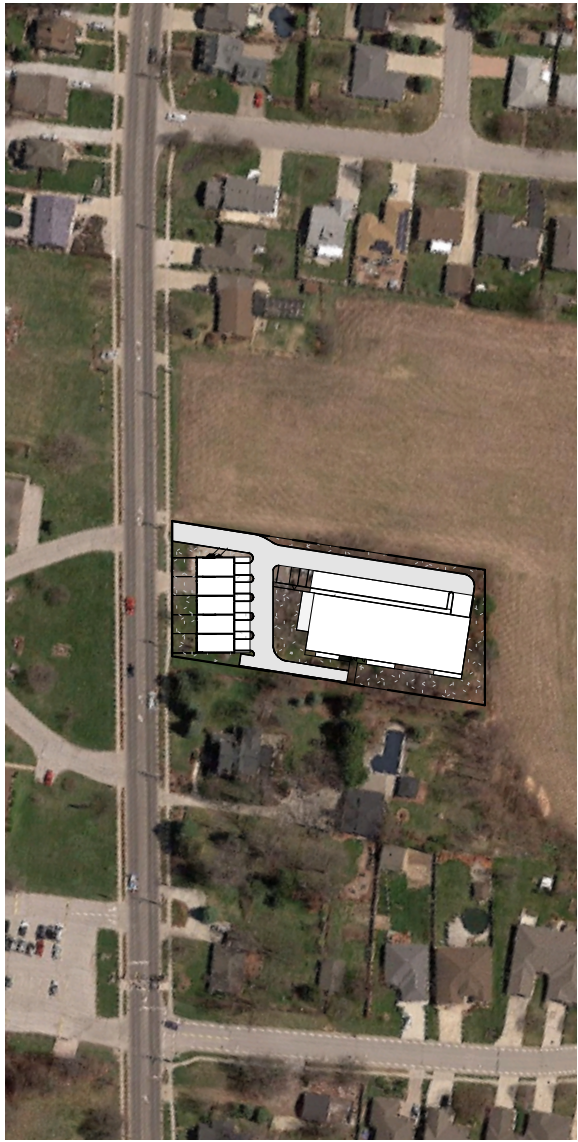
1000 1ST FLOOR, SUITE #102  
VANOCAN, ONTARIO  
M9A 4A4



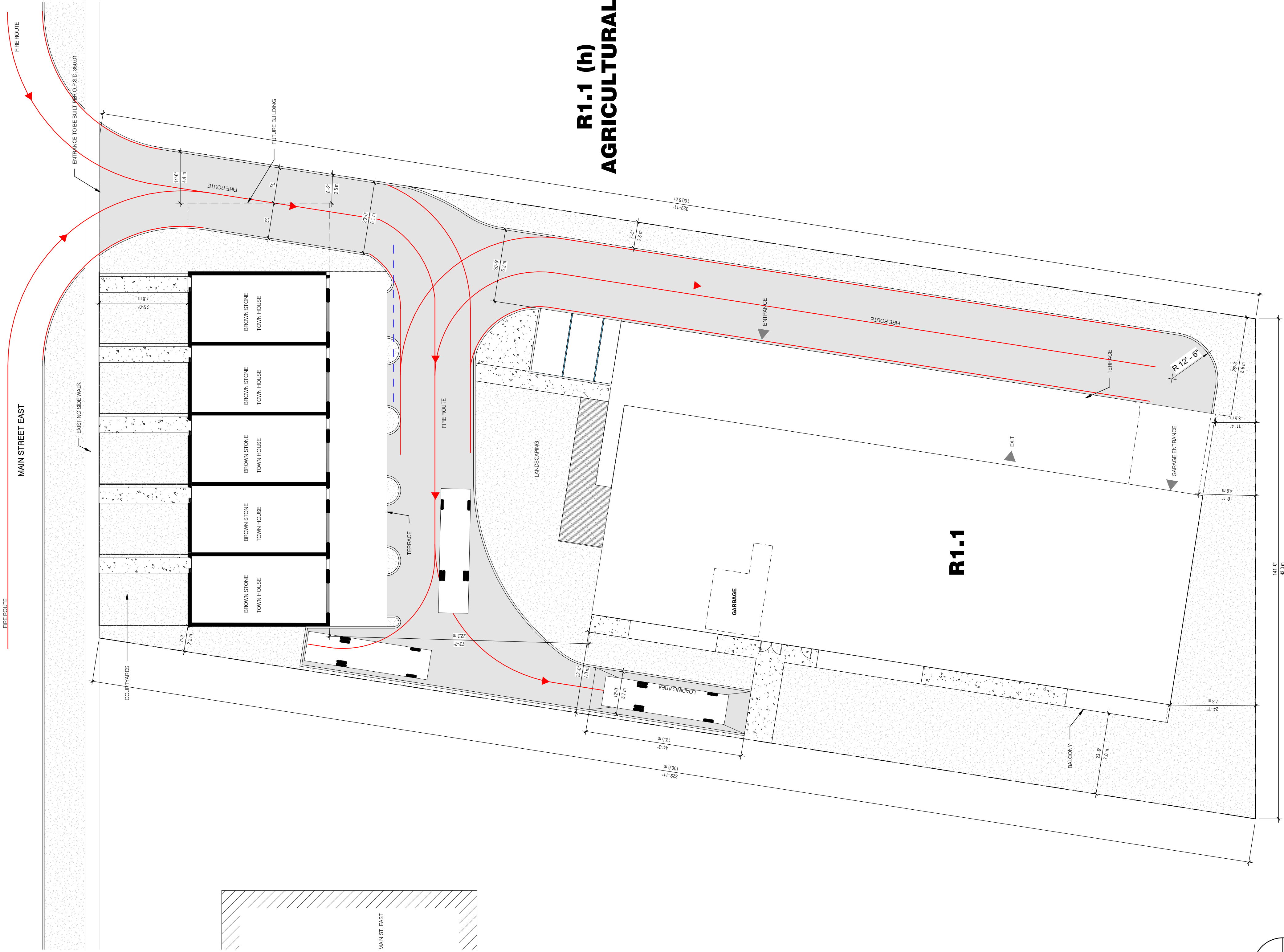
## Appendix A

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### BACKGROUND TRAFFIC DATA AND OTHER RELATED INFORMATION



KEY PLAN



SITE  
SCALE: 1 : 200

| SITE DATA MATRIX                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                             | OBC REFERENCE                                                                                                                  |                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------|
| PROJECT DESCRIPTION:<br>6 STOREY CONDOMINIUM - 28 UNITS<br>&<br>5 UNIT ROW HOUSING                                                                                                                                                                                                                                                                                                                                                                                           | <div><input checked="" type="checkbox"/> NEW<br/><input type="checkbox"/> ADDITION<br/><input type="checkbox"/> ALTERATION<br/><input type="checkbox"/> CHANGE OF USE</div> | <div><input checked="" type="checkbox"/> PART 3<br/><input type="checkbox"/> PART 9<br/><input type="checkbox"/> PART 11</div> |                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                             |                                                                                                                                |                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                             |                                                                                                                                |                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                             |                                                                                                                                |                     |
| ZONING DESIGNATION: R1.1                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                             |                                                                                                                                |                     |
| MAJOR OCCUPANCY: RESIDENTIAL                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                             |                                                                                                                                |                     |
| BUILDING CLASSIFICATION: GROUP C, 3.2.2.43, UP TO 6 STOREYS, SPRINKLERED, NONCOMBUSTIBLE CONSTRUCTION                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                                                                                                                                |                     |
| SITE AREA                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                             | GROSS AREA                                                                                                                     |                     |
| EXISTING: 4,269m <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                | N/A                                                                                                                                                                         | EXISTING: N/A                                                                                                                  | N/A                 |
| PROPOSED: 4,269m <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1,200m <sup>2</sup> (CONDO) + 353m <sup>2</sup> (TOWN)                                                                                                                      | PROPOSED:                                                                                                                      | 5,860m <sup>2</sup> |
| TOTAL: 4,269m <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1,643m <sup>2</sup>                                                                                                                                                         | TOTAL:                                                                                                                         | 5,860m <sup>2</sup> |
| LOT COVERAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                             | BUILDING HEIGHT                                                                                                                |                     |
| MAXIMUM: 40%                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 15m (50 ft)                                                                                                                                                                 | REQUIRED:                                                                                                                      | 11m                 |
| PROVIDED: 38%                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 42.4m (139'-3")                                                                                                                                                             | PROVIDED:                                                                                                                      | 18m                 |
| MINIMUM FRONT YARD DEPTH                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                             | MINIMUM SIDE YARD DEPTH (INTERIOR YARD)                                                                                        |                     |
| REQUIRED: 5.5m                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7.5m                                                                                                                                                                        | REQUIRED:                                                                                                                      | 1.5m                |
| PROVIDED: 7.6m                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3.5m                                                                                                                                                                        | PROVIDED:                                                                                                                      | 2.2m                |
| PARKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                             | LOADING SPACES                                                                                                                 |                     |
| USE CLASSIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                           | EXISTING: 0                                                                                                                                                                 | EXISTING:                                                                                                                      | 0                   |
| EXISTING: 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | PROPOSED: 4                                                                                                                                                                 | PROPOSED:                                                                                                                      | 1                   |
| PROPOSED: 47                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | REQUIRED: 4                                                                                                                                                                 | REQUIRED:                                                                                                                      | 1                   |
| REQUIRED: 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TOTAL: 4                                                                                                                                                                    | TOTAL:                                                                                                                         | 1                   |
| TOTAL: 47                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                             |                                                                                                                                |                     |
| MINIMUM LANDSCAPE AREA                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                             | SCREENING FENCE LENGTH                                                                                                         |                     |
| REQUIRED: 30%                                                                                                                                                                                                                                                                                                                                                                                                                                                                | N/A                                                                                                                                                                         | EXISTING:                                                                                                                      | N/A                 |
| PROPOSED: 1,090m <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                | 374m                                                                                                                                                                        | PROPOSED:                                                                                                                      | 243m                |
| TOTAL: 40%                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 374m                                                                                                                                                                        | TOTAL:                                                                                                                         | 243m                |
| PARKING TYPE                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                             | PROVIDED PARKING                                                                                                               |                     |
| VEHICLE PARKING - CONDOMINIUM                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                             | 37                                                                                                                             |                     |
| VEHICLE PARKING - ROW HOUSING                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                             | 10                                                                                                                             |                     |
| ACCESSIBLE PARKING                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                             | INCLUDED IN PARKING TOTAL                                                                                                      |                     |
| VISITOR PARKING                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                             | INCLUDED IN PARKING TOTAL                                                                                                      |                     |
| TOTAL PARKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 45                                                                                                                                                                          |                                                                                                                                | 47                  |
| BICYCLE PARKING                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1 SPACE /400m <sup>2</sup> TO A MAXIMUM OF 10 SPACES = 1643m <sup>2</sup> / 400m <sup>2</sup> = 4 SPACES                                                                    |                                                                                                                                | 26                  |
| LOADING SPACES                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1                                                                                                                                                                           |                                                                                                                                | 1                   |
| NOTE:<br>1. ALL EXTERIOR PATHS OF TRAVEL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 80.23 OF ONTARIO REGULATION 191/11 TO THE ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT AND SECTIONS 3.8.1.3 AND 3.8.3.2 OF THE ONTARIO BUILDING CODE<br>2. ALL CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 80.26(1) OF THE ONTARIO REGULATION 191/11 TO THE ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT AND SECTION 3.8.3.18 OF THE ONTARIO BUILDING CODE |                                                                                                                                                                             |                                                                                                                                |                     |

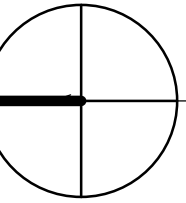
R1.1

R1.1

R1.1 (h)  
AGRICULTURAL

183 MAIN ST.E. CONDOMINIUMS

SITE PLAN CONCEPT



PROJECT TITLE  
183 MAIN STREET EAST  
KINGSTOWN ON, N9Y 1A5  
SHEET NUMBER  
19-069  
JOB NUMBER  
A2.1  
2015-05-30 12:28:04 PM

PARTNER CONSULTANTS  
BAIRD AE  
architect + engineering  
1000 - 267 Pelissier Street  
Windsor ON N9A 4K4  
A DIVISION OF MATTHEW J. BAIRD CONSULTING SERVICES INC.

102 - 27 Princess Street  
Leamington ON N8H 2X8





**MAIN ST. KINGSVILLE CONDOMINIUMS**  
183 Main Street East



**MAIN ST. KINGSVILLE CONDOMINIUMS**  
183 Main Street East

# Main St @ Remark Dr

## Morning Peak Diagram

### Specified Period

**From:** 7:00:00

**To:** 9:00:00

### One Hour Peak

**From:** 8:00:00

**To:** 9:00:00

**Municipality:** Kingsville

**Site #:** 0000000007

**Intersection:** Main St & Remark Dr

**TFR File #:** 7

**Count date:** 1-Nov-2018

**Weather conditions:**

Rain

**Person(s) who counted:**

Cam

**\*\* Signalized Intersection \*\***

**Major Road:** Main St runs W/E

North Leg Total: 53

North Entering: 34

North Peds: 2

Peds Cross:  $\times$

|        |    |   |   |    |
|--------|----|---|---|----|
| Heavys | 1  | 0 | 1 | 2  |
| Trucks | 0  | 0 | 0 | 0  |
| Cars   | 24 | 2 | 6 | 32 |
| Totals | 25 | 2 | 7 |    |



Heavys 0

Trucks 0

Cars 19

Totals 19

East Leg Total: 870

East Entering: 388

East Peds: 0

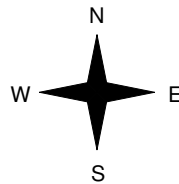
Peds Cross:  $\times$

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 7      | 2      | 383  | 392    |



Main St

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 0      | 0      | 11   | 11     |
| 8      | 2      | 404  | 414    |
| 1      | 1      | 27   | 29     |
| 9      | 3      | 442  |        |



Remark Dr

| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 5    | 0      | 0      | 5      |
| 322  | 2      | 6      | 330    |
| 47   | 1      | 5      | 53     |
| 374  | 3      | 11     |        |

Main St



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 466  | 4      | 12     | 482    |

Peds Cross:  $\times$

West Peds: 0

West Entering: 454

West Leg Total: 846

|        |    |        |    |   |    |    |
|--------|----|--------|----|---|----|----|
| Cars   | 76 | Cars   | 37 | 3 | 56 | 96 |
| Trucks | 2  | Trucks | 0  | 0 | 2  | 2  |
| Heavys | 6  | Heavys | 0  | 0 | 3  | 3  |
| Totals | 84 | Totals | 37 | 3 | 61 |    |



Wigle Ave

Peds Cross:  $\times$

South Peds: 2

South Entering: 101

South Leg Total: 185

## Comments

# Main St @ Remark Dr

## Mid-day Peak Diagram

### Specified Period

**From:** 11:00:00

**To:** 13:00:00

### One Hour Peak

**From:** 11:45:00

**To:** 12:45:00

**Municipality:** Kingsville

**Site #:** 0000000007

**Intersection:** Main St & Remark Dr

**TFR File #:** 7

**Count date:** 1-Nov-2018

### Weather conditions:

Rain

### Person(s) who counted:

Cam

### \*\* Signalized Intersection \*\*

**Major Road:** Main St runs W/E

North Leg Total: 79

North Entering: 33

North Peds: 6

Peds Cross:  $\bowtie$

|        |    |    |   |    |
|--------|----|----|---|----|
| Heavys | 0  | 0  | 0 | 0  |
| Trucks | 0  | 0  | 0 | 0  |
| Cars   | 13 | 11 | 9 | 33 |
| Totals | 13 | 11 | 9 |    |



|        |    |
|--------|----|
| Heavys | 0  |
| Trucks | 1  |
| Cars   | 45 |
| Totals | 46 |

East Leg Total: 1111

East Entering: 571

East Peds: 3

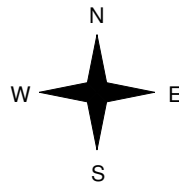
Peds Cross:  $\bowtie$

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 6      | 6      | 508  | 520    |



Main St

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 0      | 1      | 17   | 18     |
| 7      | 6      | 424  | 437    |
| 1      | 0      | 37   | 38     |
| 8      | 7      | 478  |        |



Remark Dr

| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 17   | 0      | 0      | 17     |
| 460  | 5      | 6      | 471    |
| 77   | 2      | 4      | 83     |
| 554  | 7      | 10     |        |

Main St



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 521  | 10     | 9      | 540    |

Peds Cross:  $\bowtie$

West Peds: 0

West Entering: 493

West Leg Total: 1013

|        |     |        |    |    |    |     |
|--------|-----|--------|----|----|----|-----|
| Cars   | 125 | Cars   | 35 | 11 | 88 | 134 |
| Trucks | 2   | Trucks | 1  | 0  | 4  | 5   |
| Heavys | 5   | Heavys | 0  | 0  | 2  | 2   |
| Totals | 132 | Totals | 36 | 11 | 94 |     |



Wigle Ave

Peds Cross:  $\bowtie$

South Peds: 2

South Entering: 141

South Leg Total: 273

## Comments

# Main St @ Remark Dr

## Afternoon Peak Diagram

### Specified Period

**From:** 14:00:00

**To:** 18:00:00

### One Hour Peak

**From:** 16:30:00

**To:** 17:30:00

**Municipality:** Kingsville

**Site #:** 0000000007

**Intersection:** Main St & Remark Dr

**TFR File #:** 7

**Count date:** 1-Nov-2018

### Weather conditions:

Rain

### Person(s) who counted:

Cam

### \*\* Signalized Intersection \*\*

**Major Road:** Main St runs W/E

North Leg Total: 79

North Entering: 31

North Peds: 2

Peds Cross:  $\nlessgtr$

|        |    |   |   |    |
|--------|----|---|---|----|
| Heavys | 0  | 0 | 0 | 0  |
| Trucks | 0  | 0 | 0 | 0  |
| Cars   | 17 | 7 | 7 | 31 |
| Totals | 17 | 7 | 7 |    |

|        |    |
|--------|----|
| Heavys | 0  |
| Trucks | 2  |
| Cars   | 46 |
| Totals | 48 |

East Leg Total: 1230

East Entering: 639

East Peds: 1

Peds Cross:  $\nlessgtr$

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 2      | 2      | 624  | 628    |

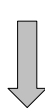


Main St

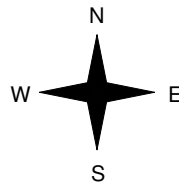
| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 0      | 0      | 24   | 24     |
| 2      | 1      | 502  | 505    |
| 0      | 1      | 43   | 44     |
| 2      | 2      | 569  |        |

Peds Cross:  $\nlessgtr$   
 West Peds: 2  
 West Entering: 573  
 West Leg Total: 1201

|        |     |        |    |    |    |     |
|--------|-----|--------|----|----|----|-----|
| Cars   | 117 | Cars   | 46 | 15 | 77 | 138 |
| Trucks | 2   | Trucks | 1  | 2  | 1  | 4   |
| Heavys | 1   | Heavys | 1  | 0  | 1  | 2   |
| Totals | 120 | Totals | 48 | 17 | 79 |     |



Remark Dr



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 7    | 0      | 0      | 7      |
| 561  | 1      | 1      | 563    |
| 67   | 1      | 1      | 69     |
| 635  | 2      | 2      |        |

Main St



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 586  | 2      | 3      | 591    |

Peds Cross:  $\nlessgtr$   
 South Peds: 0  
 South Entering: 144  
 South Leg Total: 264

### Comments

# Main St @ Remark Dr

## Total Count Diagram

**Municipality:** Kingsville  
**Site #:** 0000000007  
**Intersection:** Main St & Remark Dr  
**TFR File #:** 7  
**Count date:** 1-Nov-2018

**Weather conditions:**  
 Rain  
**Person(s) who counted:**  
 Cam

**\*\* Signalized Intersection \*\***

**Major Road:** Main St runs W/E

North Leg Total: 553  
 North Entering: 261  
 North Peds: 107  
 Peds Cross:  $\nlessgtr$

|        | 1   | 2  | 2  | 5   |
|--------|-----|----|----|-----|
| Heavys | 1   | 2  | 2  | 5   |
| Trucks | 1   | 0  | 0  | 1   |
| Cars   | 144 | 51 | 60 | 255 |
| Totals | 146 | 53 | 62 |     |

|        | 2 | 3 | 287 |
|--------|---|---|-----|
| Heavys | 2 |   |     |
| Trucks | 3 |   |     |
| Cars   |   |   | 287 |
| Totals |   |   | 292 |

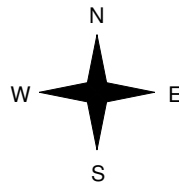
East Leg Total: 8405  
 East Entering: 4100  
 East Peds: 9  
 Peds Cross:  $\nlessgtr$

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 47     | 30     | 3914 | 3991   |



Main St

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 1      | 1      | 135  | 137    |
| 42     | 26     | 3517 | 3585   |
| 7      | 4      | 318  | 329    |
| 50     | 31     | 3970 |        |



Wigle Ave



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 67   | 0      | 1      | 68     |
| 3444 | 24     | 38     | 3506   |
| 489  | 13     | 24     | 526    |
| 4000 | 37     | 63     |        |

Main St



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 4195 | 41     | 69     | 4305   |

Peds Cross:  $\nlessgtr$   
 West Peds: 30  
 West Entering: 4051  
 West Leg Total: 8042

|        | 858 | 326 | 85 | 618 | 1029 |
|--------|-----|-----|----|-----|------|
| Cars   | 858 | 326 | 85 | 618 | 1029 |
| Trucks | 17  | 5   | 2  | 15  | 22   |
| Heavys | 33  | 8   | 0  | 25  | 33   |
| Totals | 908 | 339 | 87 | 658 |      |

Peds Cross:  $\nlessgtr$   
 South Peds: 59  
 South Entering: 1084  
 South Leg Total: 1992

## Comments

# Jasperson Dr @ Main St

## Morning Peak Diagram

### Specified Period

**From:** 7:00:00

**To:** 9:00:00

### One Hour Peak

**From:** 8:00:00

**To:** 9:00:00

**Municipality:** Kingsville

**Site #:** 0000000005

**Intersection:** Main St & Jasperson Dr

**TFR File #:** 5

**Count date:** 1-Nov-2018

### Weather conditions:

Rain

### Person(s) who counted:

Cam

### \*\* Signalized Intersection \*\*

**Major Road:** Main St runs W/E

North Leg Total: 219

North Entering: 150

North Peds: 2

Peds Cross:  $\nlessgtr$

|        |    |    |    |     |
|--------|----|----|----|-----|
| Heavys | 0  | 0  | 0  | 0   |
| Trucks | 1  | 0  | 0  | 1   |
| Cars   | 45 | 18 | 86 | 149 |
| Totals | 46 | 18 | 86 |     |

|        |    |
|--------|----|
| Heavys | 3  |
| Trucks | 1  |
| Cars   | 65 |
| Totals | 69 |

East Leg Total: 888

East Entering: 401

East Peds: 2

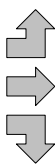
Peds Cross:  $\nlessgtr$

|        |        |      |        |
|--------|--------|------|--------|
| Heavys | Trucks | Cars | Totals |
| 11     | 5      | 389  | 405    |

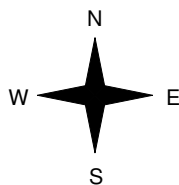


Main St

|        |        |      |        |
|--------|--------|------|--------|
| Heavys | Trucks | Cars | Totals |
| 2      | 0      | 16   | 18     |
| 8      | 2      | 377  | 387    |
| 2      | 2      | 40   | 44     |
| 12     | 4      | 433  |        |



East Kingsville Square



Jasperson Dr



Main St

|      |        |        |        |
|------|--------|--------|--------|
| Cars | Trucks | Heavys | Totals |
| 45   | 1      | 1      | 47     |
| 326  | 2      | 11     | 339    |
| 15   | 0      | 0      | 15     |
| 386  | 3      | 12     |        |

|      |        |        |        |
|------|--------|--------|--------|
| Cars | Trucks | Heavys | Totals |
| 474  | 3      | 10     | 487    |

Peds Cross:  $\nlessgtr$

West Peds: 0

West Entering: 449

West Leg Total: 854

|        |    |        |    |   |    |    |
|--------|----|--------|----|---|----|----|
| Cars   | 73 | Cars   | 18 | 4 | 11 | 33 |
| Trucks | 2  | Trucks | 2  | 0 | 1  | 3  |
| Heavys | 2  | Heavys | 0  | 0 | 2  | 2  |
| Totals | 77 | Totals | 20 | 4 | 14 |    |

Peds Cross:  $\nlessgtr$

South Peds: 6

South Entering: 38

South Leg Total: 115

## Comments

# Jasperson Dr @ Main St

## Mid-day Peak Diagram

### Specified Period

**From:** 11:00:00

**To:** 13:00:00

### One Hour Peak

**From:** 12:00:00

**To:** 13:00:00

**Municipality:** Kingsville

**Site #:** 0000000005

**Intersection:** Main St & Jasperson Dr

**TFR File #:** 5

**Count date:** 1-Nov-2018

### Weather conditions:

Rain

### Person(s) who counted:

Cam

### \*\* Signalized Intersection \*\*

**Major Road:** Main St runs W/E

North Leg Total: 305

North Entering: 150

North Peds: 1

Peds Cross:  $\times$

|        |    |    |    |     |
|--------|----|----|----|-----|
| Heavys | 2  | 0  | 0  | 2   |
| Trucks | 0  | 1  | 1  | 2   |
| Cars   | 37 | 22 | 87 | 146 |
| Totals | 39 | 23 | 88 |     |

|        |     |
|--------|-----|
| Heavys | 2   |
| Trucks | 4   |
| Cars   | 149 |
| Totals | 155 |

East Leg Total: 1162

East Entering: 591

East Peds: 0

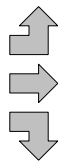
Peds Cross:  $\times$

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 13     | 7      | 513  | 533    |

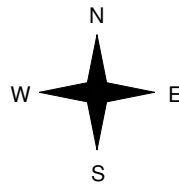


Main St

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 0      | 1      | 18   | 19     |
| 9      | 5      | 435  | 449    |
| 1      | 4      | 31   | 36     |
| 10     | 10     | 484  |        |



East Kingsville Square



Jasperson Dr



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 105  | 2      | 1      | 108    |
| 444  | 4      | 11     | 459    |
| 21   | 2      | 1      | 24     |
| 570  | 8      | 13     |        |

Main St



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 554  | 8      | 9      | 571    |

Peds Cross:  $\times$

West Peds: 5

West Entering: 504

West Leg Total: 1037

|        |    |        |    |    |    |    |
|--------|----|--------|----|----|----|----|
| Cars   | 74 | Cars   | 32 | 26 | 32 | 90 |
| Trucks | 7  | Trucks | 3  | 1  | 2  | 6  |
| Heavys | 2  | Heavys | 0  | 1  | 0  | 1  |
| Totals | 83 | Totals | 35 | 28 | 34 |    |



Peds Cross:  $\times$

South Peds: 9

South Entering: 97

South Leg Total: 180

## Comments

# Jasperson Dr @ Main St

## Afternoon Peak Diagram

### Specified Period

**From:** 14:00:00

**To:** 18:00:00

### One Hour Peak

**From:** 16:30:00

**To:** 17:30:00

**Municipality:** Kingsville

**Site #:** 0000000005

**Intersection:** Main St & Jasperson Dr

**TFR File #:** 5

**Count date:** 1-Nov-2018

### Weather conditions:

Rain

### Person(s) who counted:

Cam

### \*\* Signalized Intersection \*\*

**Major Road:** Main St runs W/E

North Leg Total: 387

North Entering: 189

North Peds: 2

Peds Cross:  $\times$

|       | Heavys | Trucks | Cars | Totals |
|-------|--------|--------|------|--------|
| North | 0      | 0      | 0    | 0      |
| East  | 0      | 0      | 0    | 0      |
| South | 75     | 12     | 102  | 189    |
| West  | 75     | 12     | 102  | 189    |



|       | Heavys | Trucks | Cars | Totals |
|-------|--------|--------|------|--------|
| North | 0      | 0      | 198  | 198    |
| East  | 0      | 0      | 198  | 198    |
| South | 0      | 0      | 198  | 198    |
| West  | 0      | 0      | 198  | 198    |

East Leg Total: 1191

East Entering: 633

East Peds: 1

Peds Cross:  $\times$

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 3      | 3      | 586  | 592    |

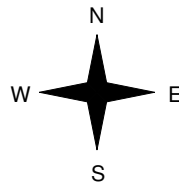


Main St

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 0      | 0      | 56   | 56     |
| 4      | 2      | 439  | 445    |
| 0      | 0      | 37   | 37     |
| 4      | 2      | 532  | 532    |



East Kingsville Square



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 127  | 0      | 0      | 127    |
| 481  | 3      | 3      | 487    |
| 19   | 0      | 0      | 19     |
| 627  | 3      | 3      | 633    |

Main St



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 552  | 2      | 4      | 558    |

Peds Cross:  $\times$

West Peds: 3

West Entering: 538

West Leg Total: 1130

| Cars | Trucks | Cars | Trucks | Cars | Trucks | Totals |
|------|--------|------|--------|------|--------|--------|
| 68   | 0      | 30   | 0      | 15   | 11     | 56     |
| 0    | 0      | 0    | 0      | 0    | 0      | 0      |
| 0    | 0      | 0    | 0      | 0    | 0      | 0      |
| 68   | 0      | 30   | 0      | 15   | 11     | 56     |



Peds Cross:  $\times$

South Peds: 4

South Entering: 56

South Leg Total: 124

## Comments

# Jasperson Dr @ Main St

## Total Count Diagram

**Municipality:** Kingsville  
**Site #:** 0000000005  
**Intersection:** Main St & Jasperson Dr  
**TFR File #:** 5  
**Count date:** 1-Nov-2018

**Weather conditions:**  
 Rain  
**Person(s) who counted:**  
 Cam

**\*\* Signalized Intersection \*\***

**Major Road:** Main St runs W/E

North Leg Total: 2354  
 North Entering: 1255  
 North Peds: 18  
 Peds Cross:  $\times$

|               | Heavys     | Trucks     | Cars       | Totals |
|---------------|------------|------------|------------|--------|
| North         | 6          | 0          | 4          | 10     |
| East          | 5          | 2          | 6          | 13     |
| South         | 389        | 129        | 714        | 1232   |
| <b>Totals</b> | <b>400</b> | <b>131</b> | <b>724</b> |        |



|               | Heavys     | Trucks     | Cars       | Totals |
|---------------|------------|------------|------------|--------|
| North         | 9          | 8          | 1082       | 1099   |
| East          | 5          | 2          | 6          | 13     |
| South         | 389        | 129        | 714        | 1232   |
| <b>Totals</b> | <b>400</b> | <b>131</b> | <b>724</b> |        |

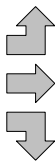
East Leg Total: 8516  
 East Entering: 4172  
 East Peds: 9  
 Peds Cross:  $\times$

| Heavys | Trucks | Cars | Totals |
|--------|--------|------|--------|
| 65     | 43     | 3815 | 3923   |

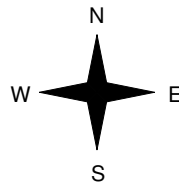


Main St

| Heavys    | Trucks    | Cars        | Totals |
|-----------|-----------|-------------|--------|
| 4         | 2         | 235         | 241    |
| 62        | 30        | 3378        | 3470   |
| 5         | 9         | 250         | 264    |
| <b>71</b> | <b>41</b> | <b>3863</b> |        |



East Kingsville Square



| Cars        | Trucks    | Heavys    | Totals |
|-------------|-----------|-----------|--------|
| 734         | 5         | 3         | 742    |
| 3220        | 32        | 58        | 3310   |
| 115         | 4         | 1         | 120    |
| <b>4069</b> | <b>41</b> | <b>62</b> |        |

Main St



| Cars | Trucks | Heavys | Totals |
|------|--------|--------|--------|
| 4234 | 42     | 68     | 4344   |

Peds Cross:  $\times$   
 West Peds: 37  
 West Entering: 3975  
 West Leg Total: 7898

|               | Cars       | Trucks    | Heavys   | Totals |
|---------------|------------|-----------|----------|--------|
| West          | 494        | 15        | 6        | 515    |
| East          | 206        | 6         | 1        | 213    |
| South         | 113        | 1         | 2        | 116    |
| North         | 142        | 6         | 2        | 150    |
| <b>Totals</b> | <b>461</b> | <b>13</b> | <b>5</b> |        |

Peds Cross:  $\times$   
 South Peds: 123  
 South Entering: 479  
 South Leg Total: 994

## Comments

## Appendix B

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### FUTURE TRAFFIC, DEVELOPMENT TRAFFIC AND TOTAL TRAFFIC VOLUMES

183 Main Street Residential Development

Highschool Access

Refer to Spencer Traffic Report

|    |     |
|----|-----|
|    | IN  |
| AM | 304 |
| PM | 84  |

Remark Dr

|    |   |   |
|----|---|---|
| 19 | 8 | 8 |
| 29 | 2 | 8 |

Jasper

|    |    |     |
|----|----|-----|
| 86 | 14 | 116 |
| 52 | 21 | 98  |

Access Road

183 MAIN ST E

|     |     |  |  |  |  |  |  |  |  |
|-----|-----|--|--|--|--|--|--|--|--|
| 44  | 158 |  |  |  |  |  |  |  |  |
| 576 | 518 |  |  |  |  |  |  |  |  |
| 0   | 0   |  |  |  |  |  |  |  |  |

UN SIGNALIZED

|     |     |
|-----|-----|
| 146 | 40  |
| 301 | 602 |
| 0   | 0   |

|       |       |
|-------|-------|
| 27.36 | 12.54 |
| 575.7 | 472   |
| 50.16 | 33.06 |

SIGNALIZED

|    |   |   |
|----|---|---|
| 19 | 8 | 8 |
| 29 | 2 | 8 |

|    |    |    |
|----|----|----|
| 42 | 3  | 70 |
| 55 | 19 | 90 |

MAIN STREET E

|     |     |
|-----|-----|
| 6   | 8   |
| 376 | 642 |
| 60  | 79  |

|     |       |
|-----|-------|
| 64  | 20.52 |
| 507 | 441.2 |
| 42  | 50.16 |

SIGNALIZED

|    |    |     |
|----|----|-----|
| 86 | 14 | 116 |
| 52 | 21 | 98  |

|    |    |    |
|----|----|----|
| 23 | 5  | 16 |
| 34 | 17 | 13 |

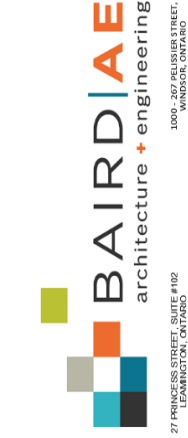
Square Mall Access

|     |       |
|-----|-------|
| 54  | 144.8 |
| 386 | 555.2 |
| 17  | 21.66 |

| LEGEND |    |    |
|--------|----|----|
| AM     | XX | XX |
| PM     |    | XX |

PROPIECT NAME 183 Main Street E  
(Townhouses/Condominium)

SHEET TITLE 2026 BACKGROUND TRAFFIC

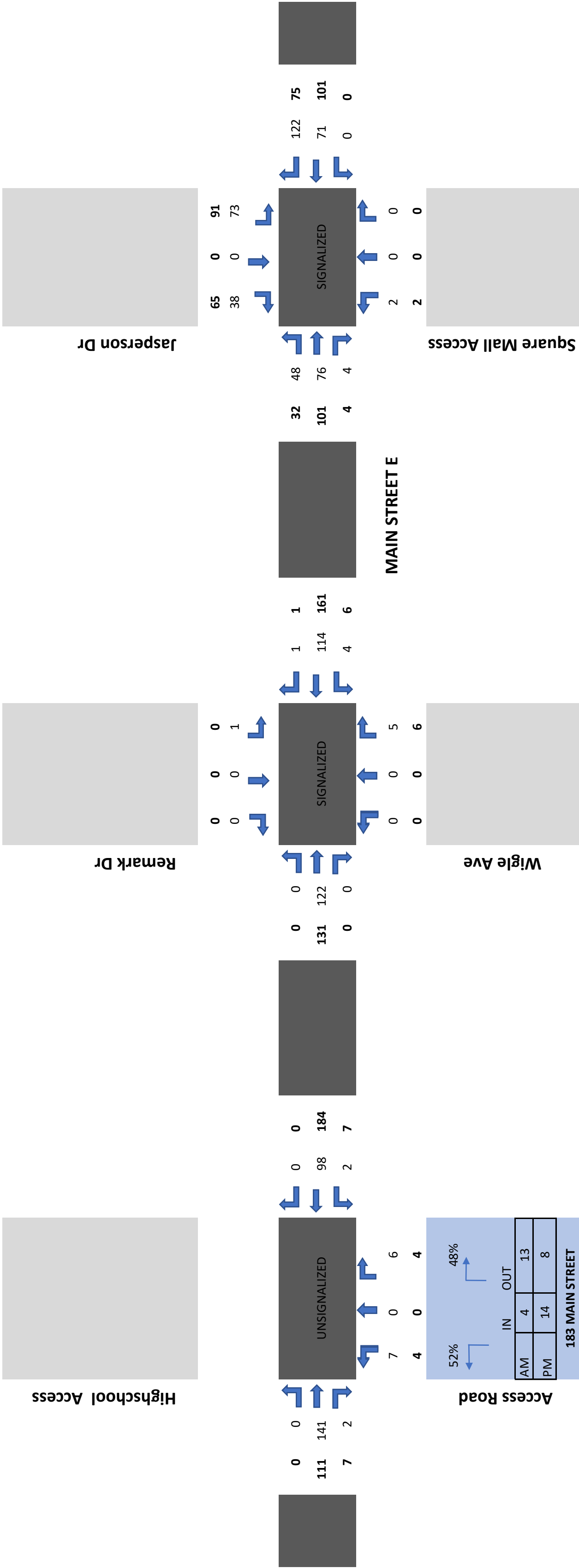


DATE: 11-Oct-19

PROJECT NO: 19-098

FIGURE NO: Figure 2

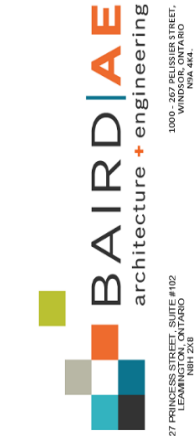
183 Main Street Residential Development



|        |
|--------|
| LEGEND |
| AM     |
| PM     |
| XX     |
| XX     |

PROJECT NAME 183 Main Street E  
(Townhouses/Condominium)

SHEET TITLE 2026 DEVELOPMENT TRAFFIC

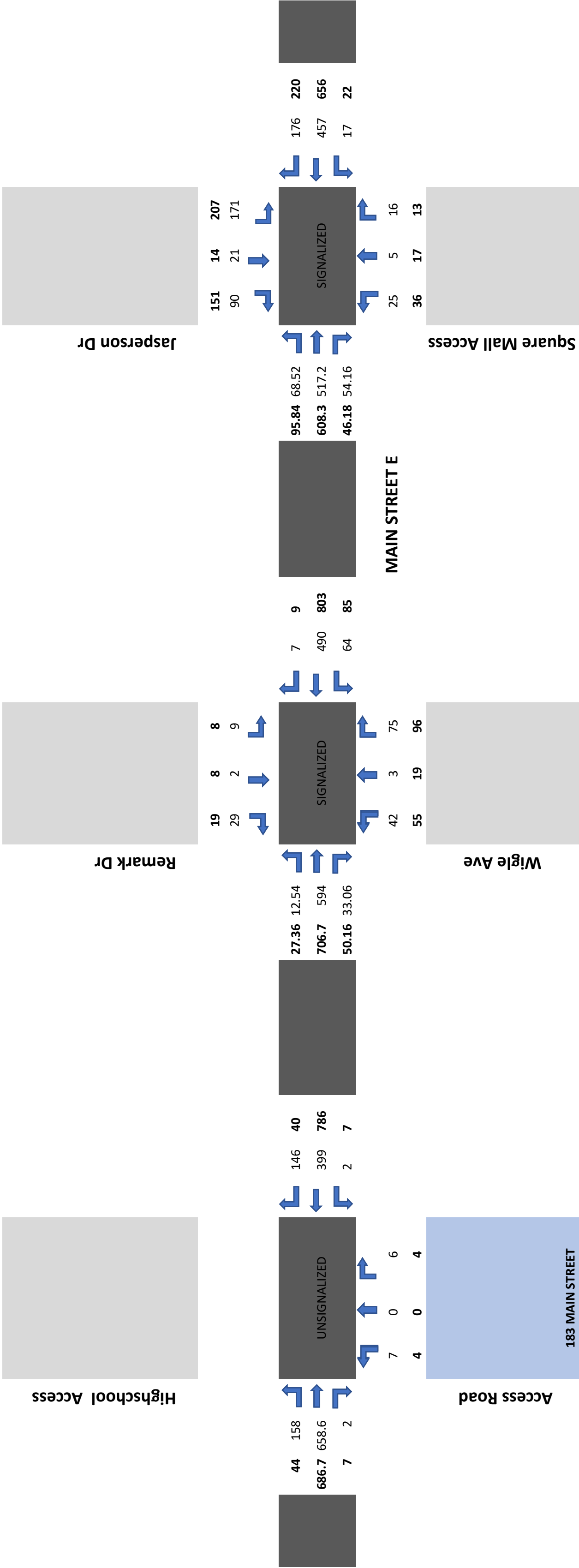


DATE: 11-Oct-19

PROJECT NO: 19-098

FIGURE NO: Figure 2.1

183 Main Street Residential Development



| LEGEND |    |    |    |
|--------|----|----|----|
| AM     | PM | XX | XX |

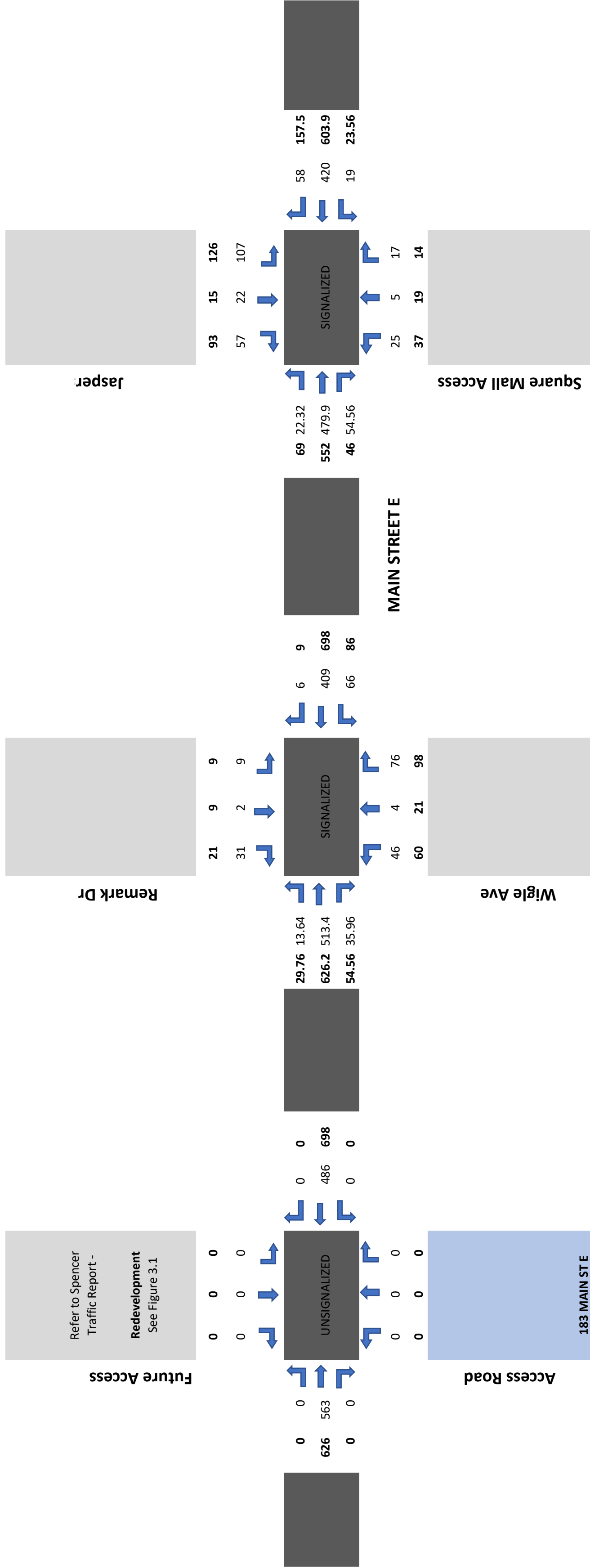
PROJECT NAME 183 Main Street E (Townhouses/Condominium)

SHEET TITLE 2026 TOTAL TRAFFIC



DATE: 11-Oct-19  
PROJECT NO: 19-098  
FIGURE NO: Figure 2.2

183 Main Street Residential Development



| LEGEND |    |    |    |
|--------|----|----|----|
| AM     | PM | XX | XX |

PROJEC T NAME 183 Main Street E (Townhouses/Condominium)

SHEET TITLE 2031 BACKGROUND TRAFFIC

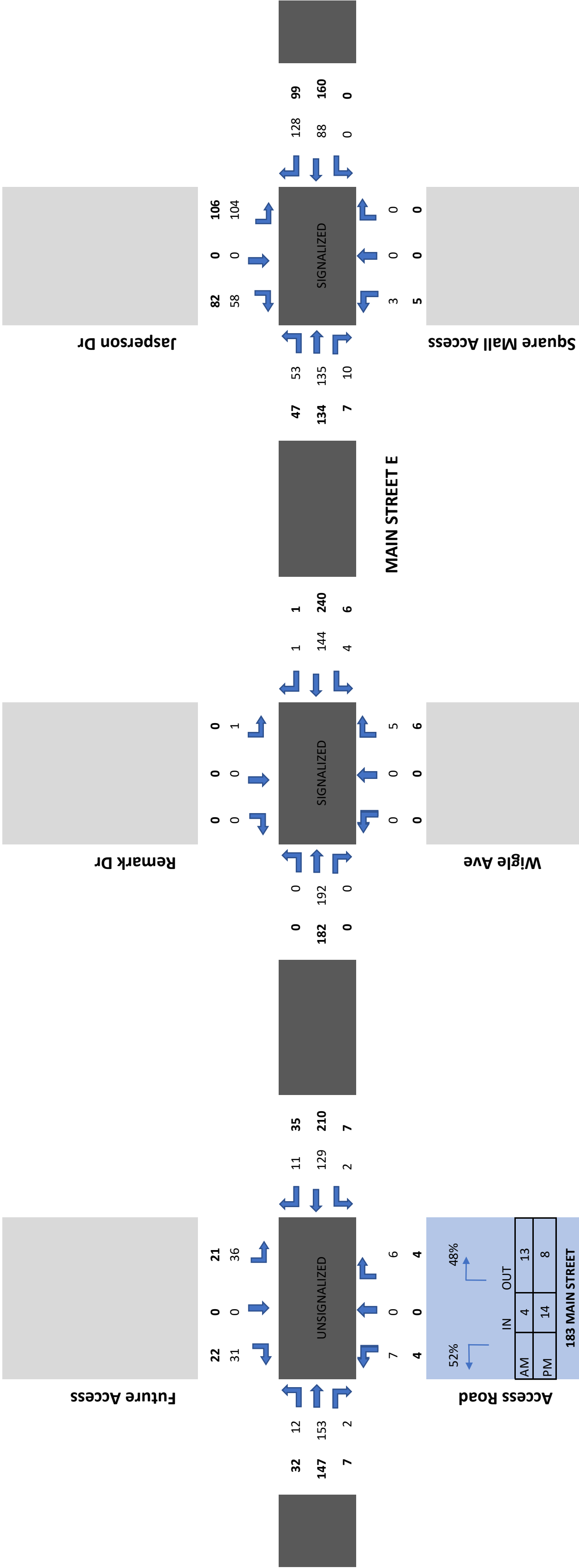


DATE: 11-Oct-19

PROJECT NO: 19-098

FIGURE NO: Figure 3

183 Main Street Residential Development



|        |
|--------|
| LEGEND |
| AM     |
| PM     |
| XX     |
| XX     |

PROJECT NAME 183 Main Street E  
(Townhouses/Condominium)

SHEET TITLE 2031 DEVELOPMENT TRAFFIC

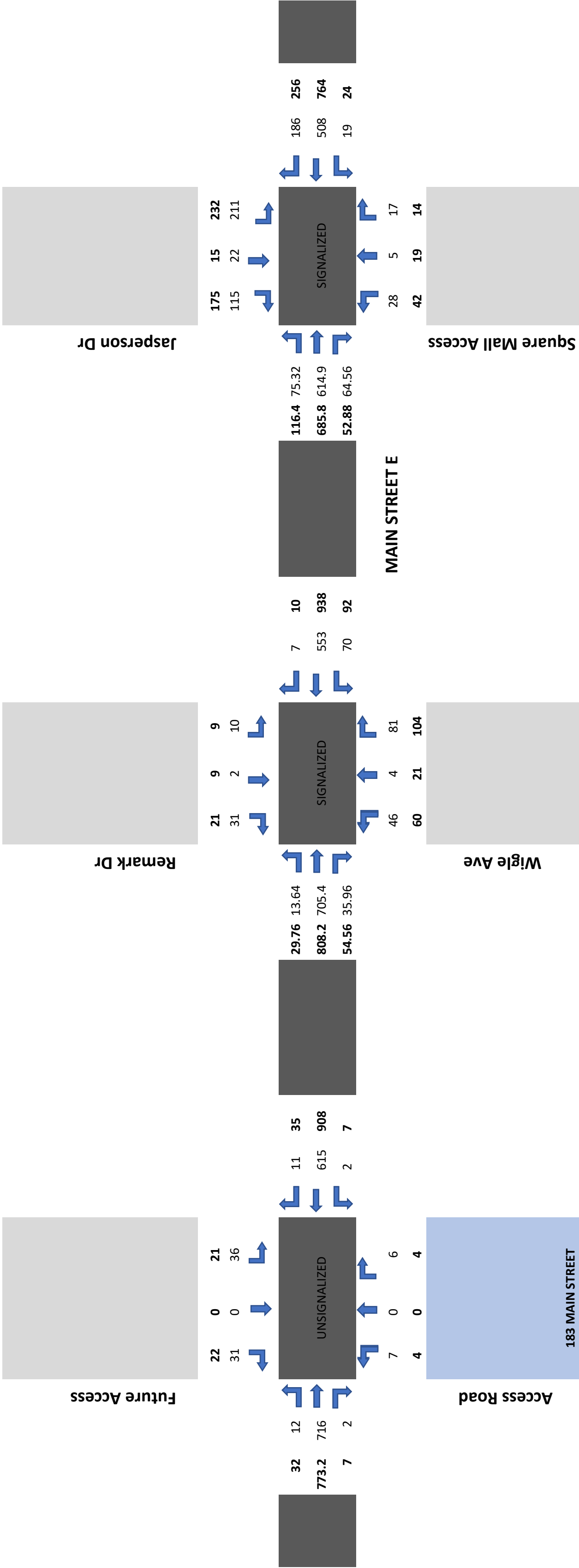
DATE: 11-Oct-19

PROJECT NO: 19-098

FIGURE NO: Figure 3.1



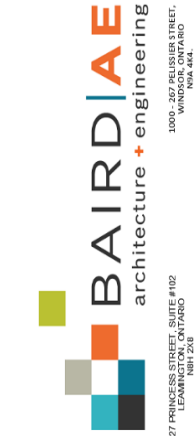
183 Main Street Residential Development



| LEGEND | AM | XX |
|--------|----|----|
| PM     | XX | XX |

PROJECT NAME 183 Main Street E  
(Townhouses/Condominium)

SHEET TITLE 2031 TOTAL TRAFFIC



DATE: 11-Oct-19

PROJECT NO: 19-098

FIGURE NO: Figure 3.2

183 Main Street Residential Development

Highschool Access

Refer to Spencer Traffic Report

|    |     |
|----|-----|
|    | IN  |
| AM | 304 |
| PM | 84  |

44

525

0

158

472

0

←

↑

←

183 MAIN ST E

Access Road

0

0

0

0

0

0

←

↑

←

24.96

525.2

45.76

11.44

430.6

30.16

←

↑

←

SIGNALIZED

58

463

38

18.72

402.5

45.76

←

↑

←

SIGNALIZED

5

343

55

7

586

72

←

↑

←

18

26

7

7

2

7

←

↑

←

Remark Dr

18

7

7

58

463

38

18.72

402.5

45.76

←

↑

←

SIGNALIZED

49

353

16

132.1

506.5

19.76

←

↑

←

78

48

106

12

19

89

←

↑

←

Jasperson Dr

78

12

106

183 MAIN ST E

Square Mall Access

31

21

4

16

4

15

←

↑

←

LEGEND

AM

PM

XX

XX

183 Main Street E

(Townhouses/Condominium)

2021 BACKGROUND TRAFFIC

DATE:

11-Oct-19

PROJECT NO:

19-098

FIGURE NO:

Figure 1

**PROJECT NAME**  
183 Main Street E  
(Townhouses/Condominium)

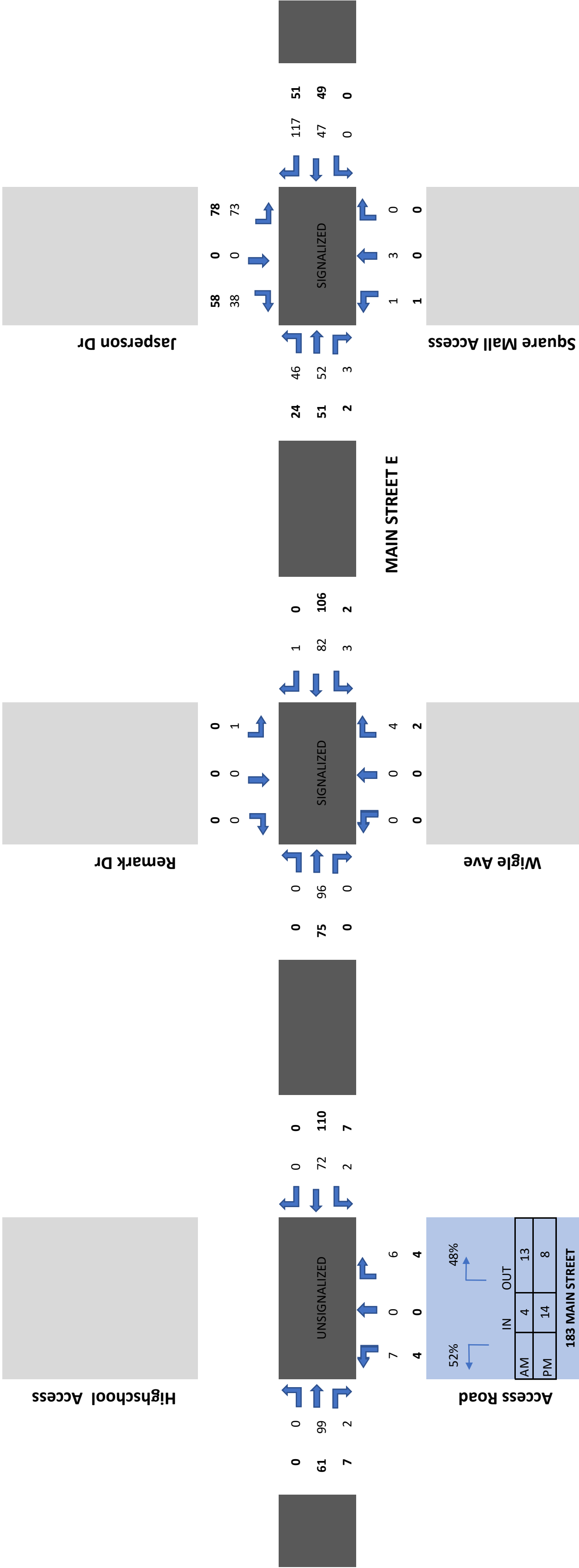
**SHEET TITLE** 2021 BACKGROUND TRAFFIC

DATE: 11-Oct-19

PROJECT NO: 19-098

FIGURE NO: Figure 1

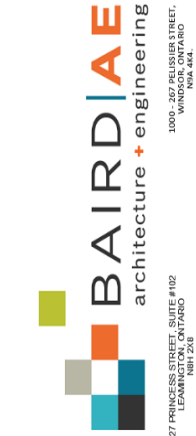
183 Main Street Residential Development



| LEGEND |  |    |    |
|--------|--|----|----|
| AM     |  | XX |    |
| PM     |  |    | XX |

PROJECT NAME 183 Main Street E (Townhouses/Condominium)

SHEET TITLE 2021 DEVELOPMENT TRAFFIC

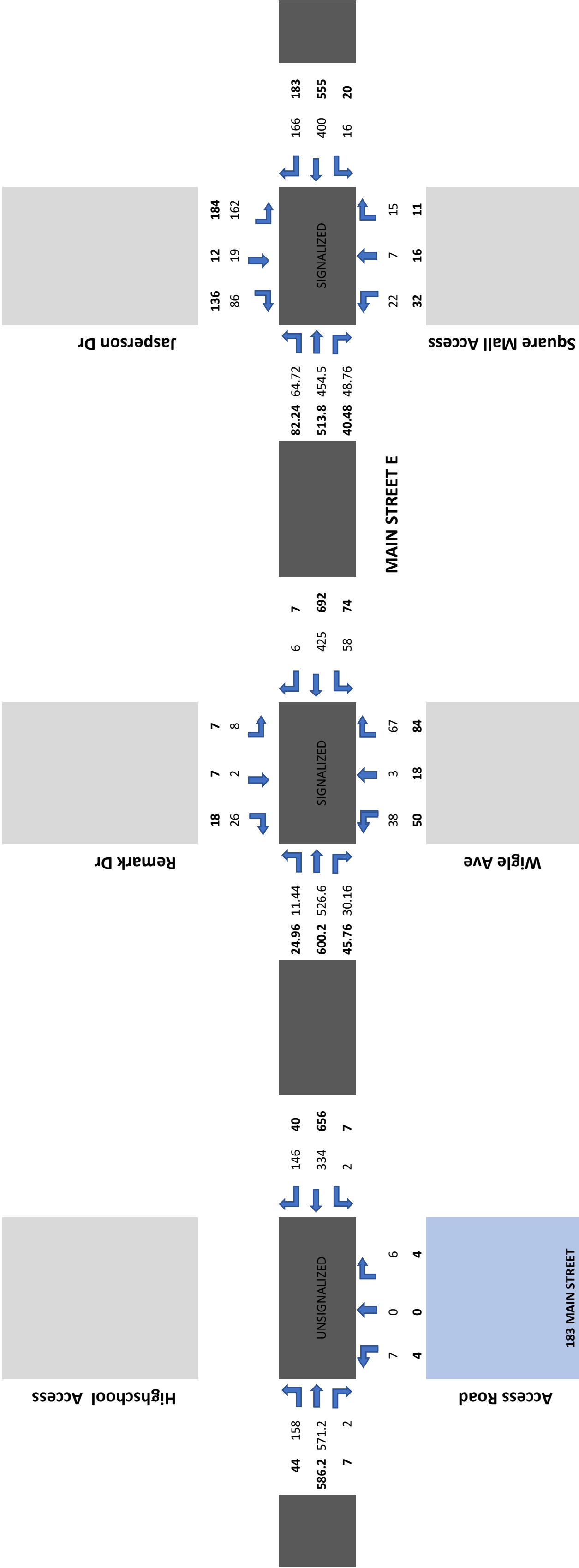


DATE: 11-Oct-19

PROJECT NO: 19-098

FIGURE NO: Figure 1.1

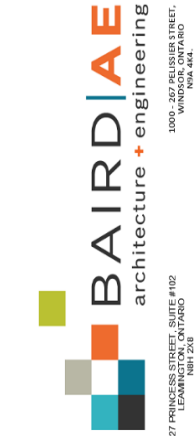
183 Main Street Residential Development



| LEGEND | AM | PM | XX |
|--------|----|----|----|
|        |    |    |    |

PROJECT NAME 183 Main Street E  
(Townhouses/Condominium)

SHEET TITLE 2021 TOTAL TRAFFIC



DATE: 11-Oct-19  
PROJECT NO: 19-098  
FIGURE NO: Figure 1.2

## Appendix C

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### CAPACITY ANALYSIS

# HCM Unsignalized Intersection Capacity Analysis

## 3: Access Rd/School & Main

183 MAIN STREET E  
2021 TOTAL AM TRAFFIC VOLUMES

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Traffic Volume (veh/h)            | 158                                                                               | 571                                                                               | 2                                                                                 | 2                                                                                 | 334                                                                               | 146                                                                               | 7                                                                                  | 0                                                                                   | 6                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Future Volume (Veh/h)             | 158                                                                               | 571                                                                               | 2                                                                                 | 2                                                                                 | 334                                                                               | 146                                                                               | 7                                                                                  | 0                                                                                   | 6                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Sign Control                      | Free                                                                              |                                                                                   |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                    |                                                                                     | Stop                                                                                |                                                                                     | Stop                                                                                |                                                                                     |
| 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)            | 172                                                                               | 621                                                                               | 2                                                                                 | 2                                                                                 | 363                                                                               | 159                                                                               | 8                                                                                  | 0                                                                                   | 7                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 2                                                                                   |
| Lane Width (m)                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Walking Speed (m/s)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1.2                                                                                 |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       | TWLTL                                                                             |                                                                                   |                                                                                   | TWLTL                                                                             |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              | 2                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 310                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 365                                                                               |                                                                                   |                                                                                   | 623                                                                               |                                                                                   |                                                                                   | 1333                                                                               | 1335                                                                                | 622                                                                                 | 1420                                                                                | 1416                                                                                | 444                                                                                 |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 966                                                                                | 966                                                                                 |                                                                                     |                                                                                     | 448                                                                                 | 448                                                                                 |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 367                                                                                | 369                                                                                 |                                                                                     |                                                                                     | 972                                                                                 | 967                                                                                 |
| vCu, unblocked vol                | 365                                                                               |                                                                                   |                                                                                   | 623                                                                               |                                                                                   |                                                                                   | 1333                                                                               | 1335                                                                                | 622                                                                                 | 1420                                                                                | 1416                                                                                | 444                                                                                 |
| tC, single (s)                    | 4.3                                                                               |                                                                                   |                                                                                   | 4.6                                                                               |                                                                                   |                                                                                   | 7.1                                                                                | 6.5                                                                                 | 6.2                                                                                 | 7.3                                                                                 | 6.5                                                                                 | 6.3                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 6.1                                                                                | 5.5                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 5.5                                                                                 |
| tF (s)                            | 2.4                                                                               |                                                                                   |                                                                                   | 2.7                                                                               |                                                                                   |                                                                                   | 3.5                                                                                | 4.0                                                                                 | 3.3                                                                                 | 3.7                                                                                 | 4.0                                                                                 | 3.4                                                                                 |
| p0 queue free %                   | 84                                                                                |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   | 97                                                                                 | 100                                                                                 | 99                                                                                  | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)               | 1096                                                                              |                                                                                   |                                                                                   | 764                                                                               |                                                                                   |                                                                                   | 240                                                                                | 256                                                                                 | 490                                                                                 | 213                                                                                 | 260                                                                                 | 597                                                                                 |
| Direction, Lane #                 | EB 1                                                                              | EB 2                                                                              | WB 1                                                                              | WB 2                                                                              | NB 1                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 172                                                                               | 623                                                                               | 2                                                                                 | 522                                                                               | 15                                                                                |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 172                                                                               | 0                                                                                 | 2                                                                                 | 0                                                                                 | 8                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 2                                                                                 | 0                                                                                 | 159                                                                               | 7                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1096                                                                              | 1700                                                                              | 764                                                                               | 1700                                                                              | 315                                                                               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.16                                                                              | 0.37                                                                              | 0.00                                                                              | 0.31                                                                              | 0.05                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (m)             | 4.4                                                                               | 0.0                                                                               | 0.1                                                                               | 0.0                                                                               | 1.2                                                                               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 8.9                                                                               | 0.0                                                                               | 9.7                                                                               | 0.0                                                                               | 17.0                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | C                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 1.9                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 17.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 1.4                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 48.6%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Lanes, Volumes, Timings  
9: Wgle Ave/Remark Dr & Main

183 MAIN STREET E  
2021 TOTAL AM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 11                                                                                | 527                                                                               | 30                                                                                | 58                                                                                | 425                                                                               | 6                                                                                 | 38                                                                                  | 3                                                                                   | 67                                                                                  | 8                                                                                   | 2                                                                                   | 26                                                                                  |
| Future Volume (vph)     | 11                                                                                | 527                                                                               | 30                                                                                | 58                                                                                | 425                                                                               | 6                                                                                 | 38                                                                                  | 3                                                                                   | 67                                                                                  | 8                                                                                   | 2                                                                                   | 26                                                                                  |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 60.0                                                                              |                                                                                   | 0.0                                                                               | 55.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 15.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                                 |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.992                                                                             |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                     | 0.916                                                                               |                                                                                     |                                                                                     | 0.903                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.983                                                                               |                                                                                     |                                                                                     | 0.989                                                                               |                                                                                     |
| Satd. Flow (prot)       | 1755                                                                              | 1653                                                                              | 0                                                                                 | 1825                                                                              | 1792                                                                              | 0                                                                                 | 0                                                                                   | 1730                                                                                | 0                                                                                   | 0                                                                                   | 1437                                                                                | 0                                                                                   |
| Flt Permitted           | 0.469                                                                             |                                                                                   |                                                                                   | 0.257                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.880                                                                               |                                                                                     |                                                                                     | 0.929                                                                               |                                                                                     |
| Satd. Flow (perm)       | 865                                                                               | 1653                                                                              | 0                                                                                 | 494                                                                               | 1792                                                                              | 0                                                                                 | 0                                                                                   | 1549                                                                                | 0                                                                                   | 0                                                                                   | 1350                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                     | 73                                                                                  |                                                                                     |                                                                                     | 28                                                                                  |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 170.1                                                                             |                                                                                   |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                     | 215.7                                                                               |                                                                                     |                                                                                     | 227.2                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 12.2                                                                              |                                                                                   |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                     | 15.5                                                                                |                                                                                     |                                                                                     | 16.4                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 2                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)      | 4%                                                                                | 16%                                                                               | 0%                                                                                | 0%                                                                                | 7%                                                                                | 3%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 28%                                                                                 | 0%                                                                                  | 18%                                                                                 |
| Adj. Flow (vph)         | 12                                                                                | 573                                                                               | 33                                                                                | 63                                                                                | 462                                                                               | 7                                                                                 | 41                                                                                  | 3                                                                                   | 73                                                                                  | 9                                                                                   | 2                                                                                   | 28                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 12                                                                                | 606                                                                               | 0                                                                                 | 63                                                                                | 469                                                                               | 0                                                                                 | 0                                                                                   | 117                                                                                 | 0                                                                                   | 0                                                                                   | 39                                                                                  | 0                                                                                   |
| Turn Type               | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 7.0                                                                               | 10.0                                                                              |                                                                                   | 7.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 11.0                                                                              | 25.0                                                                              |                                                                                   | 11.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                                | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 14.0                                                                              | 35.0                                                                              |                                                                                   | 14.0                                                                              | 35.0                                                                              |                                                                                   | 31.0                                                                                | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 38.8%                                                                               | 38.8%                                                                               |                                                                                     | 38.8%                                                                               | 38.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 10.0                                                                              | 28.6                                                                              |                                                                                   | 10.0                                                                              | 28.6                                                                              |                                                                                   | 24.7                                                                                | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 3.0                                                                               | 4.1                                                                               |                                                                                   | 3.0                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                 | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 1.0                                                                               | 2.3                                                                               |                                                                                   | 1.0                                                                               | 2.3                                                                               |                                                                                   | 2.2                                                                                 | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 6.4                                                                               |                                                                                   | 4.0                                                                               | 6.4                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 |                                                                                     |
| 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                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                               | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effct Green (s)     | 45.4                                                                              | 37.4                                                                              |                                                                                   | 47.9                                                                              | 44.1                                                                              |                                                                                   |                                                                                     | 21.0                                                                                |                                                                                     |                                                                                     | 21.0                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.57                                                                              | 0.47                                                                              |                                                                                   | 0.60                                                                              | 0.55                                                                              |                                                                                   |                                                                                     | 0.26                                                                                |                                                                                     |                                                                                     | 0.26                                                                                |                                                                                     |
| v/c Ratio               | 0.02                                                                              | 0.78                                                                              |                                                                                   | 0.15                                                                              | 0.48                                                                              |                                                                                   |                                                                                     | 0.25                                                                                |                                                                                     |                                                                                     | 0.10                                                                                |                                                                                     |

Lanes, Volumes, Timings  
9: Wigle Ave/Remark Dr & Main

183 MAIN STREET E  
2021 TOTAL AM TRAFFIC VOLUMES

|                        |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Control Delay          | 4.6                                                                               | 25.7                                                                              |                                                                                   | 5.8                                                                               | 12.6                                                                              |                                                                                   |                                                                                    | 13.9                                                                                |                                                                                     |                                                                                     | 14.6                                                                                |                                                                                     |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay            | 4.6                                                                               | 25.7                                                                              |                                                                                   | 5.8                                                                               | 12.6                                                                              |                                                                                   |                                                                                    | 13.9                                                                                |                                                                                     |                                                                                     | 14.6                                                                                |                                                                                     |
| LOS                    | A                                                                                 | C                                                                                 |                                                                                   | A                                                                                 | B                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay         |                                                                                   | 25.3                                                                              |                                                                                   |                                                                                   | 11.8                                                                              |                                                                                   |                                                                                    | 13.9                                                                                |                                                                                     |                                                                                     | 14.6                                                                                |                                                                                     |
| Approach LOS           |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (m)  | 0.7                                                                               | 81.3                                                                              |                                                                                   | 3.7                                                                               | 38.8                                                                              |                                                                                   |                                                                                    | 5.4                                                                                 |                                                                                     |                                                                                     | 1.3                                                                                 |                                                                                     |
| Queue Length 95th (m)  | 1.8                                                                               | 103.5                                                                             |                                                                                   | 5.6                                                                               | 67.4                                                                              |                                                                                   |                                                                                    | 20.7                                                                                |                                                                                     |                                                                                     | 9.9                                                                                 |                                                                                     |
| Internal Link Dist (m) |                                                                                   | 146.1                                                                             |                                                                                   |                                                                                   | 213.0                                                                             |                                                                                   |                                                                                    | 191.7                                                                               |                                                                                     |                                                                                     | 203.2                                                                               |                                                                                     |
| Turn Bay Length (m)    | 60.0                                                                              |                                                                                   |                                                                                   | 55.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 628                                                                               | 775                                                                               |                                                                                   | 465                                                                               | 987                                                                               |                                                                                   |                                                                                    | 554                                                                                 |                                                                                     |                                                                                     | 459                                                                                 |                                                                                     |
| Starvation Cap Reductn | 0                                                                                 | 0                                                                                 |                                                                                   | 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      | 0.02                                                                              | 0.78                                                                              |                                                                                   | 0.14                                                                              | 0.48                                                                              |                                                                                   |                                                                                    | 0.21                                                                                |                                                                                     |                                                                                     | 0.08                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 18.4

Intersection LOS: B

Intersection Capacity Utilization 59.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 9: Wigle Ave/Remark Dr & Main St

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Ø2 (R)                                                                              |                                                                                     |                                                                                     | Ø3                                                                                  |                                                                                     | Ø4                                                                                  |
| 31 s                                                                                |                                                                                     |                                                                                     | 14 s                                                                                |                                                                                     | 35 s                                                                                |
|  |  |  |  |  |  |
| Ø6 (R)                                                                              |                                                                                     |                                                                                     | Ø7                                                                                  |                                                                                     | Ø8                                                                                  |
| 31 s                                                                                |                                                                                     |                                                                                     | 14 s                                                                                |                                                                                     | 35 s                                                                                |

Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main

183 MAIN STREET E  
2021 TOTAL AM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)    | 65                                                                                | 454                                                                               | 49                                                                                | 16                                                                                | 400                                                                               | 166                                                                               | 22                                                                                 | 7                                                                                   | 15                                                                                  | 162                                                                                 | 19                                                                                  | 86                                                                                  |
| Future Volume (vph)     | 65                                                                                | 454                                                                               | 49                                                                                | 16                                                                                | 400                                                                               | 166                                                                               | 22                                                                                 | 7                                                                                   | 15                                                                                  | 162                                                                                 | 19                                                                                  | 86                                                                                  |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 75.0                                                                              |                                                                                   | 0.0                                                                               | 15.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                               |                                                                                   |                                                                                   | 7.5                                                                                |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 0.99                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.985                                                                             |                                                                                   |                                                                                   | 0.956                                                                             |                                                                                   |                                                                                    | 0.955                                                                               |                                                                                     |                                                                                     | 0.878                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.976                                                                               |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1789                                                                              | 1850                                                                              | 0                                                                                 | 1789                                                                              | 1788                                                                              | 0                                                                                 | 0                                                                                  | 1747                                                                                | 0                                                                                   | 1789                                                                                | 1654                                                                                | 0                                                                                   |
| Flt Permitted           | 0.202                                                                             |                                                                                   |                                                                                   | 0.272                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.863                                                                               |                                                                                     | 0.726                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 380                                                                               | 1850                                                                              | 0                                                                                 | 510                                                                               | 1788                                                                              | 0                                                                                 | 0                                                                                  | 1545                                                                                | 0                                                                                   | 1365                                                                                | 1654                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     | 93                                                                                  |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                   | 120.3                                                                             |                                                                                   |                                                                                    | 154.3                                                                               |                                                                                     |                                                                                     | 215.0                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                   | 8.7                                                                               |                                                                                   |                                                                                    | 11.1                                                                                |                                                                                     |                                                                                     | 15.5                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 |                                                                                   | 2                                                                                 |                                                                                    |                                                                                     | 2                                                                                   | 2                                                                                   |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Adj. Flow (vph)         | 71                                                                                | 493                                                                               | 53                                                                                | 17                                                                                | 435                                                                               | 180                                                                               | 24                                                                                 | 8                                                                                   | 16                                                                                  | 176                                                                                 | 21                                                                                  | 93                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 71                                                                                | 546                                                                               | 0                                                                                 | 17                                                                                | 615                                                                               | 0                                                                                 | 0                                                                                  | 48                                                                                  | 0                                                                                   | 176                                                                                 | 114                                                                                 | 0                                                                                   |
| Turn Type               | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                               | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 31.0                                                                               | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 53.7%                                                                             | 53.7%                                                                             |                                                                                   | 53.7%                                                                             | 53.7%                                                                             |                                                                                   | 46.3%                                                                              | 46.3%                                                                               |                                                                                     | 46.3%                                                                               | 46.3%                                                                               |                                                                                     |
| Maximum Green (s)       | 29.7                                                                              | 29.7                                                                              |                                                                                   | 29.7                                                                              | 29.7                                                                              |                                                                                   | 24.7                                                                               | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 4.1                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               |                                                                                   | 2.2                                                                               | 2.2                                                                               |                                                                                   | 2.2                                                                                | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.3                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                              | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                               | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effct Green (s)     | 27.1                                                                              | 27.1                                                                              |                                                                                   | 27.1                                                                              | 27.1                                                                              |                                                                                   |                                                                                    | 27.3                                                                                |                                                                                     | 27.3                                                                                | 27.3                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.40                                                                              | 0.40                                                                              |                                                                                   | 0.40                                                                              | 0.40                                                                              |                                                                                   |                                                                                    | 0.41                                                                                |                                                                                     | 0.41                                                                                | 0.41                                                                                |                                                                                     |
| v/c Ratio               | 0.46                                                                              | 0.73                                                                              |                                                                                   | 0.08                                                                              | 0.82                                                                              |                                                                                   |                                                                                    | 0.08                                                                                |                                                                                     | 0.32                                                                                | 0.16                                                                                |                                                                                     |
| Control Delay           | 23.6                                                                              | 21.8                                                                              |                                                                                   | 10.8                                                                              | 26.0                                                                              |                                                                                   |                                                                                    | 11.8                                                                                |                                                                                     | 17.7                                                                                | 6.2                                                                                 |                                                                                     |

Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main

183 MAIN STREET E  
2021 TOTAL AM TRAFFIC VOLUMES

|                        |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay            | 23.6                                                                              | 21.8                                                                              |                                                                                   | 10.8                                                                              | 26.0                                                                              |                                                                                   |                                                                                    | 11.8                                                                                |                                                                                     | 17.7                                                                                | 6.2                                                                                 |                                                                                     |
| LOS                    | C                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     | B                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay         |                                                                                   | 22.0                                                                              |                                                                                   |                                                                                   | 25.6                                                                              |                                                                                   |                                                                                    | 11.8                                                                                |                                                                                     |                                                                                     | 13.2                                                                                |                                                                                     |
| Approach LOS           |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (m)  | 6.5                                                                               | 56.2                                                                              |                                                                                   | 1.3                                                                               | 64.4                                                                              |                                                                                   |                                                                                    | 2.5                                                                                 |                                                                                     | 15.4                                                                                | 1.6                                                                                 |                                                                                     |
| Queue Length 95th (m)  | 15.7                                                                              | 72.5                                                                              |                                                                                   | 4.0                                                                               | 84.8                                                                              |                                                                                   |                                                                                    | 10.1                                                                                |                                                                                     | 35.3                                                                                | 12.5                                                                                |                                                                                     |
| Internal Link Dist (m) |                                                                                   | 213.0                                                                             |                                                                                   |                                                                                   | 96.3                                                                              |                                                                                   |                                                                                    | 130.3                                                                               |                                                                                     |                                                                                     | 191.0                                                                               |                                                                                     |
| Turn Bay Length (m)    | 75.0                                                                              |                                                                                   |                                                                                   | 15.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 15.0                                                                                |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 174                                                                               | 853                                                                               |                                                                                   | 234                                                                               | 841                                                                               |                                                                                   |                                                                                    | 662                                                                                 |                                                                                     | 577                                                                                 | 753                                                                                 |                                                                                     |
| 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      | 0.41                                                                              | 0.64                                                                              |                                                                                   | 0.07                                                                              | 0.73                                                                              |                                                                                   |                                                                                    | 0.07                                                                                |                                                                                     | 0.31                                                                                | 0.15                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 67

Actuated Cycle Length: 67

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 21.5

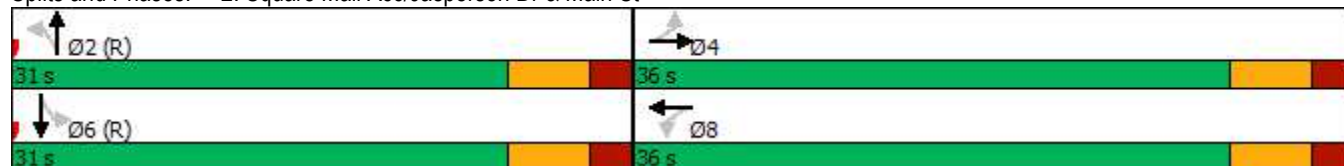
Intersection LOS: C

Intersection Capacity Utilization 70.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Square Mall Acc/Jasperson Dr & Main St



# HCM Unsignalized Intersection Capacity Analysis

## 3: Access Rd/School & Main St

183 MAIN STREET E  
2021 TOTAL PM TRAFFIC VOLUMES

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Traffic Volume (veh/h)            | 44                                                                                | 586                                                                               | 7                                                                                 | 7                                                                                 | 656                                                                               | 40                                                                                | 4                                                                                   | 0                                                                                   | 4                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Future Volume (Veh/h)             | 44                                                                                | 586                                                                               | 7                                                                                 | 7                                                                                 | 656                                                                               | 40                                                                                | 4                                                                                   | 0                                                                                   | 4                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Sign Control                      | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |                                                                                     |
| 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)            | 48                                                                                | 637                                                                               | 8                                                                                 | 8                                                                                 | 713                                                                               | 43                                                                                | 4                                                                                   | 0                                                                                   | 4                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 2                                                                                   |
| Lane Width (m)                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Walking Speed (m/s)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1.2                                                                                 |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       | TWLTL                                                                             |                                                                                   |                                                                                   | TWLTL                                                                             |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              | 2                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 310                                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 715                                                                               |                                                                                   |                                                                                   | 645                                                                               |                                                                                   |                                                                                   | 1466                                                                                | 1468                                                                                | 641                                                                                 | 1490                                                                                | 1494                                                                                | 736                                                                                 |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 737                                                                                 | 737                                                                                 |                                                                                     |                                                                                     | 752                                                                                 | 752                                                                                 |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 729                                                                                 | 731                                                                                 |                                                                                     |                                                                                     | 737                                                                                 | 741                                                                                 |
| vCu, unblocked vol                | 715                                                                               |                                                                                   |                                                                                   | 645                                                                               |                                                                                   |                                                                                   | 1466                                                                                | 1468                                                                                | 641                                                                                 | 1490                                                                                | 1494                                                                                | 736                                                                                 |
| tC, single (s)                    | 4.3                                                                               |                                                                                   |                                                                                   | 4.6                                                                               |                                                                                   |                                                                                   | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 | 7.3                                                                                 | 6.5                                                                                 | 6.3                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 6.1                                                                                 | 5.5                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 5.5                                                                                 |
| tF (s)                            | 2.4                                                                               |                                                                                   |                                                                                   | 2.7                                                                               |                                                                                   |                                                                                   | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 | 3.7                                                                                 | 4.0                                                                                 | 3.4                                                                                 |
| p0 queue free %                   | 94                                                                                |                                                                                   |                                                                                   | 99                                                                                |                                                                                   |                                                                                   | 99                                                                                  | 100                                                                                 | 99                                                                                  | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)               | 804                                                                               |                                                                                   |                                                                                   | 748                                                                               |                                                                                   |                                                                                   | 278                                                                                 | 292                                                                                 | 478                                                                                 | 258                                                                                 | 300                                                                                 | 406                                                                                 |
| Direction, Lane #                 | EB 1                                                                              | EB 2                                                                              | WB 1                                                                              | WB 2                                                                              | NB 1                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 48                                                                                | 645                                                                               | 8                                                                                 | 756                                                                               | 8                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 48                                                                                | 0                                                                                 | 8                                                                                 | 0                                                                                 | 4                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 8                                                                                 | 0                                                                                 | 43                                                                                | 4                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 804                                                                               | 1700                                                                              | 748                                                                               | 1700                                                                              | 351                                                                               |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.06                                                                              | 0.38                                                                              | 0.01                                                                              | 0.44                                                                              | 0.02                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (m)             | 1.5                                                                               | 0.0                                                                               | 0.3                                                                               | 0.0                                                                               | 0.6                                                                               |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 9.8                                                                               | 0.0                                                                               | 9.9                                                                               | 0.0                                                                               | 15.5                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 | C                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.7                                                                               |                                                                                   |                                                                                   | 0.1                                                                               | 15.5                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   |                                                                                   | 0.5                                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   |                                                                                   | 47.0%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Lanes, Volumes, Timings  
9: Wgle Ave/Remark Dr & Main St

183 MAIN STREET E  
2021 TOTAL PM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 25                                                                                | 600                                                                               | 46                                                                                | 74                                                                                | 692                                                                               | 7                                                                                 | 50                                                                                 | 18                                                                                  | 84                                                                                  | 7                                                                                   | 7                                                                                   | 18                                                                                  |
| Future Volume (vph)     | 25                                                                                | 600                                                                               | 46                                                                                | 74                                                                                | 692                                                                               | 7                                                                                 | 50                                                                                 | 18                                                                                  | 84                                                                                  | 7                                                                                   | 7                                                                                   | 18                                                                                  |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 60.0                                                                              |                                                                                   | 0.0                                                                               | 55.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 15.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                                |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.989                                                                             |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                    | 0.926                                                                               |                                                                                     |                                                                                     | 0.925                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.984                                                                               |                                                                                     |                                                                                     | 0.989                                                                               |                                                                                     |
| Satd. Flow (prot)       | 1755                                                                              | 1651                                                                              | 0                                                                                 | 1825                                                                              | 1792                                                                              | 0                                                                                 | 0                                                                                  | 1750                                                                                | 0                                                                                   | 0                                                                                   | 1512                                                                                | 0                                                                                   |
| Flt Permitted           | 0.287                                                                             |                                                                                   |                                                                                   | 0.267                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.877                                                                               |                                                                                     |                                                                                     | 0.863                                                                               |                                                                                     |
| Satd. Flow (perm)       | 530                                                                               | 1651                                                                              | 0                                                                                 | 513                                                                               | 1792                                                                              | 0                                                                                 | 0                                                                                  | 1560                                                                                | 0                                                                                   | 0                                                                                   | 1320                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                    | 80                                                                                  |                                                                                     |                                                                                     | 20                                                                                  |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 170.1                                                                             |                                                                                   |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                    | 215.7                                                                               |                                                                                     |                                                                                     | 227.2                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 12.2                                                                              |                                                                                   |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                    | 15.5                                                                                |                                                                                     |                                                                                     | 16.4                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 2                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)      | 4%                                                                                | 16%                                                                               | 0%                                                                                | 0%                                                                                | 7%                                                                                | 3%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 28%                                                                                 | 0%                                                                                  | 18%                                                                                 |
| Adj. Flow (vph)         | 27                                                                                | 652                                                                               | 50                                                                                | 80                                                                                | 752                                                                               | 8                                                                                 | 54                                                                                 | 20                                                                                  | 91                                                                                  | 8                                                                                   | 8                                                                                   | 20                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 27                                                                                | 702                                                                               | 0                                                                                 | 80                                                                                | 760                                                                               | 0                                                                                 | 0                                                                                  | 165                                                                                 | 0                                                                                   | 0                                                                                   | 36                                                                                  | 0                                                                                   |
| Turn Type               | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 7.0                                                                               | 10.0                                                                              |                                                                                   | 7.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 11.0                                                                              | 25.0                                                                              |                                                                                   | 11.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                               | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 14.0                                                                              | 35.0                                                                              |                                                                                   | 14.0                                                                              | 35.0                                                                              |                                                                                   | 31.0                                                                               | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 38.8%                                                                              | 38.8%                                                                               |                                                                                     | 38.8%                                                                               | 38.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 10.0                                                                              | 28.6                                                                              |                                                                                   | 10.0                                                                              | 28.6                                                                              |                                                                                   | 24.7                                                                               | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 3.0                                                                               | 4.1                                                                               |                                                                                   | 3.0                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 1.0                                                                               | 2.3                                                                               |                                                                                   | 1.0                                                                               | 2.3                                                                               |                                                                                   | 2.2                                                                                | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 6.4                                                                               |                                                                                   | 4.0                                                                               | 6.4                                                                               |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 |                                                                                     |
| 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                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                              | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                               | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effct Green (s)     | 54.8                                                                              | 46.8                                                                              |                                                                                   | 56.7                                                                              | 51.3                                                                              |                                                                                   |                                                                                    | 11.6                                                                                |                                                                                     |                                                                                     | 11.6                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.68                                                                              | 0.58                                                                              |                                                                                   | 0.71                                                                              | 0.64                                                                              |                                                                                   |                                                                                    | 0.14                                                                                |                                                                                     |                                                                                     | 0.14                                                                                |                                                                                     |
| v/c Ratio               | 0.06                                                                              | 0.73                                                                              |                                                                                   | 0.17                                                                              | 0.66                                                                              |                                                                                   |                                                                                    | 0.56                                                                                |                                                                                     |                                                                                     | 0.17                                                                                |                                                                                     |

Lanes, Volumes, Timings  
9: Wigle Ave/Remark Dr & Main St

183 MAIN STREET E  
2021 TOTAL PM TRAFFIC VOLUMES

| Lane Group             | EBL  | EBT    | EBR | WBL  | WBT    | WBR | NBL | NBT   | NBR | SBL | SBT   | SBR |
|------------------------|------|--------|-----|------|--------|-----|-----|-------|-----|-----|-------|-----|
| Control Delay          | 4.0  | 19.7   |     | 4.4  | 15.1   |     |     | 24.5  |     |     | 19.4  |     |
| Queue Delay            | 0.0  | 0.0    |     | 0.0  | 0.0    |     |     | 0.0   |     |     | 0.0   |     |
| Total Delay            | 4.0  | 19.7   |     | 4.4  | 15.1   |     |     | 24.5  |     |     | 19.4  |     |
| LOS                    | A    | B      |     | A    | B      |     |     | C     |     |     | B     |     |
| Approach Delay         |      | 19.1   |     |      | 14.1   |     |     | 24.5  |     |     | 19.4  |     |
| Approach LOS           |      | B      |     |      | B      |     |     | C     |     |     | B     |     |
| Queue Length 50th (m)  | 0.9  | 74.6   |     | 2.7  | 49.0   |     |     | 12.8  |     |     | 2.3   |     |
| Queue Length 95th (m)  | 3.5  | #163.5 |     | 7.8  | #170.0 |     |     | 29.6  |     |     | 9.9   |     |
| Internal Link Dist (m) |      | 146.1  |     |      | 213.0  |     |     | 191.7 |     |     | 203.2 |     |
| Turn Bay Length (m)    | 60.0 |        |     | 55.0 |        |     |     |       |     |     |       |     |
| Base Capacity (vph)    | 531  | 966    |     | 534  | 1150   |     |     | 536   |     |     | 421   |     |
| Starvation Cap Reductn | 0    | 0      |     | 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      | 0.05 | 0.73   |     | 0.15 | 0.66   |     |     | 0.31  |     |     | 0.09  |     |

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 17.3

Intersection LOS: B

Intersection Capacity Utilization 70.7%

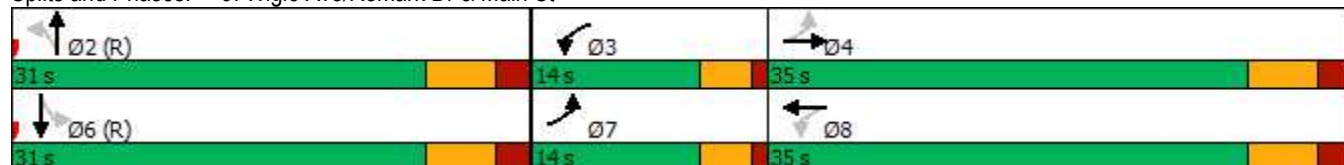
ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: Wigle Ave/Remark Dr & Main St



Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main St

183 MAIN STREET E  
2021 TOTAL PM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)    | 82                                                                                | 514                                                                               | 40                                                                                | 20                                                                                | 555                                                                               | 183                                                                               | 32                                                                                 | 16                                                                                  | 11                                                                                  | 184                                                                                 | 12                                                                                  | 136                                                                                 |
| Future Volume (vph)     | 82                                                                                | 514                                                                               | 40                                                                                | 20                                                                                | 555                                                                               | 183                                                                               | 32                                                                                 | 16                                                                                  | 11                                                                                  | 184                                                                                 | 12                                                                                  | 136                                                                                 |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 75.0                                                                              |                                                                                   | 0.0                                                                               | 15.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                               |                                                                                   |                                                                                   | 7.5                                                                                |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              | 0.99                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.989                                                                             |                                                                                   |                                                                                   | 0.963                                                                             |                                                                                   |                                                                                    | 0.975                                                                               |                                                                                     |                                                                                     | 0.862                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.973                                                                               |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1789                                                                              | 1859                                                                              | 0                                                                                 | 1789                                                                              | 1803                                                                              | 0                                                                                 | 0                                                                                  | 1782                                                                                | 0                                                                                   | 1789                                                                                | 1624                                                                                | 0                                                                                   |
| Flt Permitted           | 0.144                                                                             |                                                                                   |                                                                                   | 0.303                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.798                                                                               |                                                                                     | 0.715                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 271                                                                               | 1859                                                                              | 0                                                                                 | 569                                                                               | 1803                                                                              | 0                                                                                 | 0                                                                                  | 1462                                                                                | 0                                                                                   | 1344                                                                                | 1624                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 7                                                                                 |                                                                                   |                                                                                   | 32                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     | 148                                                                                 |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                   | 120.3                                                                             |                                                                                   |                                                                                    | 154.3                                                                               |                                                                                     |                                                                                     | 215.0                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                   | 8.7                                                                               |                                                                                   |                                                                                    | 11.1                                                                                |                                                                                     |                                                                                     | 15.5                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 |                                                                                   | 2                                                                                 |                                                                                    |                                                                                     | 2                                                                                   | 2                                                                                   |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Adj. Flow (vph)         | 89                                                                                | 559                                                                               | 43                                                                                | 22                                                                                | 603                                                                               | 199                                                                               | 35                                                                                 | 17                                                                                  | 12                                                                                  | 200                                                                                 | 13                                                                                  | 148                                                                                 |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 89                                                                                | 602                                                                               | 0                                                                                 | 22                                                                                | 802                                                                               | 0                                                                                 | 0                                                                                  | 64                                                                                  | 0                                                                                   | 200                                                                                 | 161                                                                                 | 0                                                                                   |
| Turn Type               | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                               | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 31.0                                                                               | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 53.7%                                                                             | 53.7%                                                                             |                                                                                   | 53.7%                                                                             | 53.7%                                                                             |                                                                                   | 46.3%                                                                              | 46.3%                                                                               |                                                                                     | 46.3%                                                                               | 46.3%                                                                               |                                                                                     |
| Maximum Green (s)       | 29.7                                                                              | 29.7                                                                              |                                                                                   | 29.7                                                                              | 29.7                                                                              |                                                                                   | 24.7                                                                               | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 4.1                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               |                                                                                   | 2.2                                                                               | 2.2                                                                               |                                                                                   | 2.2                                                                                | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.3                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                              | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                               | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effct Green (s)     | 33.8                                                                              | 33.8                                                                              |                                                                                   | 33.8                                                                              | 33.8                                                                              |                                                                                   |                                                                                    | 20.6                                                                                |                                                                                     | 20.6                                                                                | 20.6                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.50                                                                              | 0.50                                                                              |                                                                                   | 0.50                                                                              | 0.50                                                                              |                                                                                   |                                                                                    | 0.31                                                                                |                                                                                     | 0.31                                                                                | 0.31                                                                                |                                                                                     |
| v/c Ratio               | 0.65                                                                              | 0.64                                                                              |                                                                                   | 0.08                                                                              | 0.87                                                                              |                                                                                   |                                                                                    | 0.14                                                                                |                                                                                     | 0.48                                                                                | 0.27                                                                                |                                                                                     |
| Control Delay           | 40.3                                                                              | 15.8                                                                              |                                                                                   | 9.3                                                                               | 26.6                                                                              |                                                                                   |                                                                                    | 15.6                                                                                |                                                                                     | 24.0                                                                                | 5.6                                                                                 |                                                                                     |

Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main St

183 MAIN STREET E  
2021 TOTAL PM TRAFFIC VOLUMES

|                        |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay            | 40.3                                                                              | 15.8                                                                              |                                                                                   | 9.3                                                                               | 26.6                                                                              |                                                                                   |                                                                                    | 15.6                                                                                |                                                                                     | 24.0                                                                                | 5.6                                                                                 |                                                                                     |
| LOS                    | D                                                                                 | B                                                                                 |                                                                                   | A                                                                                 | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     | C                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay         |                                                                                   | 18.9                                                                              |                                                                                   |                                                                                   | 26.1                                                                              |                                                                                   |                                                                                    | 15.6                                                                                |                                                                                     |                                                                                     | 15.8                                                                                |                                                                                     |
| Approach LOS           |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (m)  | 7.7                                                                               | 50.8                                                                              |                                                                                   | 1.3                                                                               | 79.4                                                                              |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     | 21.8                                                                                | 1.2                                                                                 |                                                                                     |
| Queue Length 95th (m)  | #32.8                                                                             | 89.2                                                                              |                                                                                   | 5.1                                                                               | #161.5                                                                            |                                                                                   |                                                                                    | 12.7                                                                                |                                                                                     | 38.8                                                                                | 12.9                                                                                |                                                                                     |
| Internal Link Dist (m) |                                                                                   | 213.0                                                                             |                                                                                   |                                                                                   | 96.3                                                                              |                                                                                   |                                                                                    | 130.3                                                                               |                                                                                     |                                                                                     | 191.0                                                                               |                                                                                     |
| Turn Bay Length (m)    | 75.0                                                                              |                                                                                   |                                                                                   | 15.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 15.0                                                                                |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 136                                                                               | 940                                                                               |                                                                                   | 286                                                                               | 924                                                                               |                                                                                   |                                                                                    | 546                                                                                 |                                                                                     | 495                                                                                 | 692                                                                                 |                                                                                     |
| 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      | 0.65                                                                              | 0.64                                                                              |                                                                                   | 0.08                                                                              | 0.87                                                                              |                                                                                   |                                                                                    | 0.12                                                                                |                                                                                     | 0.40                                                                                | 0.23                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 67

Actuated Cycle Length: 67

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 21.3

Intersection LOS: C

Intersection Capacity Utilization 94.9%

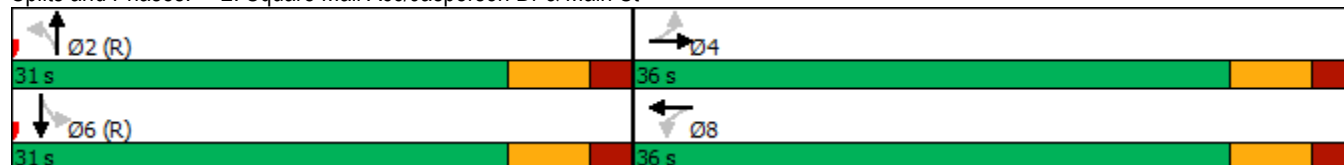
ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Square Mall Acc/Jasperson Dr & Main St



# HCM Unsignalized Intersection Capacity Analysis

## 3: Access Rd/School & Main St

183 MAIN STREET E  
2026 TOTAL AM TRAFFIC VOLUMES

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |  |
| Lane Configurations               |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Traffic Volume (veh/h)            | 158                                                                               | 659                                                                               | 2                                                                                 | 2                                                                                 | 399                                                                               | 146                                                                               | 7                                                                                  | 0                                                                                   | 6                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |  |
| Future Volume (Veh/h)             | 158                                                                               | 659                                                                               | 2                                                                                 | 2                                                                                 | 399                                                                               | 146                                                                               | 7                                                                                  | 0                                                                                   | 6                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |  |
| Sign Control                      | Free                                                                              |                                                                                   |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                    |                                                                                     | Stop                                                                                |                                                                                     | Stop                                                                                |                                                                                     |  |
| 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)            | 172                                                                               | 716                                                                               | 2                                                                                 | 2                                                                                 | 434                                                                               | 159                                                                               | 8                                                                                  | 0                                                                                   | 7                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |  |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 2                                                                                   |  |
| Lane Width (m)                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |  |
| Walking Speed (m/s)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1.2                                                                                 |  |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |  |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Median type                       | TWLTL                                                                             |                                                                                   |                                                                                   | TWLTL                                                                             |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Median storage (veh)              | 2                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 310                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| vC, conflicting volume            | 436                                                                               |                                                                                   |                                                                                   | 718                                                                               |                                                                                   |                                                                                   | 1499                                                                               | 1501                                                                                | 717                                                                                 | 1586                                                                                | 1582                                                                                | 516                                                                                 |  |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1061                                                                               | 1061                                                                                |                                                                                     |                                                                                     | 520                                                                                 | 520                                                                                 |  |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 438                                                                                | 440                                                                                 |                                                                                     |                                                                                     | 1067                                                                                | 1062                                                                                |  |
| vCu, unblocked vol                | 436                                                                               |                                                                                   |                                                                                   | 718                                                                               |                                                                                   |                                                                                   | 1499                                                                               | 1501                                                                                | 717                                                                                 | 1586                                                                                | 1582                                                                                | 516                                                                                 |  |
| tC, single (s)                    | 4.3                                                                               |                                                                                   |                                                                                   | 4.6                                                                               |                                                                                   |                                                                                   | 7.1                                                                                | 6.5                                                                                 | 6.2                                                                                 | 7.3                                                                                 | 6.5                                                                                 | 6.3                                                                                 |  |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 6.1                                                                                | 5.5                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 5.5                                                                                 |  |
| tF (s)                            | 2.4                                                                               |                                                                                   |                                                                                   | 2.7                                                                               |                                                                                   |                                                                                   | 3.5                                                                                | 4.0                                                                                 | 3.3                                                                                 | 3.7                                                                                 | 4.0                                                                                 | 3.4                                                                                 |  |
| p0 queue free %                   | 83                                                                                |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   | 96                                                                                 | 100                                                                                 | 98                                                                                  | 100                                                                                 | 100                                                                                 | 100                                                                                 |  |
| cM capacity (veh/h)               | 1030                                                                              |                                                                                   |                                                                                   | 699                                                                               |                                                                                   |                                                                                   | 208                                                                                | 226                                                                                 | 433                                                                                 | 184                                                                                 | 231                                                                                 | 544                                                                                 |  |
| Direction, Lane #                 | EB 1                                                                              | EB 2                                                                              | WB 1                                                                              | WB 2                                                                              | NB 1                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Volume Total                      | 172                                                                               | 718                                                                               | 2                                                                                 | 593                                                                               | 15                                                                                |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Volume Left                       | 172                                                                               | 0                                                                                 | 2                                                                                 | 0                                                                                 | 8                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Volume Right                      | 0                                                                                 | 2                                                                                 | 0                                                                                 | 159                                                                               | 7                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| cSH                               | 1030                                                                              | 1700                                                                              | 699                                                                               | 1700                                                                              | 274                                                                               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Volume to Capacity                | 0.17                                                                              | 0.42                                                                              | 0.00                                                                              | 0.35                                                                              | 0.05                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Queue Length 95th (m)             | 4.8                                                                               | 0.0                                                                               | 0.1                                                                               | 0.0                                                                               | 1.4                                                                               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Control Delay (s)                 | 9.2                                                                               | 0.0                                                                               | 10.2                                                                              | 0.0                                                                               | 18.9                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Lane LOS                          | A                                                                                 |                                                                                   |                                                                                   | B                                                                                 | C                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Approach Delay (s)                | 1.8                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 18.9                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Average Delay                     |                                                                                   |                                                                                   | 1.3                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 52.0%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   | A                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |

Lanes, Volumes, Timings  
9: Wgle Ave/Remark Dr & Main St

183 MAIN STREET E  
2026 TOTAL AM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 13                                                                                | 594                                                                               | 33                                                                                | 64                                                                                | 490                                                                               | 7                                                                                 | 42                                                                                  | 3                                                                                   | 75                                                                                  | 9                                                                                   | 2                                                                                   | 29                                                                                  |
| Future Volume (vph)     | 13                                                                                | 594                                                                               | 33                                                                                | 64                                                                                | 490                                                                               | 7                                                                                 | 42                                                                                  | 3                                                                                   | 75                                                                                  | 9                                                                                   | 2                                                                                   | 29                                                                                  |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 60.0                                                                              |                                                                                   | 0.0                                                                               | 55.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 15.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                                 |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.992                                                                             |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                     | 0.915                                                                               |                                                                                     |                                                                                     | 0.902                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.983                                                                               |                                                                                     |                                                                                     | 0.989                                                                               |                                                                                     |
| Satd. Flow (prot)       | 1755                                                                              | 1653                                                                              | 0                                                                                 | 1825                                                                              | 1792                                                                              | 0                                                                                 | 0                                                                                   | 1728                                                                                | 0                                                                                   | 0                                                                                   | 1435                                                                                | 0                                                                                   |
| Flt Permitted           | 0.455                                                                             |                                                                                   |                                                                                   | 0.280                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.866                                                                               |                                                                                     |                                                                                     | 0.886                                                                               |                                                                                     |
| Satd. Flow (perm)       | 839                                                                               | 1653                                                                              | 0                                                                                 | 538                                                                               | 1792                                                                              | 0                                                                                 | 0                                                                                   | 1522                                                                                | 0                                                                                   | 0                                                                                   | 1285                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                     | 82                                                                                  |                                                                                     |                                                                                     | 32                                                                                  |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 170.1                                                                             |                                                                                   |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                     | 215.7                                                                               |                                                                                     |                                                                                     | 227.2                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 12.2                                                                              |                                                                                   |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                     | 15.5                                                                                |                                                                                     |                                                                                     | 16.4                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 2                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)      | 4%                                                                                | 16%                                                                               | 0%                                                                                | 0%                                                                                | 7%                                                                                | 3%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 28%                                                                                 | 0%                                                                                  | 18%                                                                                 |
| Adj. Flow (vph)         | 14                                                                                | 646                                                                               | 36                                                                                | 70                                                                                | 533                                                                               | 8                                                                                 | 46                                                                                  | 3                                                                                   | 82                                                                                  | 10                                                                                  | 2                                                                                   | 32                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 14                                                                                | 682                                                                               | 0                                                                                 | 70                                                                                | 541                                                                               | 0                                                                                 | 0                                                                                   | 131                                                                                 | 0                                                                                   | 0                                                                                   | 44                                                                                  | 0                                                                                   |
| Turn Type               | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 7.0                                                                               | 10.0                                                                              |                                                                                   | 7.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 11.0                                                                              | 25.0                                                                              |                                                                                   | 11.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                                | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 14.0                                                                              | 35.0                                                                              |                                                                                   | 14.0                                                                              | 35.0                                                                              |                                                                                   | 31.0                                                                                | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 38.8%                                                                               | 38.8%                                                                               |                                                                                     | 38.8%                                                                               | 38.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 10.0                                                                              | 28.6                                                                              |                                                                                   | 10.0                                                                              | 28.6                                                                              |                                                                                   | 24.7                                                                                | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 3.0                                                                               | 4.1                                                                               |                                                                                   | 3.0                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                 | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 1.0                                                                               | 2.3                                                                               |                                                                                   | 1.0                                                                               | 2.3                                                                               |                                                                                   | 2.2                                                                                 | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 6.4                                                                               |                                                                                   | 4.0                                                                               | 6.4                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 |                                                                                     |
| 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                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                               | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effct Green (s)     | 54.7                                                                              | 46.7                                                                              |                                                                                   | 57.3                                                                              | 53.4                                                                              |                                                                                   |                                                                                     | 11.7                                                                                |                                                                                     |                                                                                     | 11.7                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.68                                                                              | 0.58                                                                              |                                                                                   | 0.72                                                                              | 0.67                                                                              |                                                                                   |                                                                                     | 0.15                                                                                |                                                                                     |                                                                                     | 0.15                                                                                |                                                                                     |
| v/c Ratio               | 0.02                                                                              | 0.71                                                                              |                                                                                   | 0.14                                                                              | 0.45                                                                              |                                                                                   |                                                                                     | 0.45                                                                                |                                                                                     |                                                                                     | 0.20                                                                                |                                                                                     |

Lanes, Volumes, Timings  
9: Wigle Ave/Remark Dr & Main St

183 MAIN STREET E  
2026 TOTAL AM TRAFFIC VOLUMES

|                        |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Control Delay          | 3.4                                                                               | 17.9                                                                              |                                                                                   | 3.9                                                                               | 8.8                                                                               |                                                                                   |                                                                                    | 18.9                                                                                |                                                                                     |                                                                                     | 17.0                                                                                |                                                                                     |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay            | 3.4                                                                               | 17.9                                                                              |                                                                                   | 3.9                                                                               | 8.8                                                                               |                                                                                   |                                                                                    | 18.9                                                                                |                                                                                     |                                                                                     | 17.0                                                                                |                                                                                     |
| LOS                    | A                                                                                 | B                                                                                 |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay         |                                                                                   | 17.6                                                                              |                                                                                   |                                                                                   | 8.3                                                                               |                                                                                   |                                                                                    | 18.9                                                                                |                                                                                     |                                                                                     | 17.0                                                                                |                                                                                     |
| Approach LOS           |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (m)  | 0.5                                                                               | 73.6                                                                              |                                                                                   | 2.5                                                                               | 30.4                                                                              |                                                                                   |                                                                                    | 7.1                                                                                 |                                                                                     |                                                                                     | 1.7                                                                                 |                                                                                     |
| Queue Length 95th (m)  | 2.0                                                                               | 128.0                                                                             |                                                                                   | 6.2                                                                               | 82.2                                                                              |                                                                                   |                                                                                    | 22.5                                                                                |                                                                                     |                                                                                     | 10.5                                                                                |                                                                                     |
| Internal Link Dist (m) |                                                                                   | 146.1                                                                             |                                                                                   |                                                                                   | 213.0                                                                             |                                                                                   |                                                                                    | 191.7                                                                               |                                                                                     |                                                                                     | 203.2                                                                               |                                                                                     |
| Turn Bay Length (m)    | 60.0                                                                              |                                                                                   |                                                                                   | 55.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 713                                                                               | 966                                                                               |                                                                                   | 549                                                                               | 1195                                                                              |                                                                                   |                                                                                    | 526                                                                                 |                                                                                     |                                                                                     | 418                                                                                 |                                                                                     |
| Starvation Cap Reductn | 0                                                                                 | 0                                                                                 |                                                                                   | 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      | 0.02                                                                              | 0.71                                                                              |                                                                                   | 0.13                                                                              | 0.45                                                                              |                                                                                   |                                                                                    | 0.25                                                                                |                                                                                     |                                                                                     | 0.11                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 13.9

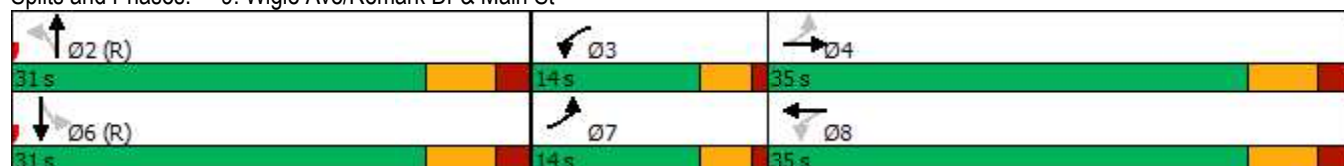
Intersection LOS: B

Intersection Capacity Utilization 64.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 9: Wigle Ave/Remark Dr & Main St



Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main St

183 MAIN STREET E  
2026 TOTAL AM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)    | 69                                                                                | 517                                                                               | 54                                                                                | 17                                                                                | 457                                                                               | 176                                                                               | 25                                                                                 | 5                                                                                   | 16                                                                                  | 171                                                                                 | 21                                                                                  | 90                                                                                  |
| Future Volume (vph)     | 69                                                                                | 517                                                                               | 54                                                                                | 17                                                                                | 457                                                                               | 176                                                                               | 25                                                                                 | 5                                                                                   | 16                                                                                  | 171                                                                                 | 21                                                                                  | 90                                                                                  |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 75.0                                                                              |                                                                                   | 0.0                                                                               | 15.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                               |                                                                                   |                                                                                   | 7.5                                                                                |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 0.99                                                                              |                                                                                   |                                                                                    | 0.99                                                                                |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.986                                                                             |                                                                                   |                                                                                   | 0.958                                                                             |                                                                                   |                                                                                    | 0.953                                                                               |                                                                                     |                                                                                     | 0.879                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.973                                                                               |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1789                                                                              | 1852                                                                              | 0                                                                                 | 1789                                                                              | 1792                                                                              | 0                                                                                 | 0                                                                                  | 1732                                                                                | 0                                                                                   | 1789                                                                                | 1656                                                                                | 0                                                                                   |
| Flt Permitted           | 0.164                                                                             |                                                                                   |                                                                                   | 0.226                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.840                                                                               |                                                                                     | 0.725                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 309                                                                               | 1852                                                                              | 0                                                                                 | 424                                                                               | 1792                                                                              | 0                                                                                 | 0                                                                                  | 1495                                                                                | 0                                                                                   | 1361                                                                                | 1656                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 37                                                                                |                                                                                   |                                                                                    | 17                                                                                  |                                                                                     |                                                                                     | 98                                                                                  |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                   | 120.3                                                                             |                                                                                   |                                                                                    | 154.3                                                                               |                                                                                     |                                                                                     | 215.0                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                   | 8.7                                                                               |                                                                                   |                                                                                    | 11.1                                                                                |                                                                                     |                                                                                     | 15.5                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 |                                                                                   | 2                                                                                 |                                                                                    |                                                                                     | 2                                                                                   | 2                                                                                   |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Adj. Flow (vph)         | 75                                                                                | 562                                                                               | 59                                                                                | 18                                                                                | 497                                                                               | 191                                                                               | 27                                                                                 | 5                                                                                   | 17                                                                                  | 186                                                                                 | 23                                                                                  | 98                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 75                                                                                | 621                                                                               | 0                                                                                 | 18                                                                                | 688                                                                               | 0                                                                                 | 0                                                                                  | 49                                                                                  | 0                                                                                   | 186                                                                                 | 121                                                                                 | 0                                                                                   |
| Turn Type               | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                               | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 31.0                                                                               | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 53.7%                                                                             | 53.7%                                                                             |                                                                                   | 53.7%                                                                             | 53.7%                                                                             |                                                                                   | 46.3%                                                                              | 46.3%                                                                               |                                                                                     | 46.3%                                                                               | 46.3%                                                                               |                                                                                     |
| Maximum Green (s)       | 29.7                                                                              | 29.7                                                                              |                                                                                   | 29.7                                                                              | 29.7                                                                              |                                                                                   | 24.7                                                                               | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 4.1                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               |                                                                                   | 2.2                                                                               | 2.2                                                                               |                                                                                   | 2.2                                                                                | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.3                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                              | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                               | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effct Green (s)     | 29.0                                                                              | 29.0                                                                              |                                                                                   | 29.0                                                                              | 29.0                                                                              |                                                                                   |                                                                                    | 25.4                                                                                |                                                                                     | 25.4                                                                                | 25.4                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.43                                                                              | 0.43                                                                              |                                                                                   | 0.43                                                                              | 0.43                                                                              |                                                                                   |                                                                                    | 0.38                                                                                |                                                                                     | 0.38                                                                                | 0.38                                                                                |                                                                                     |
| v/c Ratio               | 0.56                                                                              | 0.77                                                                              |                                                                                   | 0.10                                                                              | 0.86                                                                              |                                                                                   |                                                                                    | 0.09                                                                                |                                                                                     | 0.36                                                                                | 0.18                                                                                |                                                                                     |
| Control Delay           | 31.2                                                                              | 22.5                                                                              |                                                                                   | 11.0                                                                              | 28.1                                                                              |                                                                                   |                                                                                    | 12.1                                                                                |                                                                                     | 19.2                                                                                | 6.4                                                                                 |                                                                                     |

Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main St

183 MAIN STREET E  
2026 TOTAL AM TRAFFIC VOLUMES

| Lane Group             | EBL   | EBT   | EBR | WBL  | WBT   | WBR | NBL | NBT   | NBR | SBL  | SBT   | SBR |
|------------------------|-------|-------|-----|------|-------|-----|-----|-------|-----|------|-------|-----|
| Queue Delay            | 0.0   | 0.0   |     | 0.0  | 0.0   |     |     | 0.0   |     | 0.0  | 0.0   |     |
| Total Delay            | 31.2  | 22.5  |     | 11.0 | 28.1  |     |     | 12.1  |     | 19.2 | 6.4   |     |
| LOS                    | C     | C     |     | B    | C     |     |     | B     |     | B    | A     |     |
| Approach Delay         |       | 23.4  |     |      | 27.6  |     |     | 12.1  |     |      | 14.1  |     |
| Approach LOS           |       | C     |     |      | C     |     |     | B     |     |      | B     |     |
| Queue Length 50th (m)  | 6.8   | 62.7  |     | 1.3  | 71.5  |     |     | 2.7   |     | 17.6 | 1.9   |     |
| Queue Length 95th (m)  | #21.7 | 89.4  |     | 4.4  | 104.9 |     |     | 9.9   |     | 36.8 | 12.8  |     |
| Internal Link Dist (m) |       | 213.0 |     |      | 96.3  |     |     | 130.3 |     |      | 191.0 |     |
| Turn Bay Length (m)    | 75.0  |       |     | 15.0 |       |     |     |       |     | 15.0 |       |     |
| Base Capacity (vph)    | 142   | 862   |     | 195  | 848   |     |     | 605   |     | 541  | 718   |     |
| 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      | 0.53  | 0.72  |     | 0.09 | 0.81  |     |     | 0.08  |     | 0.34 | 0.17  |     |

Intersection Summary

Area Type: Other

Cycle Length: 67

Actuated Cycle Length: 67

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 23.2

Intersection LOS: C

Intersection Capacity Utilization 74.4%

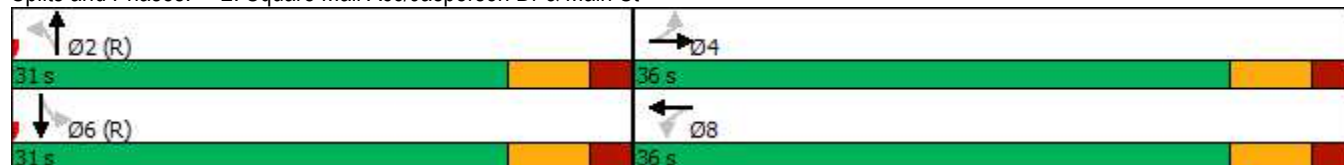
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Square Mall Acc/Jasperson Dr & Main St



# HCM Unsignalized Intersection Capacity Analysis

## 3: Access Rd/School & Main St

183 MAIN STREET E  
2026 TOTAL PM TRAFFIC VOLUMES

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Traffic Volume (veh/h)            | 44                                                                                | 687                                                                               | 7                                                                                 | 7                                                                                 | 786                                                                               | 40                                                                                | 4                                                                                   | 0                                                                                   | 4                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Future Volume (Veh/h)             | 44                                                                                | 687                                                                               | 7                                                                                 | 7                                                                                 | 786                                                                               | 40                                                                                | 4                                                                                   | 0                                                                                   | 4                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Sign Control                      | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |                                                                                     |
| 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)            | 48                                                                                | 747                                                                               | 8                                                                                 | 8                                                                                 | 854                                                                               | 43                                                                                | 4                                                                                   | 0                                                                                   | 4                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 2                                                                                   |
| Lane Width (m)                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Walking Speed (m/s)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1.2                                                                                 |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       | TWLTL                                                                             |                                                                                   |                                                                                   | TWLTL                                                                             |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              | 2                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 310                                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 856                                                                               |                                                                                   |                                                                                   | 755                                                                               |                                                                                   |                                                                                   | 1717                                                                                | 1719                                                                                | 751                                                                                 | 1740                                                                                | 1744                                                                                | 878                                                                                 |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 847                                                                                 | 847                                                                                 |                                                                                     |                                                                                     | 894                                                                                 | 894                                                                                 |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 870                                                                                 | 872                                                                                 |                                                                                     |                                                                                     | 847                                                                                 | 851                                                                                 |
| vCu, unblocked vol                | 856                                                                               |                                                                                   |                                                                                   | 755                                                                               |                                                                                   |                                                                                   | 1717                                                                                | 1719                                                                                | 751                                                                                 | 1740                                                                                | 1744                                                                                | 878                                                                                 |
| tC, single (s)                    | 4.3                                                                               |                                                                                   |                                                                                   | 4.6                                                                               |                                                                                   |                                                                                   | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 | 7.3                                                                                 | 6.5                                                                                 | 6.3                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 6.1                                                                                 | 5.5                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 5.5                                                                                 |
| tF (s)                            | 2.4                                                                               |                                                                                   |                                                                                   | 2.7                                                                               |                                                                                   |                                                                                   | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 | 3.7                                                                                 | 4.0                                                                                 | 3.4                                                                                 |
| p0 queue free %                   | 93                                                                                |                                                                                   |                                                                                   | 99                                                                                |                                                                                   |                                                                                   | 98                                                                                  | 100                                                                                 | 99                                                                                  | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)               | 709                                                                               |                                                                                   |                                                                                   | 675                                                                               |                                                                                   |                                                                                   | 226                                                                                 | 245                                                                                 | 414                                                                                 | 212                                                                                 | 255                                                                                 | 336                                                                                 |
| Direction, Lane #                 | EB 1                                                                              | EB 2                                                                              | WB 1                                                                              | WB 2                                                                              | NB 1                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 48                                                                                | 755                                                                               | 8                                                                                 | 897                                                                               | 8                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 48                                                                                | 0                                                                                 | 8                                                                                 | 0                                                                                 | 4                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 8                                                                                 | 0                                                                                 | 43                                                                                | 4                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 709                                                                               | 1700                                                                              | 675                                                                               | 1700                                                                              | 293                                                                               |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.07                                                                              | 0.44                                                                              | 0.01                                                                              | 0.53                                                                              | 0.03                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (m)             | 1.7                                                                               | 0.0                                                                               | 0.3                                                                               | 0.0                                                                               | 0.7                                                                               |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 10.4                                                                              | 0.0                                                                               | 10.4                                                                              | 0.0                                                                               | 17.6                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 | C                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.6                                                                               |                                                                                   |                                                                                   | 0.1                                                                               | 17.6                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   |                                                                                   | 0.4                                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   |                                                                                   | 53.8%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Lanes, Volumes, Timings  
9: Wgle Ave/Remark Dr & Main St

183 MAIN STREET E  
2026 TOTAL PM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |
| Traffic Volume (vph)    | 27                                                                                | 707                                                                               | 50                                                                                | 85                                                                                | 803                                                                               | 9                                                                                 | 55                                                                                  | 19                                                                                  | 96                                                                                  | 8                                                                                   | 8                                                                                   | 19                                                                                  |
| Future Volume (vph)     | 27                                                                                | 707                                                                               | 50                                                                                | 85                                                                                | 803                                                                               | 9                                                                                 | 55                                                                                  | 19                                                                                  | 96                                                                                  | 8                                                                                   | 8                                                                                   | 19                                                                                  |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 60.0                                                                              |                                                                                   | 0.0                                                                               | 55.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 15.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                                 |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.990                                                                             |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                     | 0.924                                                                               |                                                                                     |                                                                                     | 0.927                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.984                                                                               |                                                                                     |                                                                                     | 0.989                                                                               |                                                                                     |
| Satd. Flow (prot)       | 1755                                                                              | 1652                                                                              | 0                                                                                 | 1825                                                                              | 1792                                                                              | 0                                                                                 | 0                                                                                   | 1747                                                                                | 0                                                                                   | 0                                                                                   | 1516                                                                                | 0                                                                                   |
| Flt Permitted           | 0.204                                                                             |                                                                                   |                                                                                   | 0.188                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.877                                                                               |                                                                                     |                                                                                     | 0.846                                                                               |                                                                                     |
| Satd. Flow (perm)       | 377                                                                               | 1652                                                                              | 0                                                                                 | 361                                                                               | 1792                                                                              | 0                                                                                 | 0                                                                                   | 1557                                                                                | 0                                                                                   | 0                                                                                   | 1297                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                     | 84                                                                                  |                                                                                     |                                                                                     | 21                                                                                  |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 170.1                                                                             |                                                                                   |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                     | 215.7                                                                               |                                                                                     |                                                                                     | 227.2                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 12.2                                                                              |                                                                                   |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                     | 15.5                                                                                |                                                                                     |                                                                                     | 16.4                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 2                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)      | 4%                                                                                | 16%                                                                               | 0%                                                                                | 0%                                                                                | 7%                                                                                | 3%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 28%                                                                                 | 0%                                                                                  | 18%                                                                                 |
| Adj. Flow (vph)         | 29                                                                                | 768                                                                               | 54                                                                                | 92                                                                                | 873                                                                               | 10                                                                                | 60                                                                                  | 21                                                                                  | 104                                                                                 | 9                                                                                   | 9                                                                                   | 21                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 29                                                                                | 822                                                                               | 0                                                                                 | 92                                                                                | 883                                                                               | 0                                                                                 | 0                                                                                   | 185                                                                                 | 0                                                                                   | 0                                                                                   | 39                                                                                  | 0                                                                                   |
| Turn Type               | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 7.0                                                                               | 10.0                                                                              |                                                                                   | 7.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 11.0                                                                              | 25.0                                                                              |                                                                                   | 11.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                                | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 14.0                                                                              | 35.0                                                                              |                                                                                   | 14.0                                                                              | 35.0                                                                              |                                                                                   | 31.0                                                                                | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 38.8%                                                                               | 38.8%                                                                               |                                                                                     | 38.8%                                                                               | 38.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 10.0                                                                              | 28.6                                                                              |                                                                                   | 10.0                                                                              | 28.6                                                                              |                                                                                   | 24.7                                                                                | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 3.0                                                                               | 4.1                                                                               |                                                                                   | 3.0                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                 | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 1.0                                                                               | 2.3                                                                               |                                                                                   | 1.0                                                                               | 2.3                                                                               |                                                                                   | 2.2                                                                                 | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 6.4                                                                               |                                                                                   | 4.0                                                                               | 6.4                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 |                                                                                     |
| 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                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                               | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effct Green (s)     | 54.0                                                                              | 46.0                                                                              |                                                                                   | 56.2                                                                              | 50.7                                                                              |                                                                                   |                                                                                     | 12.2                                                                                |                                                                                     |                                                                                     | 12.2                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.68                                                                              | 0.58                                                                              |                                                                                   | 0.70                                                                              | 0.63                                                                              |                                                                                   |                                                                                     | 0.15                                                                                |                                                                                     |                                                                                     | 0.15                                                                                |                                                                                     |
| v/c Ratio               | 0.08                                                                              | 0.86                                                                              |                                                                                   | 0.24                                                                              | 0.78                                                                              |                                                                                   |                                                                                     | 0.60                                                                                |                                                                                     |                                                                                     | 0.18                                                                                |                                                                                     |

Lanes, Volumes, Timings  
9: Wigle Ave/Remark Dr & Main St

183 MAIN STREET E  
2026 TOTAL PM TRAFFIC VOLUMES

|                        |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Control Delay          | 4.5                                                                               | 28.6                                                                              |                                                                                   | 5.4                                                                               | 20.2                                                                              |                                                                                   |                                                                                    | 25.6                                                                                |                                                                                     |                                                                                     | 18.9                                                                                |                                                                                     |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay            | 4.5                                                                               | 28.6                                                                              |                                                                                   | 5.4                                                                               | 20.2                                                                              |                                                                                   |                                                                                    | 25.6                                                                                |                                                                                     |                                                                                     | 18.9                                                                                |                                                                                     |
| LOS                    | A                                                                                 | C                                                                                 |                                                                                   | A                                                                                 | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay         |                                                                                   | 27.8                                                                              |                                                                                   |                                                                                   | 18.8                                                                              |                                                                                   |                                                                                    | 25.6                                                                                |                                                                                     |                                                                                     | 18.9                                                                                |                                                                                     |
| Approach LOS           |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (m)  | 1.0                                                                               | 102.5                                                                             |                                                                                   | 3.3                                                                               | 67.6                                                                              |                                                                                   |                                                                                    | 15.2                                                                                |                                                                                     |                                                                                     | 2.6                                                                                 |                                                                                     |
| Queue Length 95th (m)  | 3.9                                                                               | #214.3                                                                            |                                                                                   | 9.3                                                                               | #220.9                                                                            |                                                                                   |                                                                                    | 33.0                                                                                |                                                                                     |                                                                                     | 10.3                                                                                |                                                                                     |
| Internal Link Dist (m) |                                                                                   | 146.1                                                                             |                                                                                   |                                                                                   | 213.0                                                                             |                                                                                   |                                                                                    | 191.7                                                                               |                                                                                     |                                                                                     | 203.2                                                                               |                                                                                     |
| Turn Bay Length (m)    | 60.0                                                                              |                                                                                   |                                                                                   | 55.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 438                                                                               | 952                                                                               |                                                                                   | 440                                                                               | 1136                                                                              |                                                                                   |                                                                                    | 538                                                                                 |                                                                                     |                                                                                     | 414                                                                                 |                                                                                     |
| Starvation Cap Reductn | 0                                                                                 | 0                                                                                 |                                                                                   | 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      | 0.07                                                                              | 0.86                                                                              |                                                                                   | 0.21                                                                              | 0.78                                                                              |                                                                                   |                                                                                    | 0.34                                                                                |                                                                                     |                                                                                     | 0.09                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 23.2

Intersection LOS: C

Intersection Capacity Utilization 77.9%

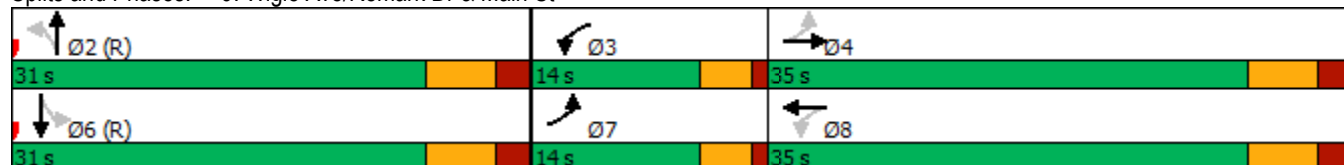
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: Wigle Ave/Remark Dr & Main St



Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main St

183 MAIN STREET E  
2026 TOTAL PM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |  |  |  |
| Traffic Volume (vph)    | 96                                                                                | 608                                                                               | 46                                                                                | 22                                                                                | 656                                                                               | 220                                                                               | 36                                                                                 | 17                                                                                  | 13                                                                                  | 207                                                                                 | 14                                                                                  | 151                                                                                 |
| Future Volume (vph)     | 96                                                                                | 608                                                                               | 46                                                                                | 22                                                                                | 656                                                                               | 220                                                                               | 36                                                                                 | 17                                                                                  | 13                                                                                  | 207                                                                                 | 14                                                                                  | 151                                                                                 |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 75.0                                                                              |                                                                                   | 0.0                                                                               | 15.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                               |                                                                                   |                                                                                   | 7.5                                                                                |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.989                                                                             |                                                                                   |                                                                                   | 0.962                                                                             |                                                                                   |                                                                                    | 0.973                                                                               |                                                                                     |                                                                                     | 0.863                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.973                                                                               |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1789                                                                              | 1859                                                                              | 0                                                                                 | 1789                                                                              | 1801                                                                              | 0                                                                                 | 0                                                                                  | 1775                                                                                | 0                                                                                   | 1789                                                                                | 1625                                                                                | 0                                                                                   |
| Flt Permitted           | 0.106                                                                             |                                                                                   |                                                                                   | 0.262                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.764                                                                               |                                                                                     | 0.711                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 200                                                                               | 1859                                                                              | 0                                                                                 | 493                                                                               | 1801                                                                              | 0                                                                                 | 0                                                                                  | 1394                                                                                | 0                                                                                   | 1335                                                                                | 1625                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 7                                                                                 |                                                                                   |                                                                                   | 32                                                                                |                                                                                   |                                                                                    | 14                                                                                  |                                                                                     |                                                                                     | 129                                                                                 |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                   | 120.3                                                                             |                                                                                   |                                                                                    | 154.3                                                                               |                                                                                     |                                                                                     | 215.0                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                   | 8.7                                                                               |                                                                                   |                                                                                    | 11.1                                                                                |                                                                                     |                                                                                     | 15.5                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 |                                                                                   | 2                                                                                 |                                                                                    |                                                                                     | 2                                                                                   | 2                                                                                   |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Adj. Flow (vph)         | 104                                                                               | 661                                                                               | 50                                                                                | 24                                                                                | 713                                                                               | 239                                                                               | 39                                                                                 | 18                                                                                  | 14                                                                                  | 225                                                                                 | 15                                                                                  | 164                                                                                 |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 104                                                                               | 711                                                                               | 0                                                                                 | 24                                                                                | 952                                                                               | 0                                                                                 | 0                                                                                  | 71                                                                                  | 0                                                                                   | 225                                                                                 | 179                                                                                 | 0                                                                                   |
| Turn Type               | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                               | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 31.0                                                                               | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 53.7%                                                                             | 53.7%                                                                             |                                                                                   | 53.7%                                                                             | 53.7%                                                                             |                                                                                   | 46.3%                                                                              | 46.3%                                                                               |                                                                                     | 46.3%                                                                               | 46.3%                                                                               |                                                                                     |
| Maximum Green (s)       | 29.7                                                                              | 29.7                                                                              |                                                                                   | 29.7                                                                              | 29.7                                                                              |                                                                                   | 24.7                                                                               | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 4.1                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               |                                                                                   | 2.2                                                                               | 2.2                                                                               |                                                                                   | 2.2                                                                                | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.3                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                              | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                               | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 37.8                                                                              | 37.8                                                                              |                                                                                   | 37.8                                                                              | 37.8                                                                              |                                                                                   |                                                                                    | 16.6                                                                                |                                                                                     | 16.6                                                                                | 16.6                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.56                                                                              | 0.56                                                                              |                                                                                   | 0.56                                                                              | 0.56                                                                              |                                                                                   |                                                                                    | 0.25                                                                                |                                                                                     | 0.25                                                                                | 0.25                                                                                |                                                                                     |
| v/c Ratio               | 0.93                                                                              | 0.68                                                                              |                                                                                   | 0.09                                                                              | 0.92                                                                              |                                                                                   |                                                                                    | 0.20                                                                                |                                                                                     | 0.68                                                                                | 0.36                                                                                |                                                                                     |
| Control Delay           | 93.4                                                                              | 16.4                                                                              |                                                                                   | 10.0                                                                              | 32.3                                                                              |                                                                                   |                                                                                    | 16.2                                                                                |                                                                                     | 32.8                                                                                | 8.3                                                                                 |                                                                                     |

Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main St

183 MAIN STREET E  
2026 TOTAL PM TRAFFIC VOLUMES

|                        |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay            | 93.4                                                                              | 16.4                                                                              |                                                                                   | 10.0                                                                              | 32.3                                                                              |                                                                                   |                                                                                    | 16.2                                                                                |                                                                                     | 32.8                                                                                | 8.3                                                                                 |                                                                                     |
| LOS                    | F                                                                                 | B                                                                                 |                                                                                   | A                                                                                 | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     | C                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay         |                                                                                   | 26.3                                                                              |                                                                                   |                                                                                   | 31.7                                                                              |                                                                                   |                                                                                    | 16.2                                                                                |                                                                                     |                                                                                     | 21.9                                                                                |                                                                                     |
| Approach LOS           |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Queue Length 50th (m)  | 11.2                                                                              | 58.7                                                                              |                                                                                   | 1.3                                                                               | 99.8                                                                              |                                                                                   |                                                                                    | 5.9                                                                                 |                                                                                     | 26.7                                                                                | 5.1                                                                                 |                                                                                     |
| Queue Length 95th (m)  | #33.0                                                                             | #138.8                                                                            |                                                                                   | 5.9                                                                               | #214.5                                                                            |                                                                                   |                                                                                    | 13.3                                                                                |                                                                                     | 42.2                                                                                | 16.7                                                                                |                                                                                     |
| Internal Link Dist (m) |                                                                                   | 213.0                                                                             |                                                                                   |                                                                                   | 96.3                                                                              |                                                                                   |                                                                                    | 130.3                                                                               |                                                                                     |                                                                                     | 191.0                                                                               |                                                                                     |
| Turn Bay Length (m)    | 75.0                                                                              |                                                                                   |                                                                                   | 15.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 15.0                                                                                |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 112                                                                               | 1052                                                                              |                                                                                   | 278                                                                               | 1030                                                                              |                                                                                   |                                                                                    | 522                                                                                 |                                                                                     | 492                                                                                 | 680                                                                                 |                                                                                     |
| 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      | 0.93                                                                              | 0.68                                                                              |                                                                                   | 0.09                                                                              | 0.92                                                                              |                                                                                   |                                                                                    | 0.14                                                                                |                                                                                     | 0.46                                                                                | 0.26                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 67

Actuated Cycle Length: 67

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 27.5

Intersection LOS: C

Intersection Capacity Utilization 103.8%

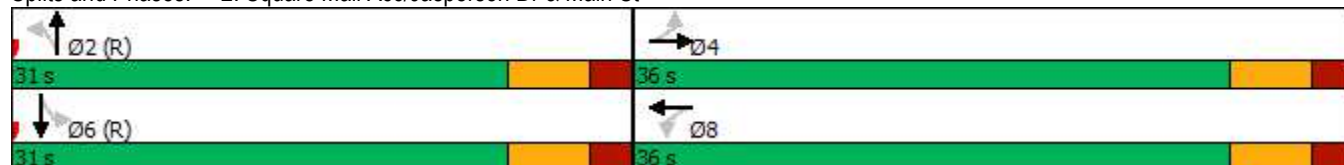
ICU Level of Service G

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Square Mall Acc/Jasperson Dr & Main St



# HCM Unsignalized Intersection Capacity Analysis

## 3: Access Rd/FUT ACC & Main St

183 MAIN STREET E  
2031 TOTAL AM TRAFFIC VOLUMES

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (veh/h)            | 12                                                                                | 716                                                                               | 2                                                                                 | 2                                                                                 | 615                                                                               | 11                                                                                | 7                                                                                   | 0                                                                                   | 6                                                                                   | 36                                                                                  | 0                                                                                   | 31                                                                                  |
| Future Volume (Veh/h)             | 12                                                                                | 716                                                                               | 2                                                                                 | 2                                                                                 | 615                                                                               | 11                                                                                | 7                                                                                   | 0                                                                                   | 6                                                                                   | 36                                                                                  | 0                                                                                   | 31                                                                                  |
| Sign Control                      | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |                                                                                     |
| 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)            | 13                                                                                | 778                                                                               | 2                                                                                 | 2                                                                                 | 668                                                                               | 12                                                                                | 8                                                                                   | 0                                                                                   | 7                                                                                   | 39                                                                                  | 0                                                                                   | 34                                                                                  |
| Pedestrians                       | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (m)                    | 3.7                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       | TWLTL                                                                             |                                                                                   |                                                                                   | TWLTL                                                                             |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              | 2                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 310                                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 670                                                                               |                                                                                   |                                                                                   | 780                                                                               |                                                                                   |                                                                                   | 1511                                                                                | 1479                                                                                | 779                                                                                 | 1491                                                                                | 1486                                                                                | 676                                                                                 |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 805                                                                                 | 805                                                                                 |                                                                                     | 680                                                                                 | 680                                                                                 |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 706                                                                                 | 674                                                                                 |                                                                                     | 811                                                                                 | 806                                                                                 |                                                                                     |
| vCu, unblocked vol                | 670                                                                               |                                                                                   |                                                                                   | 780                                                                               |                                                                                   |                                                                                   | 1511                                                                                | 1479                                                                                | 779                                                                                 | 1491                                                                                | 1486                                                                                | 676                                                                                 |
| tC, single (s)                    | 4.3                                                                               |                                                                                   |                                                                                   | 4.6                                                                               |                                                                                   |                                                                                   | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 | 7.3                                                                                 | 6.5                                                                                 | 6.3                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 6.1                                                                                 | 5.5                                                                                 |                                                                                     | 6.3                                                                                 | 5.5                                                                                 |                                                                                     |
| tF (s)                            | 2.4                                                                               |                                                                                   |                                                                                   | 2.7                                                                               |                                                                                   |                                                                                   | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 | 3.7                                                                                 | 4.0                                                                                 | 3.4                                                                                 |
| p0 queue free %                   | 98                                                                                |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   | 97                                                                                  | 100                                                                                 | 98                                                                                  | 85                                                                                  | 100                                                                                 | 92                                                                                  |
| cM capacity (veh/h)               | 836                                                                               |                                                                                   |                                                                                   | 659                                                                               |                                                                                   |                                                                                   | 275                                                                                 | 310                                                                                 | 399                                                                                 | 262                                                                                 | 311                                                                                 | 439                                                                                 |
| Direction, Lane #                 | EB 1                                                                              | EB 2                                                                              | WB 1                                                                              | WB 2                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 13                                                                                | 780                                                                               | 2                                                                                 | 680                                                                               | 15                                                                                | 73                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 13                                                                                | 0                                                                                 | 2                                                                                 | 0                                                                                 | 8                                                                                 | 39                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 2                                                                                 | 0                                                                                 | 12                                                                                | 7                                                                                 | 34                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 836                                                                               | 1700                                                                              | 659                                                                               | 1700                                                                              | 322                                                                               | 323                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.02                                                                              | 0.46                                                                              | 0.00                                                                              | 0.40                                                                              | 0.05                                                                              | 0.23                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (m)             | 0.4                                                                               | 0.0                                                                               | 0.1                                                                               | 0.0                                                                               | 1.2                                                                               | 6.8                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 9.4                                                                               | 0.0                                                                               | 10.5                                                                              | 0.0                                                                               | 16.7                                                                              | 19.4                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 |                                                                                   | B                                                                                 |                                                                                   | C                                                                                 | C                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.2                                                                               |                                                                                   | 0.0                                                                               |                                                                                   | 16.7                                                                              | 19.4                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   | C                                                                                 | C                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization | 49.3%                                                                             |                                                                                   |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                   | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Lanes, Volumes, Timings  
9: Wgle Ave/Remark Dr & Main St

183 MAIN STREET E  
2031 TOTAL AM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 14                                                                                | 705                                                                               | 36                                                                                | 70                                                                                | 553                                                                               | 7                                                                                 | 46                                                                                  | 4                                                                                   | 81                                                                                  | 10                                                                                  | 2                                                                                   | 31                                                                                  |
| Future Volume (vph)     | 14                                                                                | 705                                                                               | 36                                                                                | 70                                                                                | 553                                                                               | 7                                                                                 | 46                                                                                  | 4                                                                                   | 81                                                                                  | 10                                                                                  | 2                                                                                   | 31                                                                                  |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 60.0                                                                              |                                                                                   | 0.0                                                                               | 55.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 15.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                                 |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                     | 0.916                                                                               |                                                                                     |                                                                                     | 0.902                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.983                                                                               |                                                                                     |                                                                                     | 0.988                                                                               |                                                                                     |
| Satd. Flow (prot)       | 1755                                                                              | 1654                                                                              | 0                                                                                 | 1825                                                                              | 1792                                                                              | 0                                                                                 | 0                                                                                   | 1730                                                                                | 0                                                                                   | 0                                                                                   | 1432                                                                                | 0                                                                                   |
| Flt Permitted           | 0.412                                                                             |                                                                                   |                                                                                   | 0.214                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.864                                                                               |                                                                                     |                                                                                     | 0.863                                                                               |                                                                                     |
| Satd. Flow (perm)       | 761                                                                               | 1654                                                                              | 0                                                                                 | 411                                                                               | 1792                                                                              | 0                                                                                 | 0                                                                                   | 1520                                                                                | 0                                                                                   | 0                                                                                   | 1251                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                     | 88                                                                                  |                                                                                     |                                                                                     | 34                                                                                  |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 170.1                                                                             |                                                                                   |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                     | 215.7                                                                               |                                                                                     |                                                                                     | 227.2                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 12.2                                                                              |                                                                                   |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                     | 15.5                                                                                |                                                                                     |                                                                                     | 16.4                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 2                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)      | 4%                                                                                | 16%                                                                               | 0%                                                                                | 0%                                                                                | 7%                                                                                | 3%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 28%                                                                                 | 0%                                                                                  | 18%                                                                                 |
| Adj. Flow (vph)         | 15                                                                                | 766                                                                               | 39                                                                                | 76                                                                                | 601                                                                               | 8                                                                                 | 50                                                                                  | 4                                                                                   | 88                                                                                  | 11                                                                                  | 2                                                                                   | 34                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 15                                                                                | 805                                                                               | 0                                                                                 | 76                                                                                | 609                                                                               | 0                                                                                 | 0                                                                                   | 142                                                                                 | 0                                                                                   | 0                                                                                   | 47                                                                                  | 0                                                                                   |
| Turn Type               | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 7.0                                                                               | 10.0                                                                              |                                                                                   | 7.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 11.0                                                                              | 25.0                                                                              |                                                                                   | 11.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                                | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 14.0                                                                              | 35.0                                                                              |                                                                                   | 14.0                                                                              | 35.0                                                                              |                                                                                   | 31.0                                                                                | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 38.8%                                                                               | 38.8%                                                                               |                                                                                     | 38.8%                                                                               | 38.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 10.0                                                                              | 28.6                                                                              |                                                                                   | 10.0                                                                              | 28.6                                                                              |                                                                                   | 24.7                                                                                | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 3.0                                                                               | 4.1                                                                               |                                                                                   | 3.0                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                 | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 1.0                                                                               | 2.3                                                                               |                                                                                   | 1.0                                                                               | 2.3                                                                               |                                                                                   | 2.2                                                                                 | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 6.4                                                                               |                                                                                   | 4.0                                                                               | 6.4                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 |                                                                                     |
| 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                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                               | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effct Green (s)     | 55.5                                                                              | 47.5                                                                              |                                                                                   | 58.2                                                                              | 54.2                                                                              |                                                                                   |                                                                                     | 10.9                                                                                |                                                                                     |                                                                                     | 10.9                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.69                                                                              | 0.59                                                                              |                                                                                   | 0.73                                                                              | 0.68                                                                              |                                                                                   |                                                                                     | 0.14                                                                                |                                                                                     |                                                                                     | 0.14                                                                                |                                                                                     |
| v/c Ratio               | 0.02                                                                              | 0.82                                                                              |                                                                                   | 0.18                                                                              | 0.50                                                                              |                                                                                   |                                                                                     | 0.50                                                                                |                                                                                     |                                                                                     | 0.24                                                                                |                                                                                     |

Lanes, Volumes, Timings  
9: Wgle Ave/Remark Dr & Main St

183 MAIN STREET E  
2031 TOTAL AM TRAFFIC VOLUMES

|                        |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Control Delay          | 3.4                                                                               | 23.5                                                                              |                                                                                   | 4.2                                                                               | 9.4                                                                               |                                                                                   |                                                                                    | 20.3                                                                                |                                                                                     |                                                                                     | 17.5                                                                                |                                                                                     |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay            | 3.4                                                                               | 23.5                                                                              |                                                                                   | 4.2                                                                               | 9.4                                                                               |                                                                                   |                                                                                    | 20.3                                                                                |                                                                                     |                                                                                     | 17.5                                                                                |                                                                                     |
| LOS                    | A                                                                                 | C                                                                                 |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay         |                                                                                   | 23.1                                                                              |                                                                                   |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                    | 20.3                                                                                |                                                                                     |                                                                                     | 17.5                                                                                |                                                                                     |
| Approach LOS           |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (m)  | 0.5                                                                               | 96.0                                                                              |                                                                                   | 2.5                                                                               | 34.1                                                                              |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     | 1.9                                                                                 |                                                                                     |
| Queue Length 95th (m)  | 2.2                                                                               | #194.2                                                                            |                                                                                   | 6.9                                                                               | 99.6                                                                              |                                                                                   |                                                                                    | 23.8                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Internal Link Dist (m) |                                                                                   | 146.1                                                                             |                                                                                   |                                                                                   | 213.0                                                                             |                                                                                   |                                                                                    | 191.7                                                                               |                                                                                     |                                                                                     | 203.2                                                                               |                                                                                     |
| Turn Bay Length (m)    | 60.0                                                                              |                                                                                   |                                                                                   | 55.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 675                                                                               | 983                                                                               |                                                                                   | 477                                                                               | 1215                                                                              |                                                                                   |                                                                                    | 530                                                                                 |                                                                                     |                                                                                     | 409                                                                                 |                                                                                     |
| Starvation Cap Reductn | 0                                                                                 | 0                                                                                 |                                                                                   | 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      | 0.02                                                                              | 0.82                                                                              |                                                                                   | 0.16                                                                              | 0.50                                                                              |                                                                                   |                                                                                    | 0.27                                                                                |                                                                                     |                                                                                     | 0.11                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 17.0

Intersection LOS: B

Intersection Capacity Utilization 71.3%

ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: Wgle Ave/Remark Dr & Main St

|                                                                                            |                                                                                        |                                                                                        |
|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|  Ø2 (R) |  Ø3 |  Ø4 |
| 31 s                                                                                       | 14 s                                                                                   | 35 s                                                                                   |
|  Ø6 (R) |  Ø7 |  Ø8 |
| 31 s                                                                                       | 14 s                                                                                   | 35 s                                                                                   |

Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main St

183 MAIN STREET E  
2031 TOTAL AM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |  |  |  |
| Traffic Volume (vph)    | 75                                                                                | 615                                                                               | 65                                                                                | 19                                                                                | 508                                                                               | 186                                                                               | 28                                                                                 | 5                                                                                   | 17                                                                                  | 211                                                                                 | 22                                                                                  | 115                                                                                 |
| Future Volume (vph)     | 75                                                                                | 615                                                                               | 65                                                                                | 19                                                                                | 508                                                                               | 186                                                                               | 28                                                                                 | 5                                                                                   | 17                                                                                  | 211                                                                                 | 22                                                                                  | 115                                                                                 |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 75.0                                                                              |                                                                                   | 0.0                                                                               | 15.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                               |                                                                                   |                                                                                   | 7.5                                                                                |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                    | 0.99                                                                                |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.986                                                                             |                                                                                   |                                                                                   | 0.960                                                                             |                                                                                   |                                                                                    | 0.954                                                                               |                                                                                     |                                                                                     | 0.874                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.972                                                                               |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1789                                                                              | 1852                                                                              | 0                                                                                 | 1789                                                                              | 1797                                                                              | 0                                                                                 | 0                                                                                  | 1732                                                                                | 0                                                                                   | 1789                                                                                | 1646                                                                                | 0                                                                                   |
| Flt Permitted           | 0.141                                                                             |                                                                                   |                                                                                   | 0.153                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.815                                                                               |                                                                                     | 0.722                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 266                                                                               | 1852                                                                              | 0                                                                                 | 288                                                                               | 1797                                                                              | 0                                                                                 | 0                                                                                  | 1453                                                                                | 0                                                                                   | 1355                                                                                | 1646                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 35                                                                                |                                                                                   |                                                                                    | 18                                                                                  |                                                                                     |                                                                                     | 125                                                                                 |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                   | 120.3                                                                             |                                                                                   |                                                                                    | 154.3                                                                               |                                                                                     |                                                                                     | 215.0                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                   | 8.7                                                                               |                                                                                   |                                                                                    | 11.1                                                                                |                                                                                     |                                                                                     | 15.5                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 |                                                                                   | 2                                                                                 |                                                                                    |                                                                                     | 2                                                                                   | 2                                                                                   |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Adj. Flow (vph)         | 82                                                                                | 668                                                                               | 71                                                                                | 21                                                                                | 552                                                                               | 202                                                                               | 30                                                                                 | 5                                                                                   | 18                                                                                  | 229                                                                                 | 24                                                                                  | 125                                                                                 |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 82                                                                                | 739                                                                               | 0                                                                                 | 21                                                                                | 754                                                                               | 0                                                                                 | 0                                                                                  | 53                                                                                  | 0                                                                                   | 229                                                                                 | 149                                                                                 | 0                                                                                   |
| Turn Type               | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                               | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 31.0                                                                               | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 53.7%                                                                             | 53.7%                                                                             |                                                                                   | 53.7%                                                                             | 53.7%                                                                             |                                                                                   | 46.3%                                                                              | 46.3%                                                                               |                                                                                     | 46.3%                                                                               | 46.3%                                                                               |                                                                                     |
| Maximum Green (s)       | 29.7                                                                              | 29.7                                                                              |                                                                                   | 29.7                                                                              | 29.7                                                                              |                                                                                   | 24.7                                                                               | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 4.1                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               |                                                                                   | 2.2                                                                               | 2.2                                                                               |                                                                                   | 2.2                                                                                | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.3                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                              | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                               | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effct Green (s)     | 31.1                                                                              | 31.1                                                                              |                                                                                   | 31.1                                                                              | 31.1                                                                              |                                                                                   |                                                                                    | 23.3                                                                                |                                                                                     | 23.3                                                                                | 23.3                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.46                                                                              | 0.46                                                                              |                                                                                   | 0.46                                                                              | 0.46                                                                              |                                                                                   |                                                                                    | 0.35                                                                                |                                                                                     | 0.35                                                                                | 0.35                                                                                |                                                                                     |
| v/c Ratio               | 0.67                                                                              | 0.86                                                                              |                                                                                   | 0.16                                                                              | 0.89                                                                              |                                                                                   |                                                                                    | 0.10                                                                                |                                                                                     | 0.49                                                                                | 0.23                                                                                |                                                                                     |
| Control Delay           | 44.8                                                                              | 27.6                                                                              |                                                                                   | 13.3                                                                              | 30.0                                                                              |                                                                                   |                                                                                    | 12.3                                                                                |                                                                                     | 22.2                                                                                | 5.9                                                                                 |                                                                                     |

Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main St

183 MAIN STREET E  
2031 TOTAL AM TRAFFIC VOLUMES

| Lane Group             | EBL   | EBT    | EBR | WBL  | WBT    | WBR | NBL | NBT   | NBR | SBL  | SBT   | SBR |
|------------------------|-------|--------|-----|------|--------|-----|-----|-------|-----|------|-------|-----|
| Queue Delay            | 0.0   | 0.0    |     | 0.0  | 0.0    |     |     | 0.0   |     | 0.0  | 0.0   |     |
| Total Delay            | 44.8  | 27.6   |     | 13.3 | 30.0   |     |     | 12.3  |     | 22.2 | 5.9   |     |
| LOS                    | D     | C      |     | B    | C      |     |     | B     |     | C    | A     |     |
| Approach Delay         |       | 29.3   |     |      | 29.5   |     |     | 12.3  |     |      | 15.8  |     |
| Approach LOS           |       | C      |     |      | C      |     |     | B     |     |      | B     |     |
| Queue Length 50th (m)  | 7.6   | 77.3   |     | 1.5  | 78.3   |     |     | 3.1   |     | 23.9 | 2.1   |     |
| Queue Length 95th (m)  | #30.9 | #147.4 |     | 5.9  | #152.2 |     |     | 9.9   |     | 42.8 | 13.0  |     |
| Internal Link Dist (m) |       | 213.0  |     |      | 96.3   |     |     | 130.3 |     |      | 191.0 |     |
| Turn Bay Length (m)    | 75.0  |        |     | 15.0 |        |     |     |       |     | 15.0 |       |     |
| Base Capacity (vph)    | 125   | 883    |     | 136  | 870    |     |     | 562   |     | 514  | 701   |     |
| 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      | 0.66  | 0.84   |     | 0.15 | 0.87   |     |     | 0.09  |     | 0.45 | 0.21  |     |

Intersection Summary

Area Type: Other

Cycle Length: 67

Actuated Cycle Length: 67

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 26.4

Intersection LOS: C

Intersection Capacity Utilization 89.8%

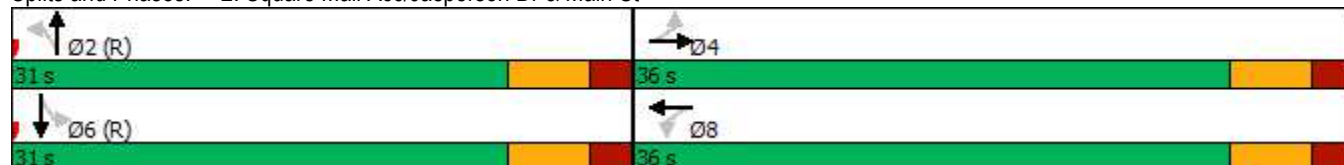
ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Square Mall Acc/Jasperson Dr & Main St



# HCM Unsignalized Intersection Capacity Analysis

## 3: Access Rd/FUT ACC & Main St

183 MAIN STREET E  
2031 TOTAL PM TRAFFIC VOLUMES

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (veh/h)            | 32                                                                                | 773                                                                               | 7                                                                                 | 7                                                                                 | 908                                                                               | 35                                                                                | 4                                                                                   | 0                                                                                   | 4                                                                                   | 21                                                                                  | 0                                                                                   | 22                                                                                  |
| Future Volume (Veh/h)             | 32                                                                                | 773                                                                               | 7                                                                                 | 7                                                                                 | 908                                                                               | 35                                                                                | 4                                                                                   | 0                                                                                   | 4                                                                                   | 21                                                                                  | 0                                                                                   | 22                                                                                  |
| Sign Control                      | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |                                                                                     |
| 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)            | 35                                                                                | 840                                                                               | 8                                                                                 | 8                                                                                 | 987                                                                               | 38                                                                                | 4                                                                                   | 0                                                                                   | 4                                                                                   | 23                                                                                  | 0                                                                                   | 24                                                                                  |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 2                                                                                   |
| Lane Width (m)                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 3.7                                                                                 |
| Walking Speed (m/s)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1.2                                                                                 |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       | TWLTL                                                                             |                                                                                   |                                                                                   | TWLTL                                                                             |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              | 2                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 310                                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 989                                                                               |                                                                                   |                                                                                   | 848                                                                               |                                                                                   |                                                                                   | 1941                                                                                | 1919                                                                                | 844                                                                                 | 1938                                                                                | 1942                                                                                | 1008                                                                                |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 914                                                                                 | 914                                                                                 |                                                                                     |                                                                                     | 1024                                                                                | 1024                                                                                |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1027                                                                                | 1005                                                                                |                                                                                     |                                                                                     | 914                                                                                 | 918                                                                                 |
| vCu, unblocked vol                | 989                                                                               |                                                                                   |                                                                                   | 848                                                                               |                                                                                   |                                                                                   | 1941                                                                                | 1919                                                                                | 844                                                                                 | 1938                                                                                | 1942                                                                                | 1008                                                                                |
| tC, single (s)                    | 4.3                                                                               |                                                                                   |                                                                                   | 4.6                                                                               |                                                                                   |                                                                                   | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 | 7.3                                                                                 | 6.5                                                                                 | 6.3                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 6.1                                                                                 | 5.5                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 5.5                                                                                 |
| tF (s)                            | 2.4                                                                               |                                                                                   |                                                                                   | 2.7                                                                               |                                                                                   |                                                                                   | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 | 3.7                                                                                 | 4.0                                                                                 | 3.4                                                                                 |
| p0 queue free %                   | 94                                                                                |                                                                                   |                                                                                   | 99                                                                                |                                                                                   |                                                                                   | 98                                                                                  | 100                                                                                 | 99                                                                                  | 87                                                                                  | 100                                                                                 | 91                                                                                  |
| cM capacity (veh/h)               | 628                                                                               |                                                                                   |                                                                                   | 618                                                                               |                                                                                   |                                                                                   | 180                                                                                 | 219                                                                                 | 366                                                                                 | 183                                                                                 | 227                                                                                 | 281                                                                                 |
| Direction, Lane #                 | EB 1                                                                              | EB 2                                                                              | WB 1                                                                              | WB 2                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 35                                                                                | 848                                                                               | 8                                                                                 | 1025                                                                              | 8                                                                                 | 47                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 35                                                                                | 0                                                                                 | 8                                                                                 | 0                                                                                 | 4                                                                                 | 23                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 8                                                                                 | 0                                                                                 | 38                                                                                | 4                                                                                 | 24                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 628                                                                               | 1700                                                                              | 618                                                                               | 1700                                                                              | 242                                                                               | 223                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.06                                                                              | 0.50                                                                              | 0.01                                                                              | 0.60                                                                              | 0.03                                                                              | 0.21                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (m)             | 1.4                                                                               | 0.0                                                                               | 0.3                                                                               | 0.0                                                                               | 0.8                                                                               | 6.2                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 11.1                                                                              | 0.0                                                                               | 10.9                                                                              | 0.0                                                                               | 20.4                                                                              | 25.4                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.4                                                                               |                                                                                   |                                                                                   | 0.1                                                                               |                                                                                   |                                                                                   | 20.4                                                                                |                                                                                     |                                                                                     | 25.4                                                                                |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   |                                                                                   | 0.9                                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   |                                                                                   | 59.9%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Lanes, Volumes, Timings  
9: Wgle Ave/Remark Dr & Main St

183 MAIN STREET E  
2031 TOTAL PM TRAFFIC VOLUMES

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |  |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 30                                                                                | 808                                                                               | 55                                                                                | 92                                                                                | 938                                                                               | 10                                                                                | 60                                                                                  | 21                                                                                  | 104                                                                                 | 9                                                                                   | 9                                                                                   | 21                                                                                  |
| Future Volume (vph)     | 30                                                                                | 808                                                                               | 55                                                                                | 92                                                                                | 938                                                                               | 10                                                                                | 60                                                                                  | 21                                                                                  | 104                                                                                 | 9                                                                                   | 9                                                                                   | 21                                                                                  |
| Ideal Flow (vphpl)      | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (m)      | 60.0                                                                              |                                                                                   | 0.0                                                                               | 55.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)        | 10.0                                                                              |                                                                                   |                                                                                   | 15.0                                                                              |                                                                                   |                                                                                   | 7.5                                                                                 |                                                                                     |                                                                                     | 7.5                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                     |                                                                                   | 0.990                                                                             |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                     | 0.924                                                                               |                                                                                     |                                                                                     | 0.928                                                                               |                                                                                     |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.984                                                                               |                                                                                     |                                                                                     | 0.989                                                                               |                                                                                     |
| Satd. Flow (prot)       | 1755                                                                              | 1652                                                                              | 0                                                                                 | 1825                                                                              | 1792                                                                              | 0                                                                                 | 0                                                                                   | 1747                                                                                | 0                                                                                   | 0                                                                                   | 1518                                                                                | 0                                                                                   |
| Flt Permitted           | 0.102                                                                             |                                                                                   |                                                                                   | 0.110                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.875                                                                               |                                                                                     |                                                                                     | 0.838                                                                               |                                                                                     |
| Satd. Flow (perm)       | 188                                                                               | 1652                                                                              | 0                                                                                 | 211                                                                               | 1792                                                                              | 0                                                                                 | 0                                                                                   | 1553                                                                                | 0                                                                                   | 0                                                                                   | 1286                                                                                | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                     | 84                                                                                  |                                                                                     |                                                                                     | 23                                                                                  |                                                                                     |
| Link Speed (k/h)        |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)       |                                                                                   | 170.1                                                                             |                                                                                   |                                                                                   | 237.0                                                                             |                                                                                   |                                                                                     | 215.7                                                                               |                                                                                     |                                                                                     | 227.2                                                                               |                                                                                     |
| Travel Time (s)         |                                                                                   | 12.2                                                                              |                                                                                   |                                                                                   | 17.1                                                                              |                                                                                   |                                                                                     | 15.5                                                                                |                                                                                     |                                                                                     | 16.4                                                                                |                                                                                     |
| Confl. Peds. (#/hr)     | 2                                                                                 |                                                                                   | 2                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)      | 4%                                                                                | 16%                                                                               | 0%                                                                                | 0%                                                                                | 7%                                                                                | 3%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 28%                                                                                 | 0%                                                                                  | 18%                                                                                 |
| Adj. Flow (vph)         | 33                                                                                | 878                                                                               | 60                                                                                | 100                                                                               | 1020                                                                              | 11                                                                                | 65                                                                                  | 23                                                                                  | 113                                                                                 | 10                                                                                  | 10                                                                                  | 23                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 33                                                                                | 938                                                                               | 0                                                                                 | 100                                                                               | 1031                                                                              | 0                                                                                 | 0                                                                                   | 201                                                                                 | 0                                                                                   | 0                                                                                   | 43                                                                                  | 0                                                                                   |
| Turn Type               | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases        | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases        | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 7.0                                                                               | 10.0                                                                              |                                                                                   | 7.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 11.0                                                                              | 25.0                                                                              |                                                                                   | 11.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                                | 25.0                                                                                |                                                                                     | 25.0                                                                                | 25.0                                                                                |                                                                                     |
| Total Split (s)         | 14.0                                                                              | 35.0                                                                              |                                                                                   | 14.0                                                                              | 35.0                                                                              |                                                                                   | 31.0                                                                                | 31.0                                                                                |                                                                                     | 31.0                                                                                | 31.0                                                                                |                                                                                     |
| Total Split (%)         | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 17.5%                                                                             | 43.8%                                                                             |                                                                                   | 38.8%                                                                               | 38.8%                                                                               |                                                                                     | 38.8%                                                                               | 38.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 10.0                                                                              | 28.6                                                                              |                                                                                   | 10.0                                                                              | 28.6                                                                              |                                                                                   | 24.7                                                                                | 24.7                                                                                |                                                                                     | 24.7                                                                                | 24.7                                                                                |                                                                                     |
| Yellow Time (s)         | 3.0                                                                               | 4.1                                                                               |                                                                                   | 3.0                                                                               | 4.1                                                                               |                                                                                   | 4.1                                                                                 | 4.1                                                                                 |                                                                                     | 4.1                                                                                 | 4.1                                                                                 |                                                                                     |
| All-Red Time (s)        | 1.0                                                                               | 2.3                                                                               |                                                                                   | 1.0                                                                               | 2.3                                                                               |                                                                                   | 2.2                                                                                 | 2.2                                                                                 |                                                                                     | 2.2                                                                                 | 2.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 6.4                                                                               |                                                                                   | 4.0                                                                               | 6.4                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 |                                                                                     |
| 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                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Min                                                                               | C-Min                                                                               |                                                                                     | C-Min                                                                               | C-Min                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effct Green (s)     | 53.3                                                                              | 45.3                                                                              |                                                                                   | 55.7                                                                              | 50.1                                                                              |                                                                                   |                                                                                     | 12.8                                                                                |                                                                                     |                                                                                     | 12.8                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.67                                                                              | 0.57                                                                              |                                                                                   | 0.70                                                                              | 0.63                                                                              |                                                                                   |                                                                                     | 0.16                                                                                |                                                                                     |                                                                                     | 0.16                                                                                |                                                                                     |
| v/c Ratio               | 0.13                                                                              | 1.00                                                                              |                                                                                   | 0.34                                                                              | 0.92                                                                              |                                                                                   |                                                                                     | 0.63                                                                                |                                                                                     |                                                                                     | 0.19                                                                                |                                                                                     |

Lanes, Volumes, Timings  
9: Wigle Ave/Remark Dr & Main St

183 MAIN STREET E  
2031 TOTAL PM TRAFFIC VOLUMES

| Lane Group             | EBL  | EBT    | EBR | WBL  | WBT    | WBR | NBL | NBT   | NBR | SBL | SBT   | SBR |
|------------------------|------|--------|-----|------|--------|-----|-----|-------|-----|-----|-------|-----|
| Control Delay          | 5.5  | 51.6   |     | 7.5  | 31.6   |     |     | 26.8  |     |     | 18.2  |     |
| Queue Delay            | 0.0  | 0.0    |     | 0.0  | 0.0    |     |     | 0.0   |     |     | 0.0   |     |
| Total Delay            | 5.5  | 51.6   |     | 7.5  | 31.6   |     |     | 26.8  |     |     | 18.2  |     |
| LOS                    | A    | D      |     | A    | C      |     |     | C     |     |     | B     |     |
| Approach Delay         |      | 50.1   |     |      | 29.4   |     |     | 26.8  |     |     | 18.3  |     |
| Approach LOS           |      | D      |     |      | C      |     |     | C     |     |     | B     |     |
| Queue Length 50th (m)  | 1.2  | ~146.0 |     | 3.8  | 98.8   |     |     | 17.6  |     |     | 2.8   |     |
| Queue Length 95th (m)  | 4.5  | #263.1 |     | 10.5 | #280.1 |     |     | 35.8  |     |     | 10.8  |     |
| Internal Link Dist (m) |      | 146.1  |     |      | 213.0  |     |     | 191.7 |     |     | 203.2 |     |
| Turn Bay Length (m)    | 60.0 |        |     | 55.0 |        |     |     |       |     |     |       |     |
| Base Capacity (vph)    | 326  | 937    |     | 350  | 1122   |     |     | 537   |     |     | 412   |     |
| Starvation Cap Reductn | 0    | 0      |     | 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      | 0.10 | 1.00   |     | 0.29 | 0.92   |     |     | 0.37  |     |     | 0.10  |     |

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 37.5

Intersection LOS: D

Intersection Capacity Utilization 86.3%

ICU Level of Service E

Analysis Period (min) 15

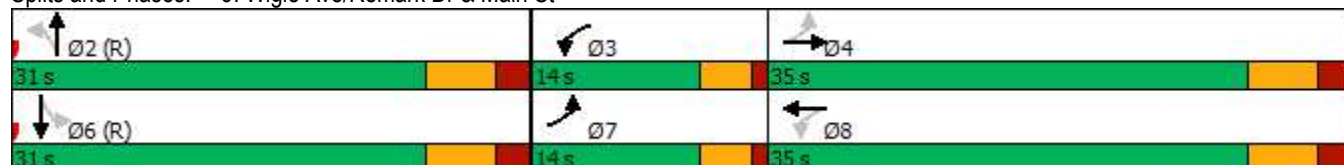
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

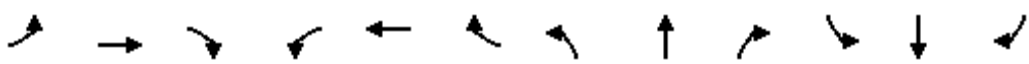
Queue shown is maximum after two cycles.

Splits and Phases: 9: Wigle Ave/Remark Dr & Main St



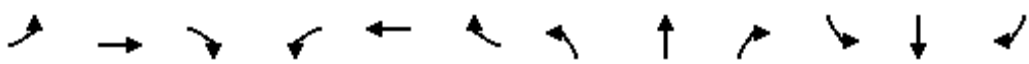
Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main St

183 MAIN STREET E  
2031 TOTAL PM TRAFFIC VOLUMES

|                         |  |                                                                                   |      |                                                                                   |                                                                                   |      |       |                                                                                     |      |                                                                                     |                                                                                     |      |
|-------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-------|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|
| Lane Group              | EBL                                                                                | EBT                                                                               | EBR  | WBL                                                                               | WBT                                                                               | WBR  | NBL   | NBT                                                                                 | NBR  | SBL                                                                                 | SBT                                                                                 | SBR  |
| Lane Configurations     |   |  |      |  |  |      |       |  |      |  |  |      |
| Traffic Volume (vph)    | 116                                                                                | 686                                                                               | 53   | 24                                                                                | 764                                                                               | 256  | 42    | 19                                                                                  | 14   | 232                                                                                 | 15                                                                                  | 175  |
| Future Volume (vph)     | 116                                                                                | 686                                                                               | 53   | 24                                                                                | 764                                                                               | 256  | 42    | 19                                                                                  | 14   | 232                                                                                 | 15                                                                                  | 175  |
| Ideal Flow (vphpl)      | 1900                                                                               | 1900                                                                              | 1900 | 1900                                                                              | 1900                                                                              | 1900 | 1900  | 1900                                                                                | 1900 | 1900                                                                                | 1900                                                                                | 1900 |
| Storage Length (m)      | 75.0                                                                               |                                                                                   | 0.0  | 15.0                                                                              |                                                                                   | 0.0  | 0.0   |                                                                                     | 15.0 | 15.0                                                                                |                                                                                     | 0.0  |
| Storage Lanes           | 1                                                                                  |                                                                                   | 0    | 1                                                                                 |                                                                                   | 0    | 0     |                                                                                     | 0    | 1                                                                                   |                                                                                     | 0    |
| Taper Length (m)        | 10.0                                                                               |                                                                                   |      | 7.5                                                                               |                                                                                   |      | 7.5   |                                                                                     |      | 7.5                                                                                 |                                                                                     |      |
| Lane Util. Factor       | 1.00                                                                               | 1.00                                                                              | 1.00 | 1.00                                                                              | 1.00                                                                              | 1.00 | 1.00  | 1.00                                                                                | 1.00 | 1.00                                                                                | 1.00                                                                                | 1.00 |
| Ped Bike Factor         |                                                                                    | 1.00                                                                              |      |                                                                                   | 0.99                                                                              |      |       | 1.00                                                                                |      | 1.00                                                                                |                                                                                     |      |
| Frt                     |                                                                                    | 0.989                                                                             |      |                                                                                   | 0.962                                                                             |      |       | 0.975                                                                               |      |                                                                                     | 0.862                                                                               |      |
| Flt Protected           | 0.950                                                                              |                                                                                   |      | 0.950                                                                             |                                                                                   |      |       | 0.973                                                                               |      | 0.950                                                                               |                                                                                     |      |
| Satd. Flow (prot)       | 1789                                                                               | 1859                                                                              | 0    | 1789                                                                              | 1801                                                                              | 0    | 0     | 1779                                                                                | 0    | 1789                                                                                | 1624                                                                                | 0    |
| Flt Permitted           | 0.110                                                                              |                                                                                   |      | 0.180                                                                             |                                                                                   |      |       | 0.746                                                                               |      | 0.704                                                                               |                                                                                     |      |
| Satd. Flow (perm)       | 207                                                                                | 1859                                                                              | 0    | 339                                                                               | 1801                                                                              | 0    | 0     | 1364                                                                                | 0    | 1322                                                                                | 1624                                                                                | 0    |
| Right Turn on Red       |                                                                                    |                                                                                   | Yes  |                                                                                   |                                                                                   | Yes  |       |                                                                                     | Yes  |                                                                                     |                                                                                     | Yes  |
| Satd. Flow (RTOR)       |                                                                                    | 8                                                                                 |      |                                                                                   | 32                                                                                |      |       | 15                                                                                  |      |                                                                                     | 89                                                                                  |      |
| Link Speed (k/h)        |                                                                                    | 50                                                                                |      |                                                                                   | 50                                                                                |      |       | 50                                                                                  |      |                                                                                     | 50                                                                                  |      |
| Link Distance (m)       |                                                                                    | 237.0                                                                             |      |                                                                                   | 120.3                                                                             |      |       | 154.3                                                                               |      |                                                                                     | 215.0                                                                               |      |
| Travel Time (s)         |                                                                                    | 17.1                                                                              |      |                                                                                   | 8.7                                                                               |      |       | 11.1                                                                                |      |                                                                                     | 15.5                                                                                |      |
| Confl. Peds. (#/hr)     | 2                                                                                  |                                                                                   | 6    | 6                                                                                 |                                                                                   | 2    |       |                                                                                     | 2    | 2                                                                                   |                                                                                     |      |
| Peak Hour Factor        | 0.92                                                                               | 0.92                                                                              | 0.92 | 0.92                                                                              | 0.92                                                                              | 0.92 | 0.92  | 0.92                                                                                | 0.92 | 0.92                                                                                | 0.92                                                                                | 0.92 |
| Adj. Flow (vph)         | 126                                                                                | 746                                                                               | 58   | 26                                                                                | 830                                                                               | 278  | 46    | 21                                                                                  | 15   | 252                                                                                 | 16                                                                                  | 190  |
| Shared Lane Traffic (%) |                                                                                    |                                                                                   |      |                                                                                   |                                                                                   |      |       |                                                                                     |      |                                                                                     |                                                                                     |      |
| Lane Group Flow (vph)   | 126                                                                                | 804                                                                               | 0    | 26                                                                                | 1108                                                                              | 0    | 0     | 82                                                                                  | 0    | 252                                                                                 | 206                                                                                 | 0    |
| Turn Type               | Perm                                                                               | NA                                                                                |      | Perm                                                                              | NA                                                                                |      | Perm  | NA                                                                                  |      | Perm                                                                                | NA                                                                                  |      |
| Protected Phases        |                                                                                    | 4                                                                                 |      |                                                                                   | 8                                                                                 |      |       | 2                                                                                   |      |                                                                                     | 6                                                                                   |      |
| Permitted Phases        | 4                                                                                  |                                                                                   |      | 8                                                                                 |                                                                                   |      | 2     |                                                                                     |      | 6                                                                                   |                                                                                     |      |
| Detector Phase          | 4                                                                                  | 4                                                                                 |      | 8                                                                                 | 8                                                                                 |      | 2     | 2                                                                                   |      | 6                                                                                   | 6                                                                                   |      |
| Switch Phase            |                                                                                    |                                                                                   |      |                                                                                   |                                                                                   |      |       |                                                                                     |      |                                                                                     |                                                                                     |      |
| Minimum Initial (s)     | 10.0                                                                               | 10.0                                                                              |      | 10.0                                                                              | 10.0                                                                              |      | 10.0  | 10.0                                                                                |      | 10.0                                                                                | 10.0                                                                                |      |
| Minimum Split (s)       | 25.0                                                                               | 25.0                                                                              |      | 25.0                                                                              | 25.0                                                                              |      | 25.0  | 25.0                                                                                |      | 25.0                                                                                | 25.0                                                                                |      |
| Total Split (s)         | 36.0                                                                               | 36.0                                                                              |      | 36.0                                                                              | 36.0                                                                              |      | 31.0  | 31.0                                                                                |      | 31.0                                                                                | 31.0                                                                                |      |
| Total Split (%)         | 53.7%                                                                              | 53.7%                                                                             |      | 53.7%                                                                             | 53.7%                                                                             |      | 46.3% | 46.3%                                                                               |      | 46.3%                                                                               | 46.3%                                                                               |      |
| Maximum Green (s)       | 29.7                                                                               | 29.7                                                                              |      | 29.7                                                                              | 29.7                                                                              |      | 24.7  | 24.7                                                                                |      | 24.7                                                                                | 24.7                                                                                |      |
| Yellow Time (s)         | 4.1                                                                                | 4.1                                                                               |      | 4.1                                                                               | 4.1                                                                               |      | 4.1   | 4.1                                                                                 |      | 4.1                                                                                 | 4.1                                                                                 |      |
| All-Red Time (s)        | 2.2                                                                                | 2.2                                                                               |      | 2.2                                                                               | 2.2                                                                               |      | 2.2   | 2.2                                                                                 |      | 2.2                                                                                 | 2.2                                                                                 |      |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0                                                                               |      | 0.0                                                                               | 0.0                                                                               |      |       | 0.0                                                                                 |      | 0.0                                                                                 | 0.0                                                                                 |      |
| Total Lost Time (s)     | 6.3                                                                                | 6.3                                                                               |      | 6.3                                                                               | 6.3                                                                               |      |       | 6.3                                                                                 |      | 6.3                                                                                 | 6.3                                                                                 |      |
| Lead/Lag                |                                                                                    |                                                                                   |      |                                                                                   |                                                                                   |      |       |                                                                                     |      |                                                                                     |                                                                                     |      |
| Lead-Lag Optimize?      |                                                                                    |                                                                                   |      |                                                                                   |                                                                                   |      |       |                                                                                     |      |                                                                                     |                                                                                     |      |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0                                                                               |      | 3.0                                                                               | 3.0                                                                               |      | 3.0   | 3.0                                                                                 |      | 3.0                                                                                 | 3.0                                                                                 |      |
| Recall Mode             | None                                                                               | None                                                                              |      | None                                                                              | None                                                                              |      | C-Min | C-Min                                                                               |      | C-Min                                                                               | C-Min                                                                               |      |
| Walk Time (s)           | 7.0                                                                                | 7.0                                                                               |      | 7.0                                                                               | 7.0                                                                               |      | 7.0   | 7.0                                                                                 |      | 7.0                                                                                 | 7.0                                                                                 |      |
| Flash Dont Walk (s)     | 11.0                                                                               | 11.0                                                                              |      | 11.0                                                                              | 11.0                                                                              |      | 11.0  | 11.0                                                                                |      | 11.0                                                                                | 11.0                                                                                |      |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0                                                                                 |      | 0                                                                                 | 0                                                                                 |      | 0     | 0                                                                                   |      | 0                                                                                   | 0                                                                                   |      |
| Act Effct Green (s)     | 36.5                                                                               | 36.5                                                                              |      | 36.5                                                                              | 36.5                                                                              |      |       | 17.9                                                                                |      | 17.9                                                                                | 17.9                                                                                |      |
| Actuated g/C Ratio      | 0.54                                                                               | 0.54                                                                              |      | 0.54                                                                              | 0.54                                                                              |      |       | 0.27                                                                                |      | 0.27                                                                                | 0.27                                                                                |      |
| v/c Ratio               | 1.12                                                                               | 0.79                                                                              |      | 0.14                                                                              | 1.11                                                                              |      |       | 0.22                                                                                |      | 0.72                                                                                | 0.41                                                                                |      |
| Control Delay           | 148.3                                                                              | 22.1                                                                              |      | 12.5                                                                              | 84.5                                                                              |      |       | 15.7                                                                                |      | 33.1                                                                                | 12.9                                                                                |      |

Lanes, Volumes, Timings  
2: Square Mall Acc/Jasperson Dr & Main St

183 MAIN STREET E  
2031 TOTAL PM TRAFFIC VOLUMES

|                        |  |        |     |      |        |     |     |       |     |      |       |     |
|------------------------|------------------------------------------------------------------------------------|--------|-----|------|--------|-----|-----|-------|-----|------|-------|-----|
| Lane Group             | EBL                                                                                | EBT    | EBR | WBL  | WBT    | WBR | NBL | NBT   | NBR | SBL  | SBT   | SBR |
| Queue Delay            | 0.0                                                                                | 0.0    |     | 0.0  | 0.0    |     |     | 0.0   |     | 0.0  | 0.0   |     |
| Total Delay            | 148.3                                                                              | 22.1   |     | 12.5 | 84.5   |     |     | 15.7  |     | 33.1 | 12.9  |     |
| LOS                    | F                                                                                  | C      |     | B    | F      |     |     | B     |     | C    | B     |     |
| Approach Delay         |                                                                                    | 39.2   |     |      | 82.9   |     |     | 15.7  |     |      | 24.0  |     |
| Approach LOS           |                                                                                    | D      |     |      | F      |     |     | B     |     |      | C     |     |
| Queue Length 50th (m)  | ~19.6                                                                              | 76.9   |     | 1.6  | ~170.6 |     |     | 6.7   |     | 29.7 | 12.0  |     |
| Queue Length 95th (m)  | #42.4                                                                              | #173.9 |     | 7.1  | #268.3 |     |     | 14.3  |     | 46.1 | 24.3  |     |
| Internal Link Dist (m) |                                                                                    | 213.0  |     |      | 96.3   |     |     | 130.3 |     |      | 191.0 |     |
| Turn Bay Length (m)    | 75.0                                                                               |        |     | 15.0 |        |     |     |       |     | 15.0 |       |     |
| Base Capacity (vph)    | 112                                                                                | 1017   |     | 184  | 996    |     |     | 512   |     | 487  | 654   |     |
| 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      | 1.13                                                                               | 0.79   |     | 0.14 | 1.11   |     |     | 0.16  |     | 0.52 | 0.31  |     |

Intersection Summary

Area Type: Other

Cycle Length: 67

Actuated Cycle Length: 67

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 54.8

Intersection LOS: D

Intersection Capacity Utilization 113.0%

ICU Level of Service H

Analysis Period (min) 15

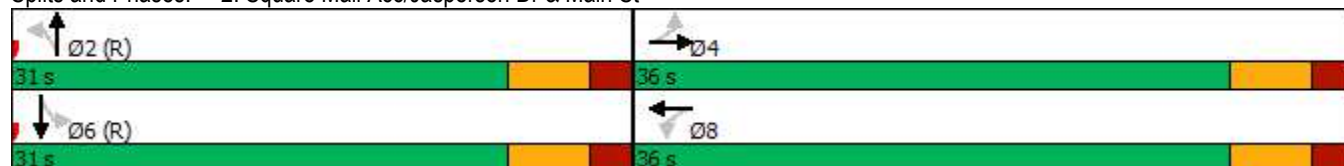
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Square Mall Acc/Jasperson Dr & Main St



## Appendix D

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### SITE PLANS, REPORTS AND PHOTOS



LOOKING EAST TOWARD DEVELOPMENT  
ACCESS FROM MAIN STREET



LOOKING WEST TOWARD ACCESS RD FROM  
MAIN STREET

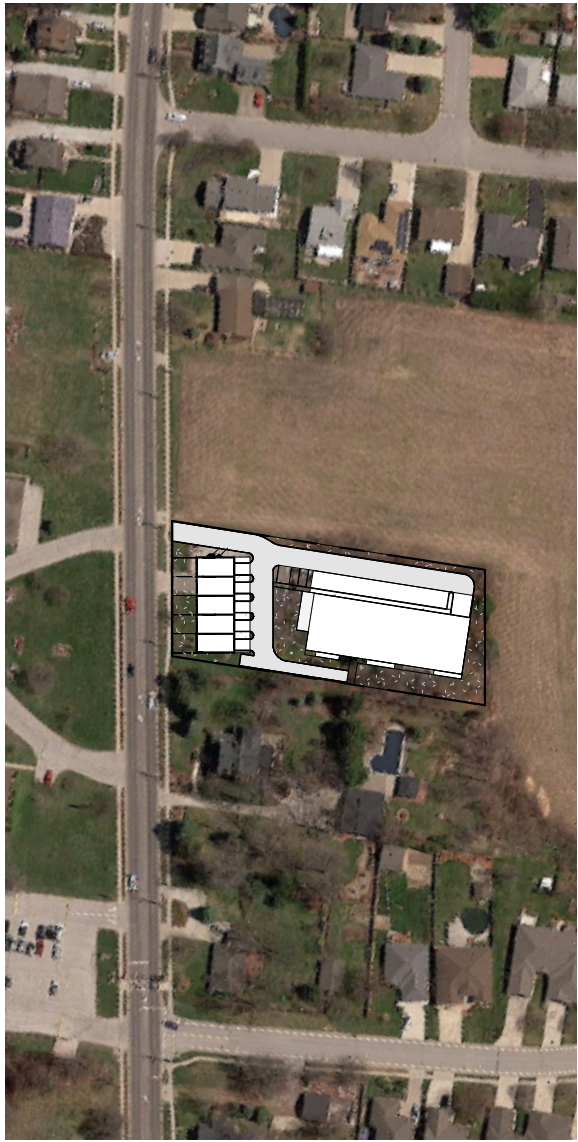


LOOKING EAST TOWARD WIGLE FROM MAIN ST

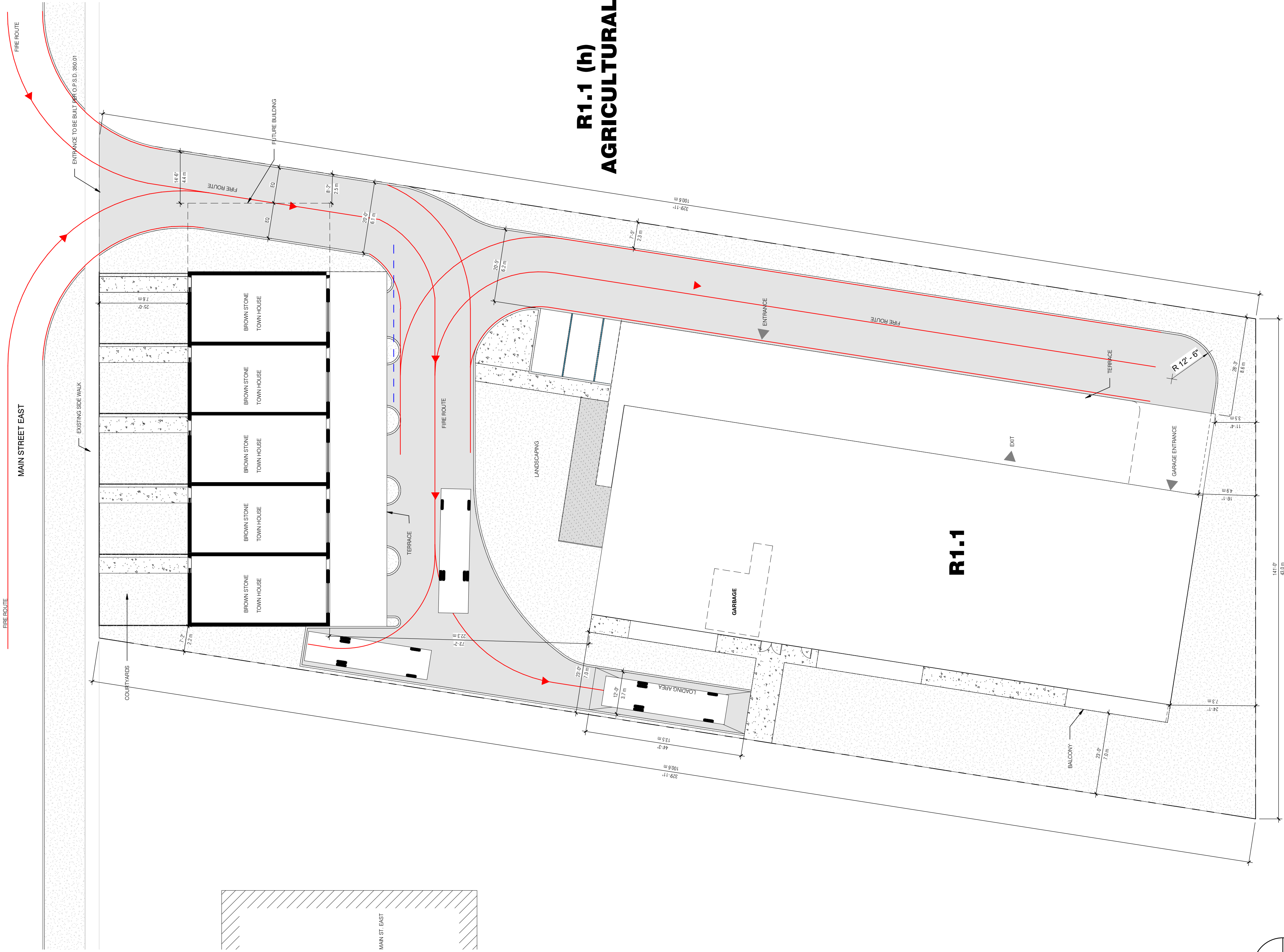


LOOKING EAST TOWARD JASPERSON RD FROM  
MAIN ST

|                |                                                            |                                                                                                                                                                                                                                                             |
|----------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PROJECT TITLE: | DATE:                                                      | <br><small>27 PRINCESS STREET, SUITE #102<br/>LEAMINGTON, ONTARIO<br/>N8H 2X8</small><br><small>1000 - 267 PELLISSIER STREET,<br/>WINDSOR, ONTARIO<br/>N9A 4K4</small> |
|                | 183 MAIN STREET EAST<br>(ROW TOWNHOUSES/CONDO DEVELOPMENT) |                                                                                                                                                                                                                                                             |
|                | SHEET TITLE:                                               |                                                                                                                                                                                                                                                             |
|                | PHOTOS                                                     |                                                                                                                                                                                                                                                             |
|                | SCALE:                                                     |                                                                                                                                                                                                                                                             |
|                | NTS                                                        |                                                                                                                                                                                                                                                             |
|                | PROJECT NO:                                                |                                                                                                                                                                                                                                                             |
|                | 19-098                                                     |                                                                                                                                                                                                                                                             |
|                | FIGURE NO:                                                 |                                                                                                                                                                                                                                                             |
|                | EXHIBIT 3                                                  |                                                                                                                                                                                                                                                             |



KEY PLAN

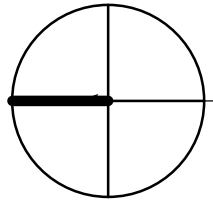


R1.1 (h)  
AGRICULTURAL

R1.1

R1.1

SITE  
SCALE: 1 : 200



| SITE DATA MATRIX                                                                                                                                                                                                                          |                                                                                                                                                                             |                                                        | OBC REFERENCE                              |                        |      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------|------------------------|------|
| PROJECT DESCRIPTION:<br>6 STOREY CONDOMINIUM - 28 UNITS<br>&<br>5 UNIT ROW HOUSING                                                                                                                                                        | <div><input checked="" type="checkbox"/> NEW<br/><input type="checkbox"/> ADDITION<br/><input type="checkbox"/> ALTERATION<br/><input type="checkbox"/> CHANGE OF USE</div> |                                                        | <input checked="" type="checkbox"/> PART 3 |                        |      |
|                                                                                                                                                                                                                                           |                                                                                                                                                                             |                                                        | <input type="checkbox"/> PART 9            |                        |      |
|                                                                                                                                                                                                                                           |                                                                                                                                                                             |                                                        | <input type="checkbox"/> PART 11           |                        |      |
|                                                                                                                                                                                                                                           |                                                                                                                                                                             |                                                        |                                            |                        |      |
| ZONING DESIGNATION:                                                                                                                                                                                                                       | R1.1                                                                                                                                                                        |                                                        |                                            |                        |      |
| MAJOR OCCUPANCY:                                                                                                                                                                                                                          | RESIDENTIAL                                                                                                                                                                 |                                                        |                                            |                        |      |
| BUILDING CLASSIFICATION:                                                                                                                                                                                                                  | GROUP C, 3,2,2,4,3, UP TO 6 STOREYS, SPRINKLERED, NONCOMBUSTIBLE CONSTRUCTION                                                                                               |                                                        |                                            |                        |      |
| SITE AREA                                                                                                                                                                                                                                 | BUILDING AREA    MAX 1,500m <sup>2</sup> FLOOR AREA                                                                                                                         |                                                        | GROSS AREA                                 |                        |      |
|                                                                                                                                                                                                                                           | EXISTING: 4,269m <sup>2</sup>                                                                                                                                               | N/A                                                    | EXISTING:                                  | N/A                    |      |
|                                                                                                                                                                                                                                           | PROPOSED: 4,269m <sup>2</sup>                                                                                                                                               | 1,200m <sup>2</sup> (CONDO) + 353m <sup>2</sup> (TOWN) | PROPOSED:                                  | 5,860m <sup>2</sup>    |      |
|                                                                                                                                                                                                                                           | TOTAL: 4,269m <sup>2</sup>                                                                                                                                                  | TOTAL: 1,643m <sup>2</sup>                             | TOTAL:                                     | 5,860m <sup>2</sup>    |      |
| LOT COVERAGE                                                                                                                                                                                                                              | MINIMUM LOT FRONTAGE                                                                                                                                                        |                                                        | BUILDING HEIGHT                            |                        |      |
|                                                                                                                                                                                                                                           | MAXIMUM: 40%                                                                                                                                                                | REQUIRED: 15m (50 ft)                                  | MAXIMUM:                                   | 11m                    |      |
|                                                                                                                                                                                                                                           | PROVIDED: 38%                                                                                                                                                               | PROVIDED: 42.4m (139'-3")                              | PROVIDED:                                  | 18m                    |      |
| MINIMUM FRONT YARD DEPTH                                                                                                                                                                                                                  | MINIMUM REAR YARD DEPTH                                                                                                                                                     |                                                        | MINIMUM SIDE YARD DEPTH (INTERIOR YARD)    |                        |      |
|                                                                                                                                                                                                                                           | REQUIRED: 5.5m                                                                                                                                                              | REQUIRED: 7.5m                                         | REQUIRED:                                  | 1.5m                   |      |
|                                                                                                                                                                                                                                           | PROVIDED: 7.6m                                                                                                                                                              | PROVIDED: 3.5m                                         | PROVIDED:                                  | 2.2m                   |      |
| PARKING                                                                                                                                                                                                                                   | BICYCLE SPACES                                                                                                                                                              |                                                        | LOADING SPACES                             |                        |      |
|                                                                                                                                                                                                                                           | EXISTING: 0                                                                                                                                                                 | EXISTING: 0                                            | EXISTING:                                  | 0                      |      |
|                                                                                                                                                                                                                                           | PROPOSED: 47                                                                                                                                                                | PROPOSED: 4                                            | PROPOSED:                                  | 1                      |      |
| USE CLASSIFICATION                                                                                                                                                                                                                        | EXISTING: 0                                                                                                                                                                 |                                                        | EXISTING: 0                                |                        |      |
|                                                                                                                                                                                                                                           | PROPOSED: 47                                                                                                                                                                | REQUIRED: 4                                            | REQUIRED:                                  | 1                      |      |
|                                                                                                                                                                                                                                           | REQUIRED: 45                                                                                                                                                                | TOTAL: 4                                               | TOTAL:                                     | 1                      |      |
| TOTAL: 47                                                                                                                                                                                                                                 |                                                                                                                                                                             |                                                        |                                            |                        |      |
| MINIMUM LANDSCAPE AREA                                                                                                                                                                                                                    |                                                                                                                                                                             | CURBING LENGTH                                         |                                            | SCREENING FENCE LENGTH |      |
| REQUIRED: 30%                                                                                                                                                                                                                             | EXISTING: N/A                                                                                                                                                               |                                                        | EXISTING:                                  |                        | N/A  |
| PROPOSED: 1,090m <sup>2</sup>                                                                                                                                                                                                             | PROPOSED: 374m                                                                                                                                                              |                                                        | PROPOSED:                                  |                        | 243m |
| TOTAL: 40%                                                                                                                                                                                                                                | TOTAL: 374m                                                                                                                                                                 |                                                        | TOTAL:                                     |                        | 243m |
| PARKING TYPE                                                                                                                                                                                                                              | ZONING PROVISIONS                                                                                                                                                           |                                                        | PROVIDED PARKING                           |                        |      |
|                                                                                                                                                                                                                                           | (1.25 SPACES/UNIT) x 28 UNITS = 35                                                                                                                                          |                                                        | 37                                         |                        |      |
|                                                                                                                                                                                                                                           | (2 SPACES/UNIT) x 5 UNITS = 10 SPACES                                                                                                                                       |                                                        | 10                                         |                        |      |
| ACCESSIBLE PARKING                                                                                                                                                                                                                        | 1 SPACE FOR 8 - 50 PARKING SPACES = 1 SPACE REQUIRED                                                                                                                        |                                                        | INCLUDED IN PARKING TOTAL                  |                        |      |
|                                                                                                                                                                                                                                           | 0.25 SPACES OF THE REQUIRED SPACES SHALL BE DEDICATED FOR VISITOR PARKING = 35 x .25 = 9 SPACES                                                                             |                                                        | INCLUDED IN PARKING TOTAL                  |                        |      |
|                                                                                                                                                                                                                                           | VISITOR PARKING                                                                                                                                                             |                                                        |                                            |                        |      |
| TOTAL PARKING                                                                                                                                                                                                                             | 45                                                                                                                                                                          |                                                        | 47                                         |                        |      |
| BICYCLE PARKING                                                                                                                                                                                                                           | 1 SPACE /400m <sup>2</sup> TO A MAXIMUM OF 10 SPACES = 1643m <sup>2</sup> / 400m <sup>2</sup> = 4 SPACES                                                                    |                                                        | 26                                         |                        |      |
|                                                                                                                                                                                                                                           |                                                                                                                                                                             |                                                        |                                            |                        |      |
|                                                                                                                                                                                                                                           | LOADING SPACES                                                                                                                                                              |                                                        | 1                                          |                        |      |
|                                                                                                                                                                                                                                           |                                                                                                                                                                             |                                                        |                                            |                        |      |
|                                                                                                                                                                                                                                           |                                                                                                                                                                             |                                                        |                                            |                        |      |
|                                                                                                                                                                                                                                           |                                                                                                                                                                             |                                                        |                                            |                        |      |
| NOTE:                                                                                                                                                                                                                                     |                                                                                                                                                                             |                                                        |                                            |                        |      |
| 1. ALL EXTERIOR PATHS OF TRAVEL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 80.23 OF ONTARIO REGULATION 191/11 TO THE ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT AND SECTIONS 3.8.1.3 AND 3.8.3.2 OF THE ONTARIO BUILDING CODE |                                                                                                                                                                             |                                                        |                                            |                        |      |
| 2. ALL CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 80.26(1) OF THE ONTARIO REGULATION 191/11 TO THE ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT AND SECTION 3.8.3.18 OF THE ONTARIO BUILDING CODE.                   |                                                                                                                                                                             |                                                        |                                            |                        |      |