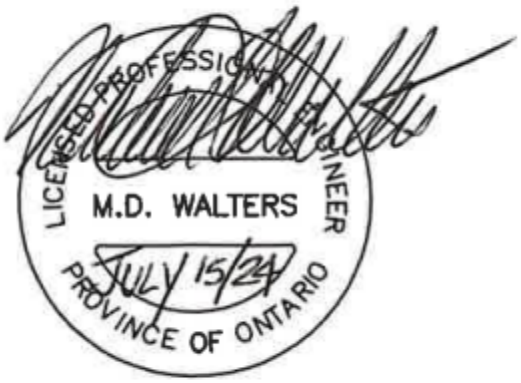
DILLON CONSULTING

AGBABA HOLDINGS CORPORATION

2121 Riverside Drive West Development, Windsor, ON

Transportation Impact Study



July 2024 - 24-8291

July 15, 2024

Agbaba Holdings Corporation
2121 Riverside Drive West
Windsor, ON N98 1A8

Attention: Marko Agbaba

2121 Riverside Drive West Development, Windsor, ON
Transportation Impact Study

Please find enclosed a copy of the transportation impact study prepared as part of the site plan application for the development proposed at the southwest corner of Riverside Drive East and Rankin Avenue.

Should you have any questions or wish to discuss our findings, please contact me at (416) 229-4647, extension 2376, or at mwalters@dillon.ca.

Yours sincerely,

DILLON CONSULTING LIMITED

Mike Walters, P. Eng.
Transportation Engineer

Our File: 24-8291

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Limited

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1.0 Introduction

1.1 Purpose

Dillon Consulting Limited (Dillon) has been retained by Agbaba Holdings Corporation to prepare a transportation impact study (TIS) for a development application at 2121 Riverside Drive East in Windsor, Ontario. The site is currently occupied by a single-detached home. The development application seeks to permit the construction of a 46-unit apartment building, that will be occupied by students (given the close proximity to the University of Windsor).

The subject lands are on the southwest quadrant of Riverside Drive West and Rankin Avenue. The site context and location is illustrated in ***Figure 1*** and ***Figure 2***, respectively.

Figure 1: Site Context

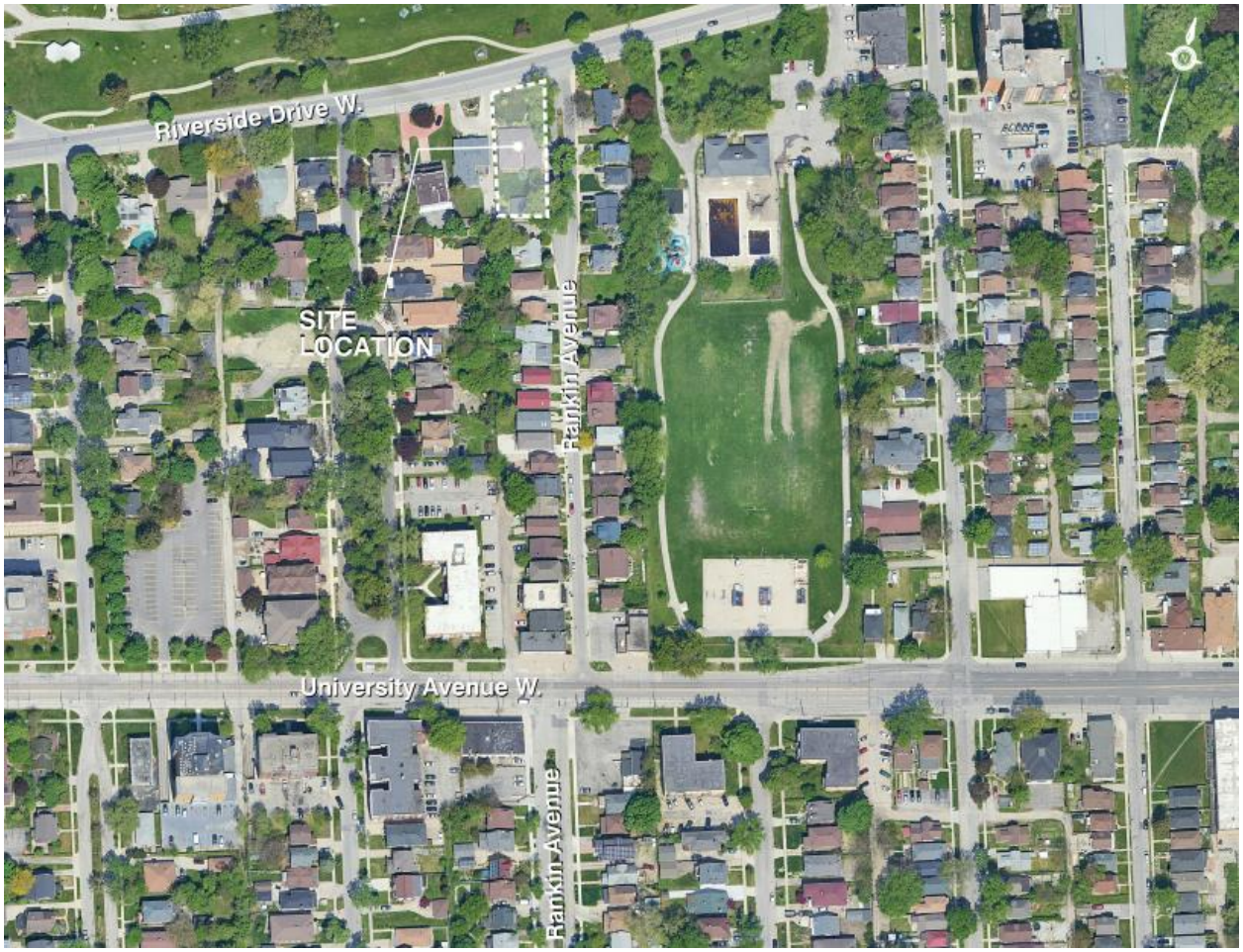
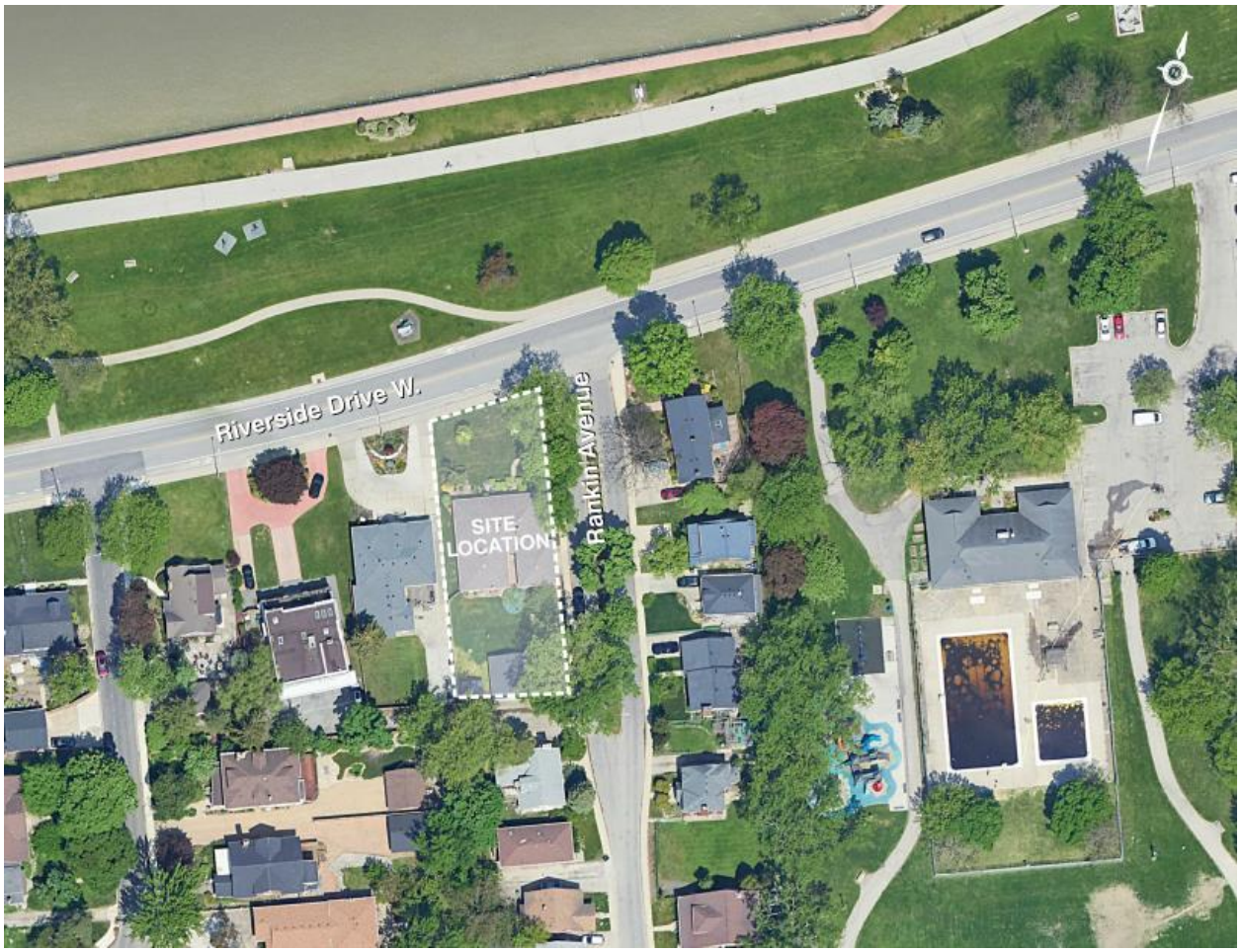


Figure 2: Site Location



1.2 Proposed Development

The proposed development consists of a three (3) storey residential building featuring 46 units and a surface parking lot with 12 parking spaces.

One vehicular access is proposed for the site on Rankin Avenue. It is located approximately 45 metres south of Riverside Drive West. Two entrances to the building itself are proposed, with one entrance proposed along Rankin Avenue (main building entrance) and another on the west side of the building (secondary building entrance), accessed via a concrete pathway that connects to Riverside Drive West.

The conceptual development plan can be seen in ***Appendix A.***

1.3 Scope of Analysis

Based on discussions with City of Windsor staff, the study area consists of the following intersections:

- Riverside Drive West and Rankin Avenue;
- University Drive West and Rankin Avenue; and
- The proposed site driveway to Rankin Avenue.

Traffic analyses have been prepared for the weekday AM and PM peak hours. Two horizon years have been assessed:

- 2026, corresponding to the anticipated build-out year; and
- 2031, corresponding to five years after the anticipated build-out year.

In addition to traffic analyses, the following have been considered:

- The impacts of the proposed development on active transportation infrastructure and non-auto modes; and
- Identification of any roadway or traffic control modifications that may be required to accommodate the traffic generated by the site.

2.0 Existing Conditions

2.1 Existing Road Network

The following describes the roadways within the study area.

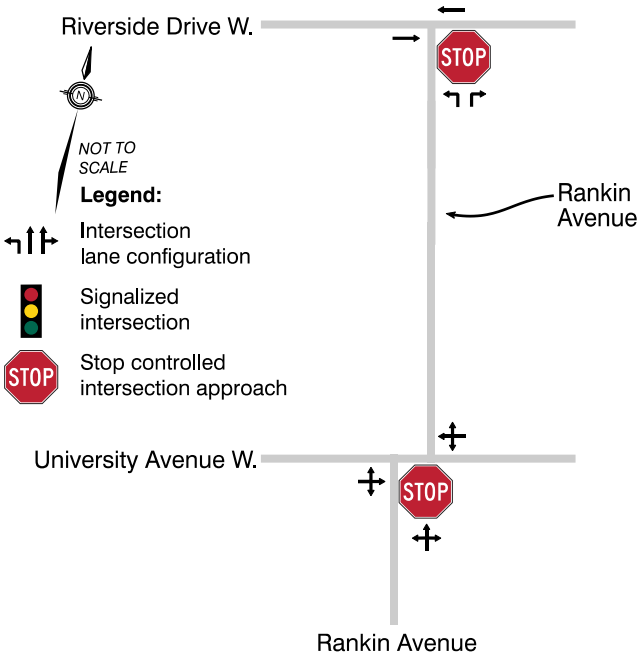
Riverside Drive West is an east-west road under the jurisdiction of the City of Windsor. It is classified as a scenic drive. Within the study area, Riverside Drive features a two-lane cross-section. As no speed limit signage is present, the speed limit would default to the statutory limit of 50 km/h. No on street parking is available on Riverside Drive West within the study area.

Rankin Avenue is a local road under the jurisdiction of the City of Windsor. It runs north-south, beginning at Union Street in the south and terminating at Riverside Drive West in the north. The road is a two-way street between University Avenue West and Union Street. North of University Avenue West, Rankin Avenue becomes a one-way street, only allowing traffic in the northbound direction. On-street parking along this street is restricted to residents of the area with a valid permit. Parking is available on the west side of the street north of University Avenue West and on both sides of the street to the south of University Avenue West. Raised landscaped islands are present along Rankin Avenue. South of University Avenue West, the landscaped islands begin at University Avenue West and extend southerly for approximately 300 metres. A landscape island is also present on Rankin Avenue north of University Avenue, beginning at Riverside Drive West and extending southerly for approximately 60 metres. Within the study area, truck restrictions are present on this road south of University Avenue West. There are no posted speed limits within the study area, and therefore a 50 km/h statutory speed limit applies under the *Highway Traffic Act*. Within the study area, the north and south legs of Rankin Avenue are not aligned at University Avenue West.

University Avenue is a two-lane Class I arterial road under the jurisdiction of the City of Windsor. It extends easterly from Sandwich Street before terminating at Pierre Avenue. There are no posted speed limits within the study area, and therefore a 50 km/h statutory speed limit applies under the *Highway Traffic Act*. Metered on-street parking exists on both sides of the roadway within the study area.

Figure 3 illustrates the existing traffic control and lane configuration at the study area intersections.

Figure 3: Existing Intersection Geometry and Traffic Control



2.2 Existing Facilities

2.2.1 Existing Active Transportation Facilities

Active transportation facilities currently exist in the study area. A summary of these facilities is noted below:

Riverside Drive West: Within the study area, sidewalks and bicycle lanes are present on both sides of the roadway. A multi-use trail, known as the Riverfront Trail is present on the north side of the roadway.

Rankin Avenue: Within the study area, sidewalks exist on both sides of the road.

University Avenue West: Within the study area, sidewalks and dedicated bicycle lanes exists on the both sides of the roadway.

2.2.2 Existing Transit Services

Transit service in the study area is operated by Transit Windsor. There are two routes that pass through the study area:

Transway 1C links the Hotel-Dieu Grace Healthcare Terminal, the University of Windsor, the downtown core, and Forest Glade. It provides east-west service, using Ouellette Avenue to travel north-south

between University Avenue and Tecumseh Road. From Monday to Saturday the service operates at 10-minute headways during the day and 30-minute headways in the early-morning and evening. On Sundays and holidays, service operates at 40- to 60-minute headways. The closest stops to the subject site are located along University Avenue West at Randolph Avenue, Partington Avenue and Bridge Avenue.

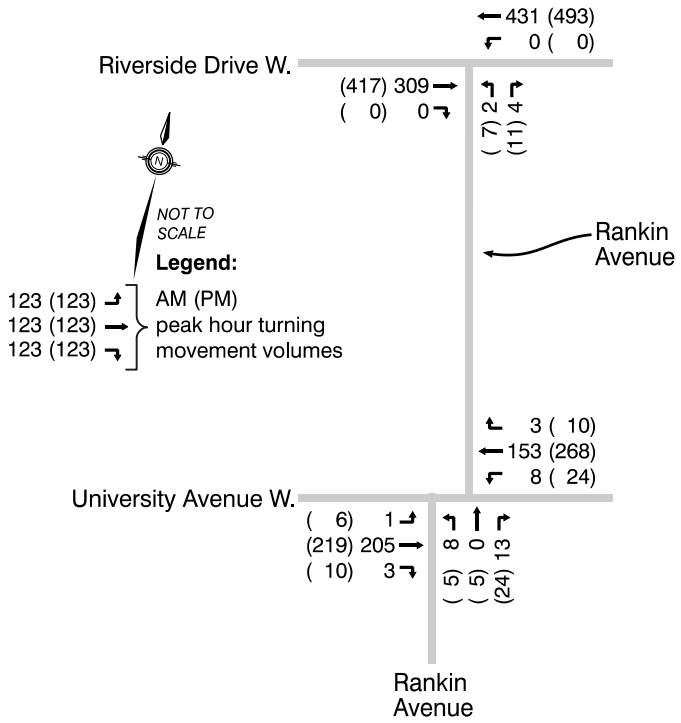
Dominion 5 connects the Windsor International Transit Terminal to St. Clair College, mostly running south along Dominion Avenue. Service operates at 20-minute headways Monday through Friday. On Saturdays the headway is 30 minutes throughout the day with 60-minute headways in the early-morning. On Sundays and holidays the headway is 60 minutes. The closest stop to the subject site is located at Campbell Street and Riverside Drive West.

2.3 Existing Traffic Volumes

Weekday AM and PM peak hour intersection turning movement counts (TMC's) were undertaken at the study area intersections by Horizon Data Services Ltd (HDSL). The traffic data was collected on Wednesday, June 5, 2024 between 7:00 AM and 9:00 AM and 4:00 PM and 6:00 PM. The TMC data can be found in ***Appendix B.***

Figure 4 presents the existing traffic volumes in the study area.

Figure 4: Existing Traffic Volumes



2.4 Existing Pedestrian and Cycling Activity

The volume of pedestrians and cyclists was recorded as part of the traffic counts undertaken by HDSL.

Table 1 documents the number of pedestrian crossings at each intersection during the peak hours.

Table 1: Existing Pedestrian Activity

Intersection	AM peak hour					PM peak hour				
	North leg	South leg	West leg	East leg	Total	North leg	South leg	West leg	East leg	Total
Riverside Drive West and Rankin Avenue	0	5	1	0	**6**	0	7	1	0	**8**
University Avenue West and Rankin Avenue	16	18	4	5	**43**	22	52	20	10	**104**

A low level of pedestrian activity was observed at the Riverside Drive West and Rankin Avenue intersection. A high volume of pedestrian activity was observed at the University Avenue West and Rankin Avenue intersection, particularly during the PM peak hour with a total of 104 pedestrian crossings observed.

Table 2 presents the number of cyclists observed on each intersection approach during the peak hours.

Table 2: Existing Cycling Activity

Intersection	AM peak hour					PM peak hour				
	WB	EB	SB	NB	Total	WB	EB	SB	NB	Total
Riverside Drive West and Rankin Avenue	1	1	0	0	2	0	3	0	0	3
University Avenue West and Rankin Avenue	2	0	1	0	3	2	2	0	0	4

A low level of cycling activity was observed, with a maximum of 4 cyclists observed at University Avenue West and Rankin Avenue during the PM peak hour.

3.0 Future Background Conditions

This section establishes the magnitude of traffic growth under future background conditions (i.e., traffic volumes that are forecasted without the proposed development in place).

Two horizon years have been assessed:

- 2026, corresponding to the anticipated build-out year; and
- 2031, corresponding to five years after the anticipated build-out year.

3.1 Background Traffic Growth

Future background traffic volumes were calculated by applying a background growth rate of 1.0% per year to existing volumes, based on direction from City of Windsor staff. The background growth rate was applied to all movements except for movements turning into or out of the site driveway.

3.2 Background Development Traffic

No significant development applications were identified by City staff on Rankin Avenue between Riverside Drive West and University Avenue West, or on Riverside Drive West between Campbell Avenue and Randolph Avenue. Therefore, no background development traffic was incorporated into the future background volume forecasts.

3.3 Future Background Traffic Volumes

The resulting future background traffic volumes at the 2026 and 2031 horizons are presented in ***Figure 5*** and ***Figure 6***, respectively.

Figure 5: Future Background Traffic Volumes (2026)

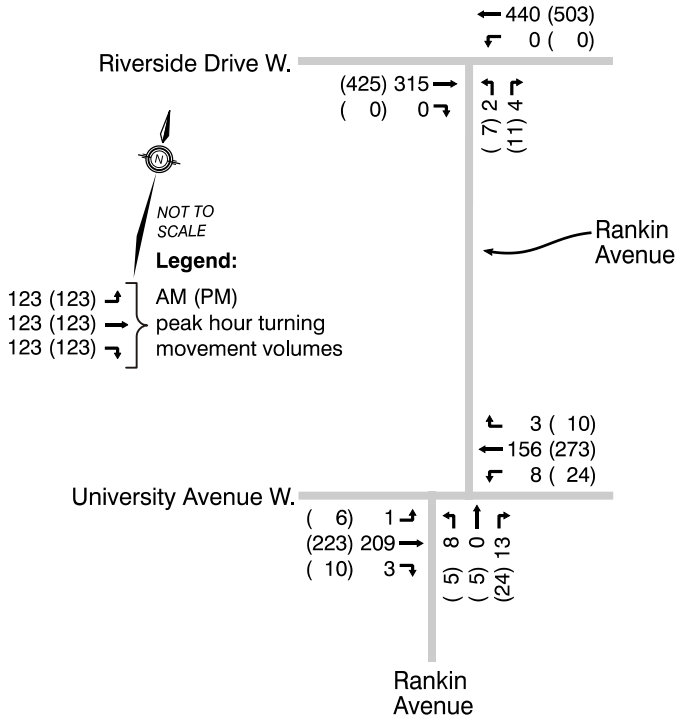
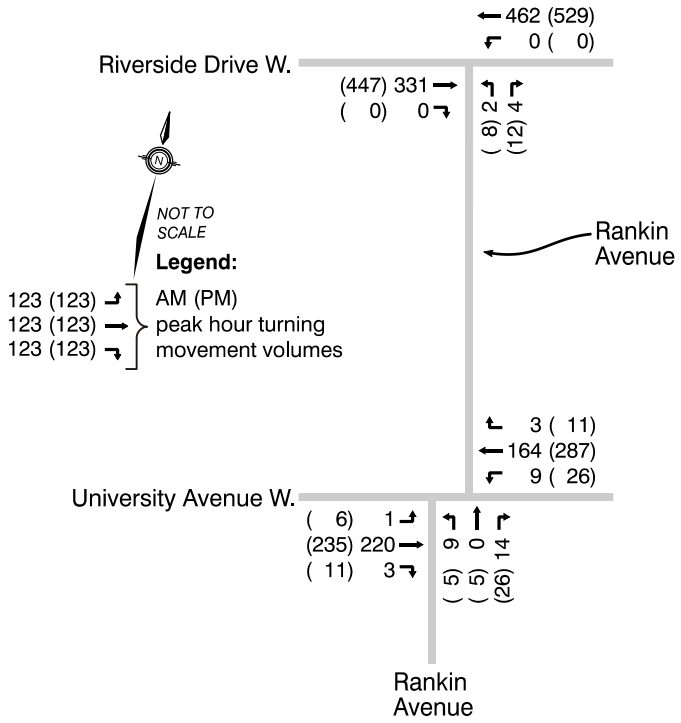


Figure 6: Future Background Traffic Volumes (2031)



4.0 Total Future Traffic Volumes

4.1 Proposed Development

The proposed development consists of a three (3) storey residential building featuring 46 units and a surface parking lot with 12 parking spaces.

One vehicular access is proposed for the site on Rankin Avenue. It is located approximately 45 metres south of Riverside Drive West. Two entrances to the building itself are proposed, with one entrance proposed along Rankin Avenue (main building entrance) and another on the west side of the building (secondary building entrance), accessed via a concrete pathway that connects to Riverside Drive West.

It is understood that the development will be occupied by students (given the close proximity to the University of Windsor).

4.2 Site Trip Generation

Trips generated by the proposed development were estimated based on trip generation rates published by ITE in the *Trip Generation Manual*, 11th edition. Trips were generated based on ITE Land Use Code 225 ("Off-Campus Student Apartment (Low-Rise)"). Each unit in the proposed development is a one-bedroom apartment, which translates to a total of 46 bedrooms. The eastern edge of the University of Windsor (University Avenue West and California Avenue) is approximately 550 metres away from the proposed development.

Table 3 presents the trip generation estimates applied to the subject site.

Table 3: Future Site Trip Generation

Land use / magnitude	AM peak hour					PM peak hour				
	Rate	% in/ out	Total trips	Trips in	Trips out	Rate	% in/ out	Total trips	Trips in	Trips out
Off-Campus Student Apartment (Low-Rise) (46 units)	0.12	36 / 64	6	2	4	0.24	50 / 50	11	6	5

The site is anticipated to generate 6 vehicle trips during the AM peak hour and 11 vehicle trips during the PM peak hour.

4.2.1 Non-Auto Travel

Non-auto trips will also be generated by the site. The subject site is in close proximity to the University of Windsor. As this development will be occupied by students who primarily do not own vehicles, it is

anticipated that the majority of the trips will be made by students walking to/from the University of Windsor, which is approximately a 7-minute walk away. When comparing the number of units to the number of proposed parking spaces, only 26% of the units will have a parking space. It is therefore expected that the development will attract students who don't own vehicles due to the limited number of parking spaces.

Even though the above math would seem to imply that 74% of the units will travel via other modes, the City's May 2019 Active Transportation Master Plan was used as a guide to estimate non-auto trips. The May 2019 AT Master Plan identifies a 2041 target mode share (for active transportation modes) of 22% for mature neighbourhoods. The 22% modal split was added on top of the estimated vehicle trips to derive total person trips for the site.

Table 4 summarizes the assumed modal split for the subject development.

Table 4: Future Site Trip Generation

Land use / magnitude	AM peak hour					PM peak hour				
	Rate	% in/ out	Total trips	Trips in	Trips out	Rate	% in/ out	Total trips	Trips in	Trips out
Total auto trips	0.12	36 / 64	6	2	4	0.24	50 / 50	11	6	5
Modal split	22%		2	1	1	22%		3	2	1
Total person trips			**8**	**3**	**5**			**14**	**8**	**6**

The proposed development is projected to generate 8 total trips (3 inbound and 5 outbound) during the weekday AM peak hour and 14 total trips during the weekday PM peak hour (8 inbound and 6 outbound).

4.3 Site Traffic Distribution

The trip distribution was estimated based on the site's location in the city of Windsor, an estimation of likely complementary external trip generators, the availability and attractiveness of various travel routes, and existing traffic patterns.

To get a better representation of the existing directional distribution, only the intersection of University Avenue West and Rankin Avenue was relied on, despite the north leg being a one way-street. The intersection of Riverside Drive East and Rankin Avenue is limited to eastbound and westbound through movements and northbound right-turn/left-turn movements due to the intersection being a 3-legged intersection (no north leg) and with the south leg being a one-way street. As a result, the following trip distribution was utilized:

- 0% to/from the north;
- 5% to/from the south;

- 47.5% to/from the east; and
- 47.5% to/from the west.

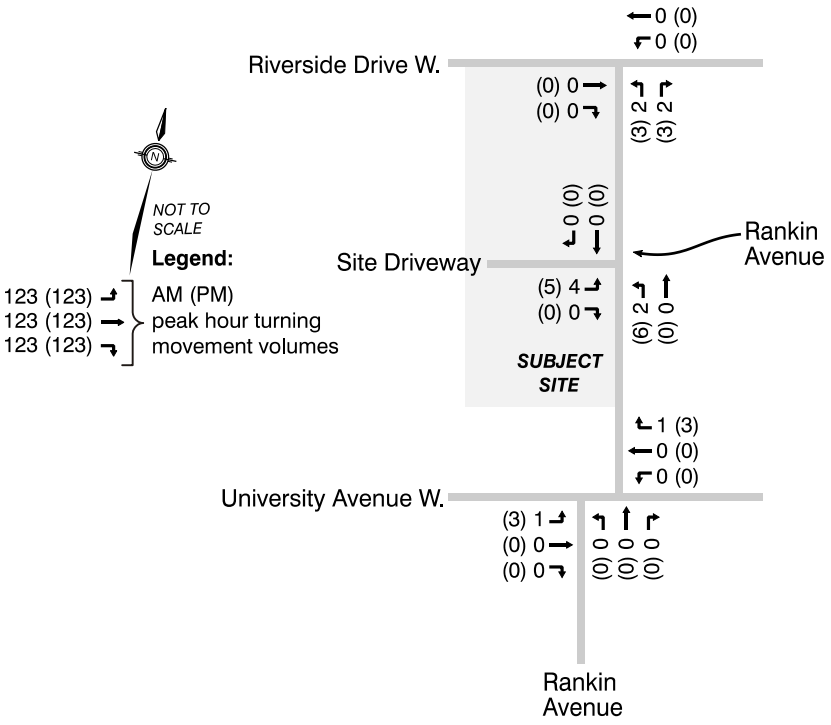
4.4 Site Traffic Assignment

Trips generated by the site were assigned logically based on the available street network.

Since Rankin Avenue is a one-way street at the site location, vehicles heading to the site must arrive from the south using University Avenue West (to head north on Rankin Avenue) and vehicles leaving the site must head north on Rankin Avenue towards Riverside Drive West. The small percentage of vehicle heading south will have to do so by first either heading westbound or eastbound on Riverside Drive East. The trips heading to the south were divided evenly on Riverside Drive West in the east and west direction as various external trip generators south of the site produced similar travel times whether a vehicle travelled eastbound or westbound to ultimately head south.

Figure 7 illustrates the anticipated site traffic volumes. Due to rounding, the volumes are not always balanced in the PM peak hour between the site driveway and the Riverside Drive West and Rankin Avenue intersection.

Figure 7: Site Traffic



4.5 Total Future Traffic Volumes

Total future traffic volumes represent conditions anticipated with the proposed development in place, and are calculated by adding the site traffic volumes to the projected future background traffic volumes. ***Figure 8*** and ***Figure 9*** illustrate the projected total future traffic volumes at the 2026 and 2031 horizons, respectively.

Figure 8: Total Future Traffic Volumes (2026)

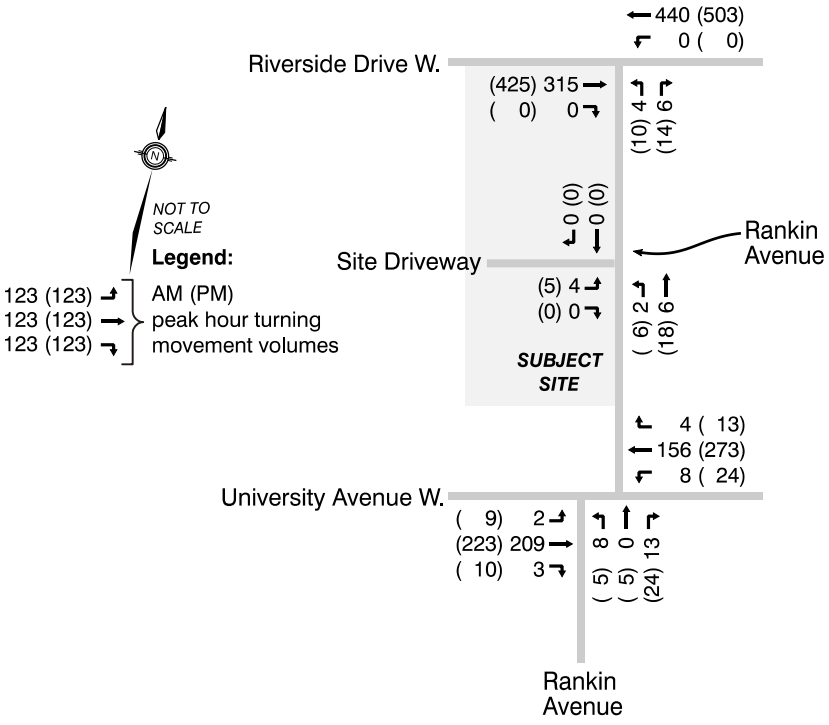
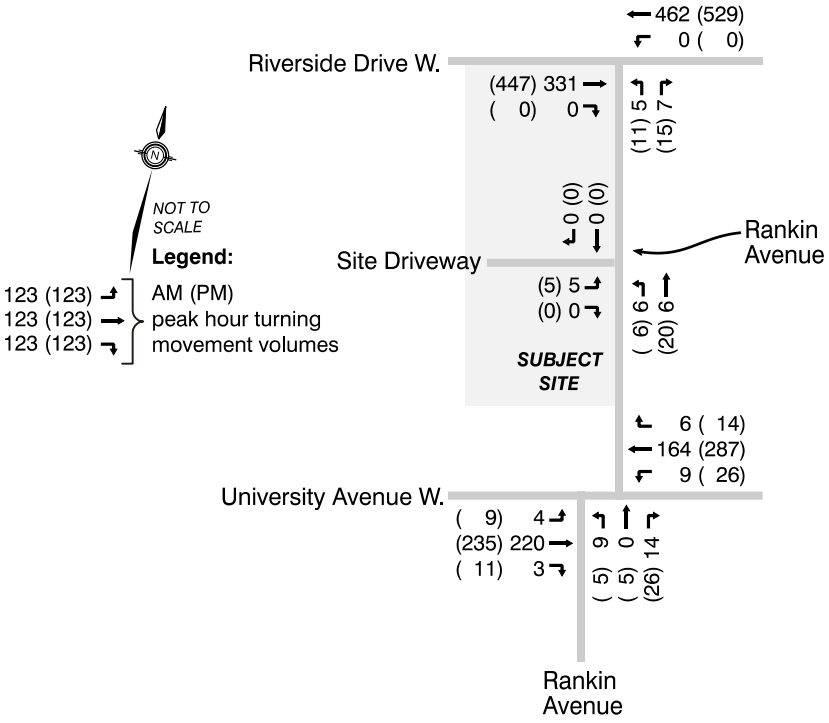


Figure 9: Total Future Traffic Volumes (2031)



5.0 Intersection Operations

Intersection operational analyses were completed for the study area intersections using Trafficware's Synchro software (version 11). The analyses reflect the existing lane configurations at each intersection.

At the unsignalized (stop-controlled) intersections within the study area, the v/c ratio, delay, level of service and 95th percentile queue were noted for any stop-controlled movements. Level of service definitions are provided in ***Appendix C***. Synchro analysis worksheets reports are provided in ***Appendix D***.

At each intersection, critical movements were identified. Critical movements are defined as:

- Any individual movement at an unsignalized intersection operating at LOS F; and
- Any turning movement where the calculated 95th percentile queue exceeds the available storage length.

5.1 Riverside Drive West and Rankin Avenue

Table 5 summarizes the operations at Riverside Drive West and Rankin Avenue.

Table 5: Intersection Operations at Riverside Drive West and Rankin Avenue

Movement	AM peak hour				PM peak hour			
	v/c	LOS	Delay *(s/veh)*	95th %ile queue *(m)*	v/c	LOS	Delay *(s/veh)*	95th %ile queue *(m)*
Existing								
NB left	0.01	C	15.3	0	0.03	C	18.7	1
NB right	0.01	B	10.2	0	0.02	B	11.1	1
Future background (2026)								
NB left	0.01	C	15.6	0	0.03	C	19.1	1
NB right	0.01	B	10.2	0	0.02	B	11.2	1
Total future (2026)								
NB left	0.01	C	15.6	0	0.04	C	19.3	1
NB right	0.01	B	10.2	0	0.03	B	11.2	1
Future background (2031)								
NB left	0.01	C	16.2	0	0.04	C	20.2	1
NB right	0.01	B	10.3	0	0.02	B	11.4	1
Total future (2031)								
NB left	0.02	C	16.3	0	0.05	C	20.4	1
NB right	0.01	B	10.3	0	0.03	B	11.4	1

The northbound left-turn movement currently operates at a reasonable level of service (LOS C) in both the AM and PM peak hour. The northbound right-turn currently operates at a good level of service (LOS B) in both peak hours. The level of service for these movements are not anticipated to changed

significantly, and only minimal changes to queuing and delay are anticipated as a result of background growth and the addition of site traffic. No critical movements are anticipated.

5.2 University Avenue West and Rankin Avenue

Table 6 summarizes the operations at University Avenue West and Rankin Avenue.

Table 6: Intersection Operations at University Avenue West and Rankin Avenue

Movement	AM peak hour				PM peak hour			
	v/c	LOS	Delay *(s/veh)*	95th %ile queue *(m)*	v/c	LOS	Delay *(s/veh)*	95th %ile queue *(m)*
Existing								
NB approach	0.04	B	10.9	1	0.07	B	12.2	2
Future background (2026)								
NB approach	0.04	B	10.9	1	0.07	B	12.3	2
Total future (2026)								
NB approach	0.04	B	11.0	1	0.07	B	12.4	2
Future background (2031)								
NB approach	0.04	B	11.1	1	0.07	B	12.6	2
Total future (2031)								
NB approach	0.04	B	11.2	1	0.07	B	12.5	2

The stop-controlled northbound approach currently operates at LOS B in both the AM and PM peak hours. The level of service is anticipated to be unchanged due to background traffic growth and the addition site traffic, through to the 2031 horizon year. The northbound approach is anticipated to operate well below capacity, and queues are not anticipated to exceed a single vehicle in all horizon years.

5.3 Rankin Avenue at Site Access

Table 7 summarizes the operations at the proposed site access on Rankin Avenue.

At the site driveway, Rankin Avenue is a one-way street with two travel lanes separated by a raised landscaped median island. ***Figure 10*** depicts the lane configuration along Rankin Avenue near the site driveway.

Figure 10: Lane Configuration of Rankin Avenue at the Proposed Site Access

The Synchro software is unable to model the geometry present on Rankin Avenue at the site access point. The intersection of the site driveway and Rankin Avenue could have been conservatively modelled with a single northbound approach lane (shared through/left-turn lane), combining the traffic of both lanes on either side of the median. This approach is unrealistic as it overestimates the delay experienced by a vehicle exiting the site (vehicles turning out of the site will turn into the lane on the left side of the median island, and do not have to wait for vehicles driving on the right side of the median island). To better represent driver behaviour, the northbound approach at the site driveway was modelled as two northbound approach lanes (one shared through/left-turn lane and one northbound through lane). This allows vehicles turning onto Rankin Avenue to head north, the ability to do so regardless of if there is traffic in the northbound through lane (on the right side of the median island).

Table 7: Intersection Operations, Ouellette Avenue at Elliott Street

Movement	AM peak hour				PM peak hour			
	v/c	LOS	Delay *(s/veh)*	95th %ile queue *(m)*	v/c	LOS	Delay *(s/veh)*	95th %ile queue *(m)*
Total future (2026)								
EB left	0.00	A	8.6	0	0.01	A	8.7	0
Total future (2031)								
EB left	0.01	A	8.6	0	0.01	A	8.7	0

The eastbound left at the site driveway to Rankin Avenue is anticipated to operate at an excellent LOS (LOS A) through to the 2031 horizon year.

6.0 Site Plan Review

6.1 Impact on Non-Auto Modes

There are existing sidewalks and bicycle lanes on Riverside Drive West along the site's north frontage, which will not be modified as a result of the proposed development. The development proposal includes the introduction of a concrete walkway that would connect the western edge of the proposed building to the existing pedestrian sidewalk on Riverside Drive West. This would link pedestrians to the building's secondary entrance.

Along Rankin Avenue, a sidewalk currently exists along the site's east frontage. A new curb cut is proposed for vehicular access off this street, with the existing location of the sidewalk on the east frontage to be maintained upon the introduction of the curb cut.

The primary pedestrian desire lines associated with this development will be to the west and south of the development (to get to the University of Windsor). This destination can be reached without requiring pedestrians to cross streets at uncontrolled locations. For pedestrians heading to the east, the stop-controlled northbound approach at Rankin Avenue and Riverside Drive West allows a controlled location for pedestrians to cross. Pedestrians wanting to cross Riverside Drive West to access the Riverfront Trail can do so at a controlled pedestrian crossing located approximately 230 metres east of the Rankin Avenue and Riverside Drive West intersection.

As part of this development, modifications to transit infrastructure are not proposed.

6.2 Parking

The City of Windsor's Zoning By-law (ZBL) 8600 provides regulations and standards for all developments within Windsor. The by-law specifies the following parking requirements for student housing:

- **Required Spaces:** 1 parking space for each 4 beds;
- **Accessible parking spaces:** 1 space for developments with a total parking supply of 1 to 25 spaces;
- **Visitor Parking Spaces:** For a multiple dwelling building with a minimum of 5 units, 15% of parking spaces must be marked as visitor.

Table 8 outlines the parking requirements for the subject site.

Table 8: Parking Requirements

Type of Spaces	Parking Spaces	Required Parking Spaces	Proposed Parking Rate	Parking Spaces Provided
University Student Residence	Based on the number of beds (46 beds)	(1.0 space/unit x (46 beds / 4 beds)) = 11 spaces (11.5 rounded DOWN to 11 spaces)	0.26 spaces/unit	0.26 spaces/unit X 46 units = 12 spaces
Accessible	Based on the total number of parking spaces in area (12 total spaces proposed)	1 Type A Parking Space is Required	-	1 parking space
Visitor	Based on the type of development (Multiple Dwelling with more than 5 units)	15% X 12 spaces = 1 space (1.8 spaces rounded down to 1 space)	-	1 parking space

The total number of parking spaces required for the site based on the City's zoning by-law is approximately 12 parking spaces. The development proposal is envisioning the provision of 12 parking spaces, which meets ZBL minimum parking requirements. Within the 12 proposed parking spaces, one space needs to be signed as a visitor space, and one space must be an accessible parking space (measuring 3.5 metres in width and 5.5 metres in length). Both the visitor space and accessible space are denoted on the development plans.

7.0 Summary

Dillon Consulting has been retained by Agbaba Holdings Corporation (the "client") to undertake a transportation impact study (TIS) which reviews the impact of a proposed residential development in the city of Windsor, Ontario. The proposed residential development is located on the southwest corner of the Riverside Drive West and Rankin Avenue intersection. Given the close proximity to the University of Windsor, the development will be used/occupied by students.

The proposed development consists of a three (3) storey residential building featuring 46 units and a surface parking lot with 12 parking spaces. One vehicular access is proposed on Rankin Avenue for the site. It is located approximately 45 metres south of Riverside Drive West. Two entrances to the building are proposed, with one entrance proposed along Rankin Avenue (main building entrance) and another on the west side of the building (secondary building entrance), accessed via a concrete pathway that connects to Riverside Drive West.

The proposed development is anticipated to generate 8 total person trips during the AM peak hour (3 inbound and 5 outbound) and 14 total person trips during the PM peak hour (8 inbound and 6 outbound). These forecasts reflect an estimated non-auto modal split of 22% for mature neighbourhoods, which is based on 2041 targets outlined in the City of Windsor's 2019 Active Transportation Master Plan.

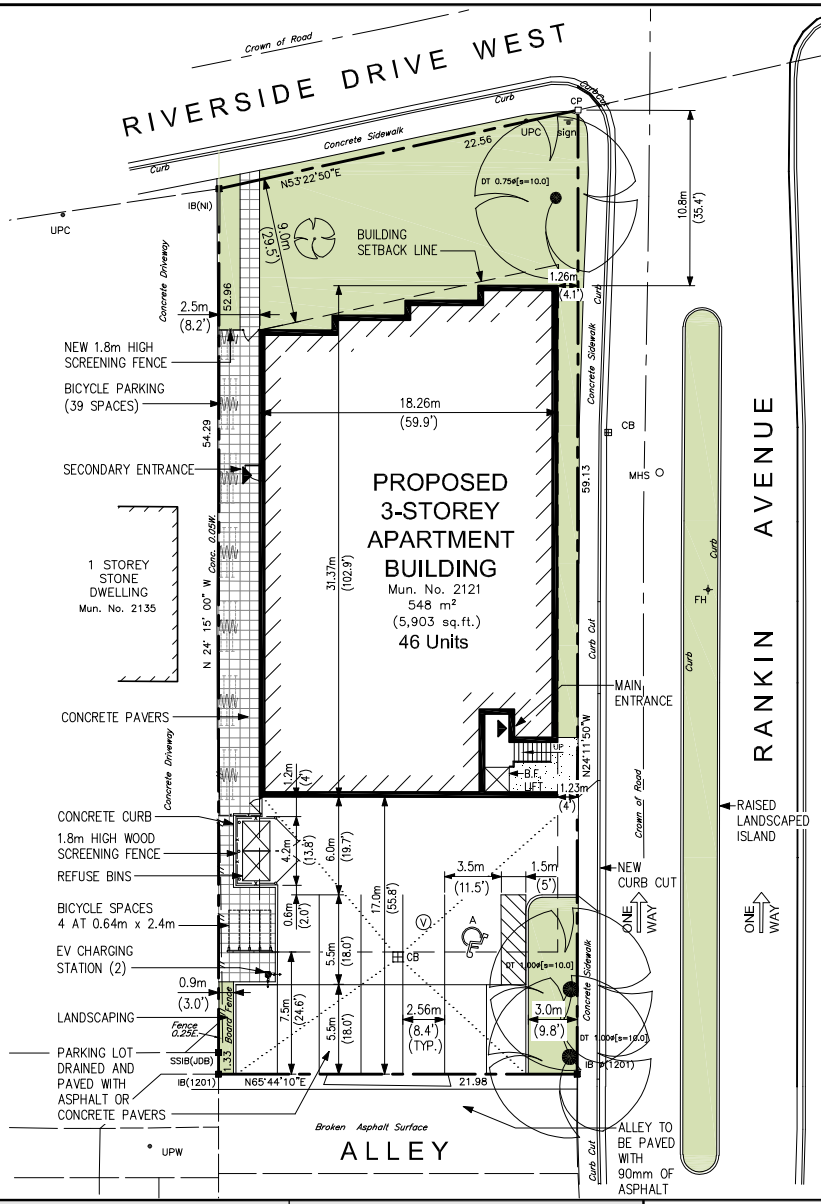
All study area intersections are projected to have acceptable levels of vehicular delay and queuing. All individual vehicle movements operate at LOS C or better. No critical movements have been identified. The proposed site driveway is projected to operate at an excellent level of service (LOS A), during both the AM and PM peak hours through to the 2031 horizon year.

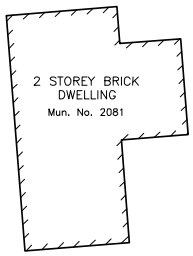
There are existing sidewalks and bicycle lanes on Riverside Drive West along the sites north frontage, which will not be modified as a result of the proposed development. The site plan proposes the introduction of a concrete walkway that would connect the western edge of the proposed building to the existing pedestrian sidewalk on Riverside Drive West. This would link pedestrians to the building's secondary entrance. Along Rankin Avenue, a sidewalk currently exists along the site's east frontage.

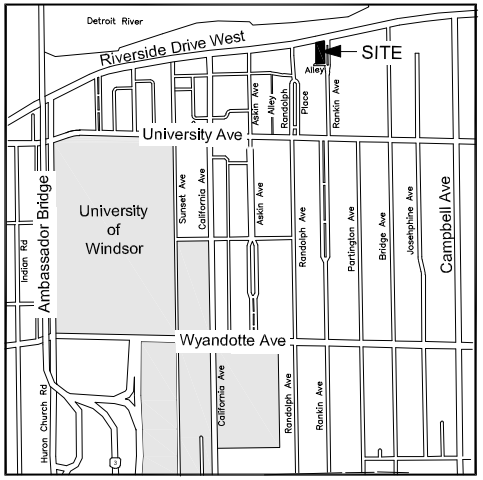
The minimum number of parking spaces required for the site as per the City's Zoning By-law is 11 spaces. The subject site proposes 12 parking spaces, which meets the ZBL requirements.

Appendix A

Proposed Site Plan







Location Map

SCALE: Not to scale

DETAILS OF DEVELOPMENT

ZONING – TO BE DETERMINED	RD2.2 REQUIRED	PROVIDED	COMMENTS	VARIANCE REQUIRED
LOT WIDTH (MINIMUM)	18.0m	21.98m		
LOT AREA (MINIMUM)	540m²	1,247.8m²		
LOT COVERAGE (MAXIMUM)	45%	44%		
BUILDING HEIGHT	9.0m	11.58m		✓
FRONT YARD (MINIMUM)	6.0m	9.0m		
REAR YARD (MINIMUM)	7.5m	17.0m		
SIDE YARD (MINIMUM)	1.8m	1.23m		✓
DWELLING UNITS (MAXIMUM)	4	46		✓
PARKING SPACES = 46x1.25	58	12	1 TYPE 'A' PARKING SPACE AND 1 VISITOR SPACE PROVIDED	✓
LOADING SPACE	1	0		✓
BICYCLE SPACES	2	43		
PARKING SEPARATION (MINIMUM)				
• STREET	3.0m	3.0m		
• INTERIOR LOT/ALLEY (MINUMUM)	0.9m	0.9m		
• HABITABLE WINDOW	4.5m	0m		✓
• ALLEY	0.9m	0m		✓
BUILDING AREA	–	548m² (5,903 sq.ft.)		
GROSS BUILDING AREA	–	1,639m² (17,647 sq.ft.)		

Site Plan

SCALE: 1:300

0 5 10 Meters

LEGAL DESCRIPTION:

PART OF LOT 1,
REGISTERED PLAN 1163,
In The
CITY OF WINDSOR,
COUNTY OF ESSEX, ONTARIO

ISSUED FOR:

MEO & ASSOCIATES INC.
Architectural & Engineering Consultants
www.meogroup.net

825 Kingsway Drive, Burlington, Ontario, Canada, L7T 3H8
Tel. 905-632-6952; Fax 905-632-8870; mjtskevx@meoassociates.com
3600 Seven Lakes Dr., Suite 200, LaSalle, Ontario, Canada, N9H 0E5
Tel. 519-250-8088; Fax 519-250-8070; rmeo@meoassociates.com

CLIENT: AGBABA HOLDINGS CORPORATION

PROJECT: 2121 RIVERSIDE DRIVE W. APARTMENTS Windsor Ontario

DRAWING TITLE: PRELIMINARY SITE PLAN

SCALE: 1:300

ACAD REFERENCE: 4758 –P1– Site Plan

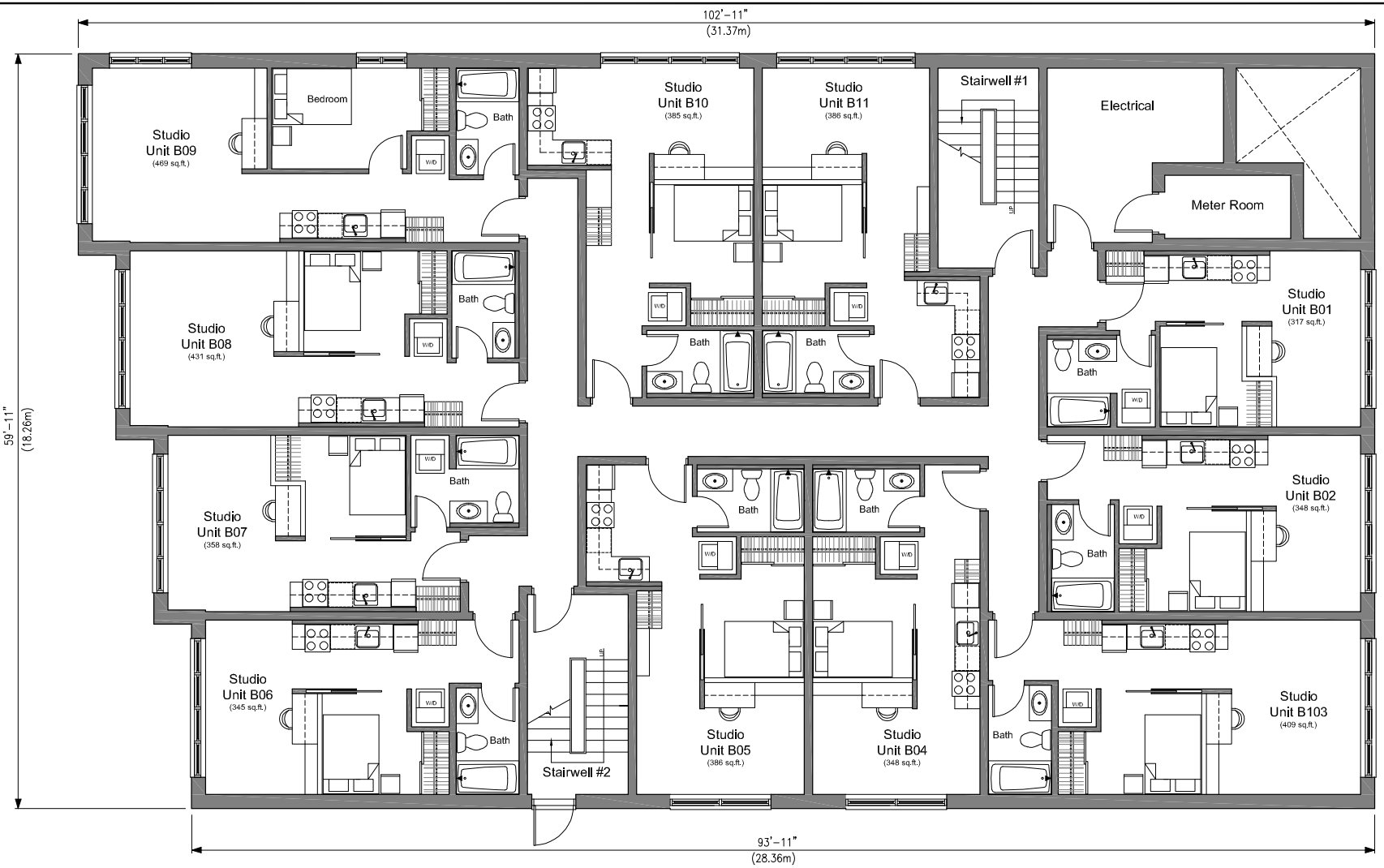
DATE: APRIL 17, 2024

DRAWN BY: I.A.Z.

PROJECT NUMBER: 4758

SHEET NUMBER: P1

4758 –P1– Site Plan.dwg, (Site Plan) Apr 17, 2024 – 11:47am



Basement Plan

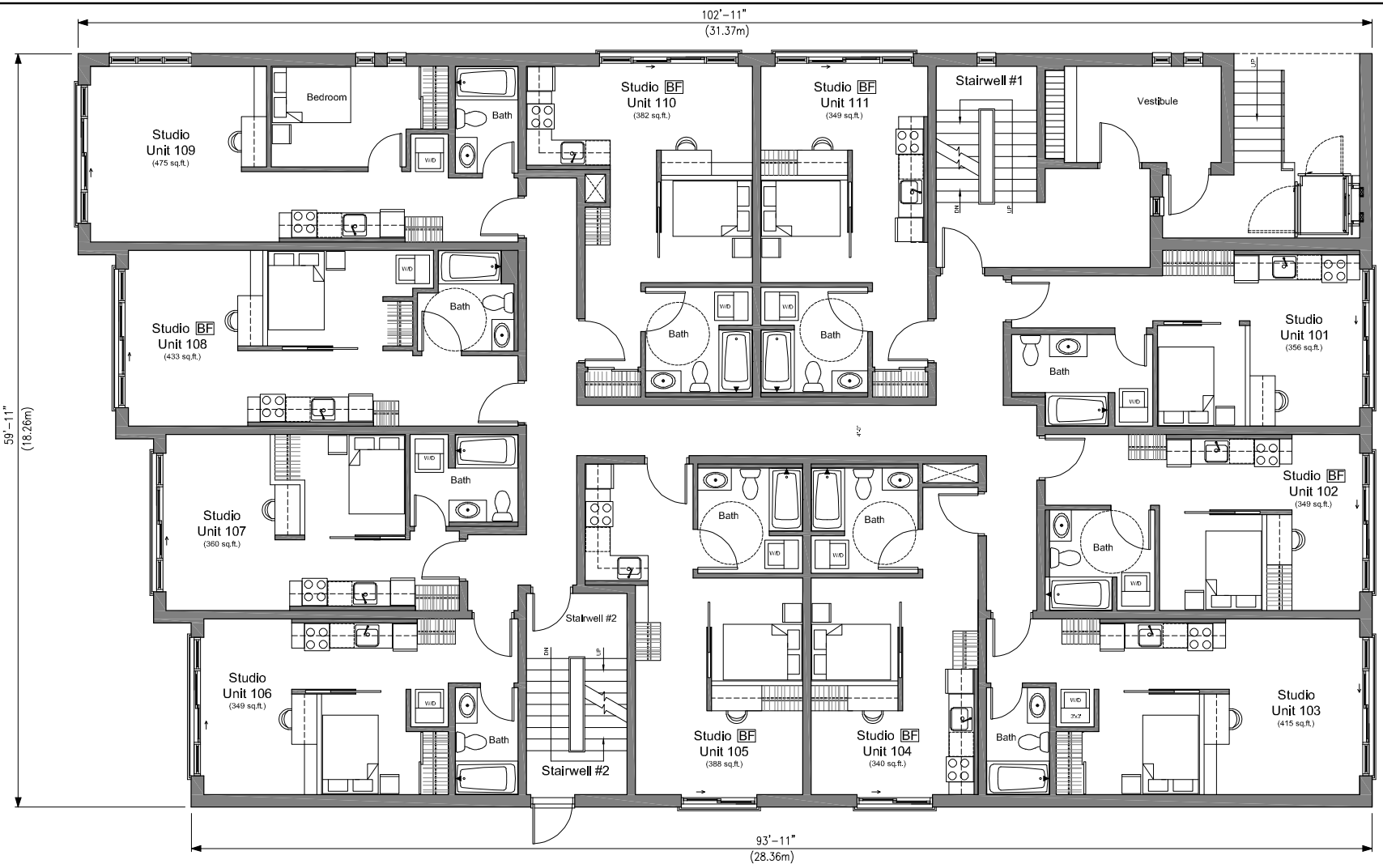
SCALE: 1/8=1'-0"

Basement = 11 Units
AREA = 5,713 sq.ft. (531m²)

0 8' 16'

MEO & ASSOCIATES INC. Architectural & Engineering Consultants www.meogroup.net	825 Kingsway Drive, Burlington, Ontario, Canada, L7T 3H8 Tel. 905-632-6952; Fax 905-632-8870; mptskevk@meoessedates.com 3600 Seven Lakes Dr., Suite 200, LaSalle, Ontario, Canada, N9H 0E5 Tel. 519-250-8088; Fax 519-250-8070; rmeo@meoessecates.com	CLIENT: AGBABA HOLDINGS CORPORATION	PROJECT: 2121 RIVERSIDE DRIVE W. APARTMENTS Windsor Ontario	DRAWING TITLE: BASEMENT PLAN	SCALE: 1/8" = 1'-0"	ACAD REFERENCE: 4758 -P2- Fl Plan	DATE: APRIL 22, 2024 DRAWN BY: I.A.Z.	ISSUED FOR: PROJECT NUMBER: 4758	SHEET NUMBER: P2

4758 -P2- Fl Plan.dwg, (B Plan) Apr 22, 2024 - 9:45am



1st Floor Plan

SCALE: 1/8=1'-0"

1st Floor = 11 Units
AREA = 5,841 sq.ft. (543m²)

0 8' 16'

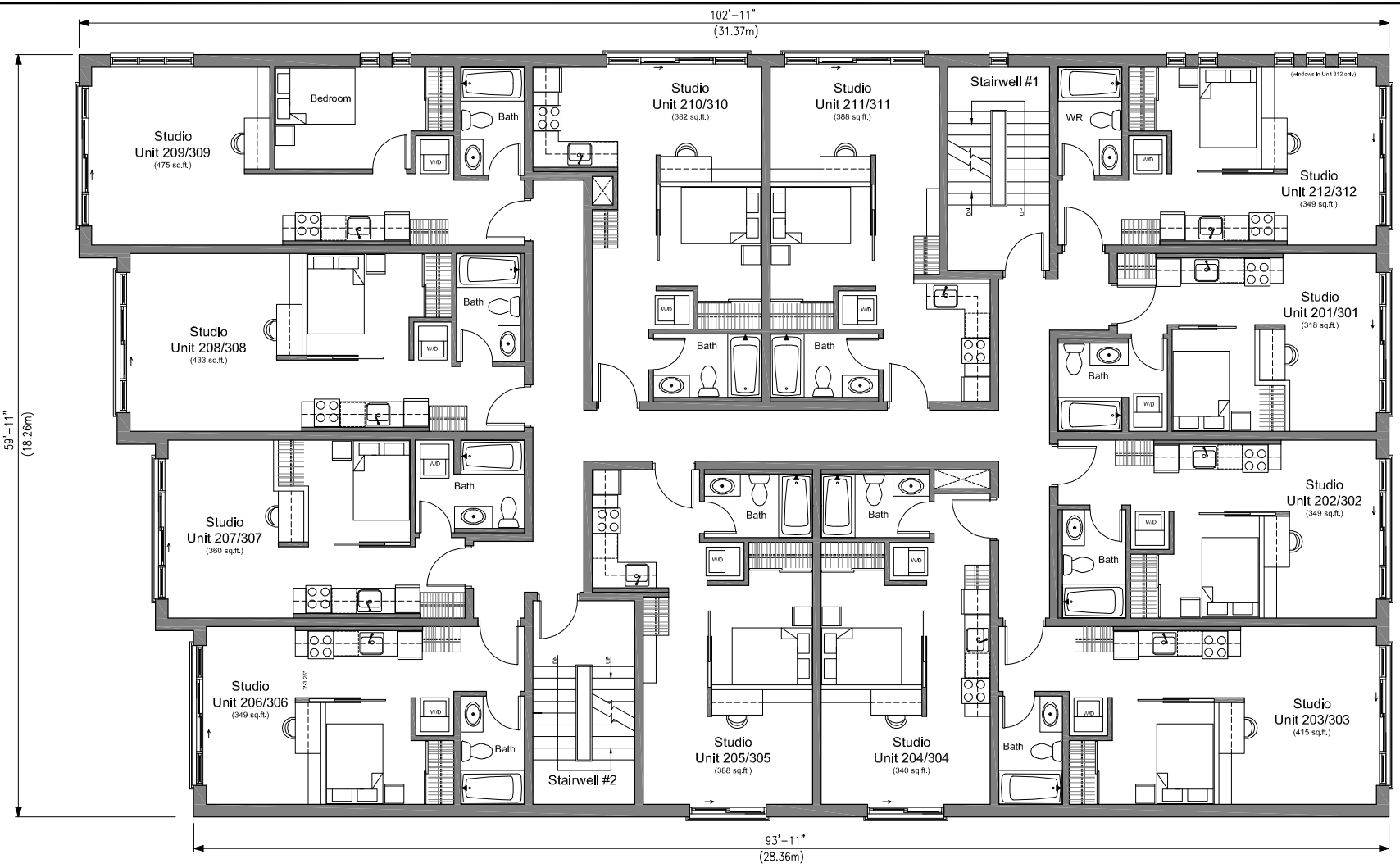
MEO & ASSOCIATES INC.
Architectural & Engineering Consultants
www.meogroup.net

825 Kingsway Drive, Burlington, Ontario, Canada, L7T 3H8
Tel. 905-632-6952; Fax 905-632-8870; mptskevk@meoessedates.com

3600 Seven Lakes Dr., Suite 200, LaSalle, Ontario, Canada, N9H 0E5
Tel. 519-250-8088; Fax 519-250-8070; rmeo@meoessecates.com

CLIENT:	AGBABA HOLDINGS CORPORATION
PROJECT:	2121 RIVERSIDE DRIVE W. APARTMENTS Windsor Ontario
DRAWING TITLE:	1st FLOOR PLAN
SCALE:	1/8" = 1'-0"
ACAD REFERENCE:	4758 -P2- Fl Plan
DATE:	APRIL 22, 2024
DRAWN BY:	I.A.Z.
ISSUED FOR:	
PROJECT NUMBER:	4758
SHEET NUMBER:	P3

4758 -P2- Fl Plan.dwg, (1st Floor) Apr 22, 2024 - 9:46am



2nd & 3rd Floor Plan

SCALE: 1/8=1'-0"

2nd Floor = 12 Units
3rd Floor = 12 Units
AREA = 5,903 sq.ft. (548m²)

0 8' 16'

ISSUED FOR:

MEO & ASSOCIATES INC.
Architectural & Engineering Consultants
www.meogroup.net

825 Kingsway Drive, Burlington, Ontario, Canada, L7T 3H8
Tel. 905-632-6952; Fax 905-632-8870; mptskevk@meoessedates.com

3600 Seven Lakes Dr., Suite 200, LaSalle, Ontario, Canada, N9H 0E5
Tel. 519-250-8088; Fax 519-250-8070; rmeo@meoessocates.com

CLIENT: AGBABA HOLDINGS CORPORATION

PROJECT: 2121 RIVERSIDE DRIVE W. APARTMENTS
Windsor Ontario

DRAWING TITLE: 2nd & 3rd FLOOR PLAN

SCALE: 1/8" = 1'-0"

ACAD REFERENCE: 4758 -P2- Fl Plan

DATE: APRIL 22, 2024

DRAWN BY: I.A.Z.

PROJECT NUMBER: 4758

SHEET NUMBER: P4

4758 -P2- Fl Plan.dwg, (2nd & 3rd Floor) Apr 22, 2024 - 9:46am

Appendix B

Traffic Survey Data

Horizon Data Services Ltd

(416) 840-6619

Your Traffic Count Specialist

File Name : Riverside Drive West at Rankin Avenue
Site Code : 00000000
Start Date : 2024-06-28
Page No : 1

Groups Printed- Cars - Trucks - Heavys - Cyclists

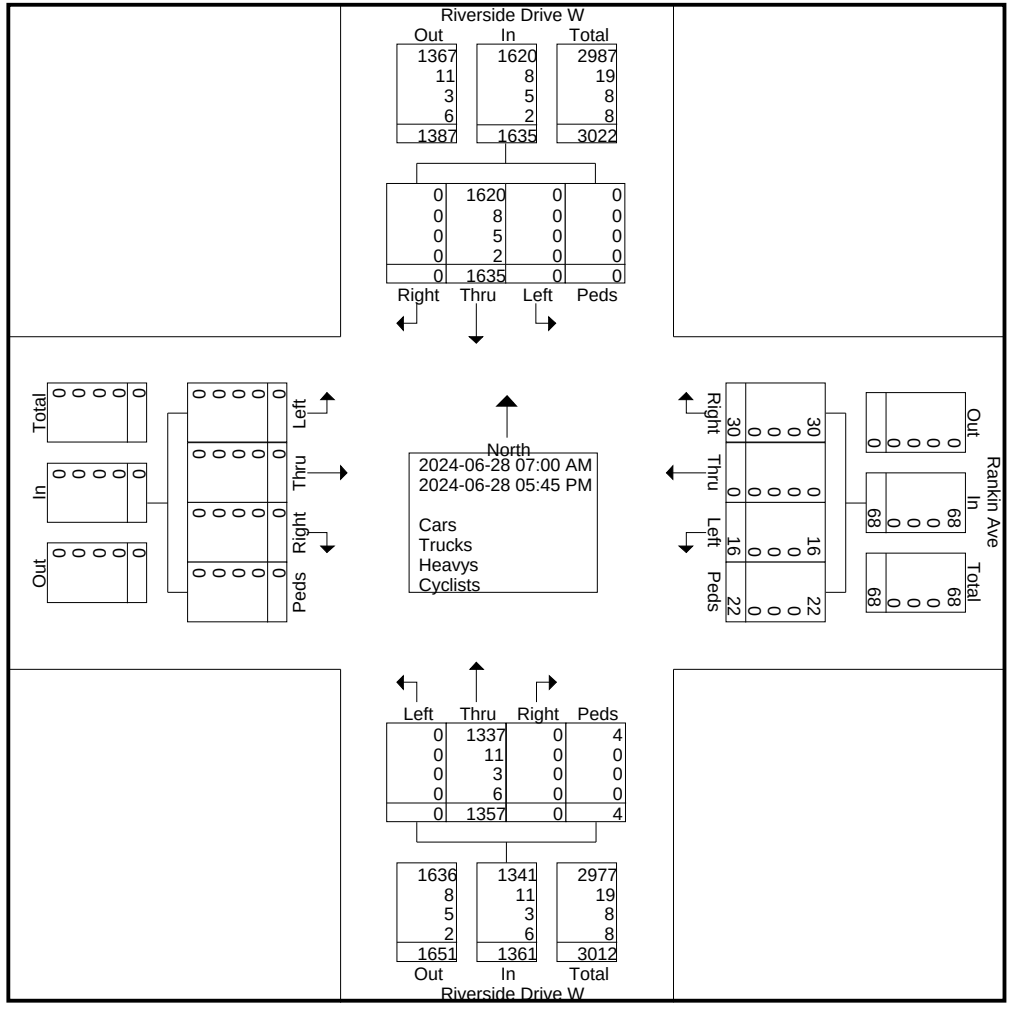
	Riverside Drive W From North					Rankin Ave From East					Riverside Drive W From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	51	0	0	51	2	0	0	2	4	0	42	0	0	42	0	0	0	0	0	97
07:15 AM	0	60	0	0	60	0	0	2	1	3	0	48	0	0	48	0	0	0	0	0	111
07:30 AM	0	64	0	0	64	3	0	0	2	5	0	64	0	1	65	0	0	0	0	0	134
07:45 AM	0	110	0	0	110	1	0	0	0	1	0	70	0	1	71	0	0	0	0	0	182
Total	0	285	0	0	285	6	0	2	5	13	0	224	0	2	226	0	0	0	0	0	524
08:00 AM	0	98	0	0	98	1	0	2	3	6	0	81	0	0	81	0	0	0	0	0	185
08:15 AM	0	115	0	0	115	1	0	0	0	1	0	73	0	0	73	0	0	0	0	0	189
08:30 AM	0	108	0	0	108	1	0	0	2	3	0	85	0	0	85	0	0	0	0	0	196
08:45 AM	0	85	0	0	85	1	0	0	2	3	0	75	0	1	76	0	0	0	0	0	164
Total	0	406	0	0	406	4	0	2	7	13	0	314	0	1	315	0	0	0	0	0	734
04:00 PM	0	147	0	0	147	3	0	1	0	4	0	121	0	0	121	0	0	0	0	0	272
04:15 PM	0	111	0	0	111	2	0	1	6	9	0	85	0	0	85	0	0	0	0	0	205
04:30 PM	0	130	0	0	130	4	0	3	1	8	0	127	0	1	128	0	0	0	0	0	266
04:45 PM	0	105	0	0	105	2	0	2	0	4	0	84	0	0	84	0	0	0	0	0	193
Total	0	493	0	0	493	11	0	7	7	25	0	417	0	1	418	0	0	0	0	0	936
05:00 PM	0	122	0	0	122	3	0	1	0	4	0	101	0	0	101	0	0	0	0	0	227
05:15 PM	0	109	0	0	109	2	0	1	1	4	0	105	0	0	105	0	0	0	0	0	218
05:30 PM	0	112	0	0	112	4	0	1	0	5	0	105	0	0	105	0	0	0	0	0	222
05:45 PM	0	108	0	0	108	0	0	2	2	4	0	91	0	0	91	0	0	0	0	0	203
Total	0	451	0	0	451	9	0	5	3	17	0	402	0	0	402	0	0	0	0	0	870
Grand Total	0	1635	0	0	1635	30	0	16	22	68	0	1357	0	4	1361	0	0	0	0	0	3064
Apprch %	0	100	0	0		44.1	0	23.5	32.4		0	99.7	0	0.3		0	0	0	0		
Total %	0	53.4	0	0	53.4	1	0	0.5	0.7	2.2	0	44.3	0	0.1	44.4	0	0	0	0	0	
Cars	0	1620	0	0	1620	30	0	16	22	68	0	1337	0	4	1341	0	0	0	0	0	3029
% Cars	0	99.1	0	0	99.1	100	0	100	100	100	0	98.5	0	100	98.5	0	0	0	0	0	98.9
Trucks	0	8	0	0	8	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	19
% Trucks	0	0.5	0	0	0.5	0	0	0	0	0	0	0.8	0	0	0.8	0	0	0	0	0	0.6
Heavys	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
% Heavys	0	0.3	0	0	0.3	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0.3
Cyclists	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	8
% Cyclists	0	0.1	0	0	0.1	0	0	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0	0.3

Horizon Data Services Ltd

(416) 840-6619

Your Traffic Count Specialist

File Name : Riverside Drive West at Rankin Avenue
Site Code : 00000000
Start Date : 2024-06-28
Page No : 2



Horizon Data Services Ltd

(416) 840-6619

Your Traffic Count Specialist

File Name : Riverside Drive West at Rankin Avenue
Site Code : 00000000
Start Date : 2024-06-28

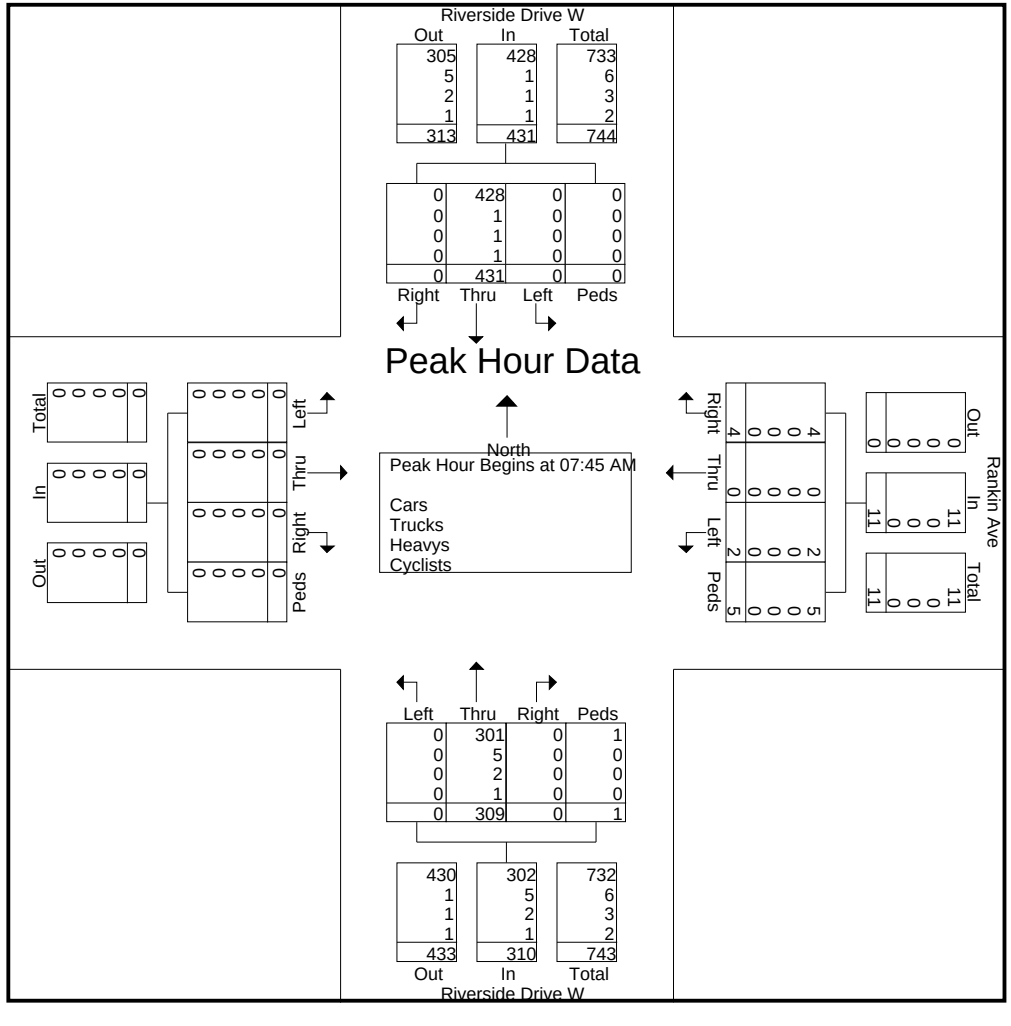
	Riverside Drive W From North					Rankin Ave From East					Riverside Drive W From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	110	0	0	110	**1**	0	0	0	1	0	70	0	**1**	71	0	0	0	0	0	182
08:00 AM	0	98	0	0	98	1	0	**2**	**3**	**6**	0	81	0	0	81	0	0	0	0	0	185
08:15 AM	0	**115**	0	0	**115**	1	0	0	0	1	0	73	0	0	73	0	0	0	0	0	189
08:30 AM	0	108	0	0	108	1	0	0	2	3	0	**85**	0	0	**85**	0	0	0	0	0	**196**
Total Volume	0	431	0	0	431	4	0	2	5	11	0	309	0	1	310	0	0	0	0	0	752
% App. Total	0	100	0	0		36.4	0	18.2	45.5		0	99.7	0	0.3		0	0	0	0		
PHF	.000	.937	.000	.000	.937	1.00	.000	.250	.417	.458	.000	.909	.000	.250	.912	.000	.000	.000	.000	.000	.959
Cars	0	428	0	0	428	4	0	2	5	11	0	301	0	1	302	0	0	0	0	0	741
% Cars	0	99.3	0	0	99.3	100	0	100	100	100	0	97.4	0	100	97.4	0	0	0	0	0	98.5
Trucks	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	6
% Trucks	0	0.2	0	0	0.2	0	0	0	0	0	0	1.6	0	0	1.6	0	0	0	0	0	0.8
Heavys	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
% Heavys	0	0.2	0	0	0.2	0	0	0	0	0	0	0.6	0	0	0.6	0	0	0	0	0	0.4
Cyclists	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
% Cyclists	0	0.2	0	0	0.2	0	0	0	0	0	0	0.3	0	0	0.3	0	0	0	0	0	0.3

Horizon Data Services Ltd

(416) 840-6619

Your Traffic Count Specialist

File Name : Riverside Drive West at Rankin Avenue
Site Code : 00000000
Start Date : 2024-06-28
Page No : 4



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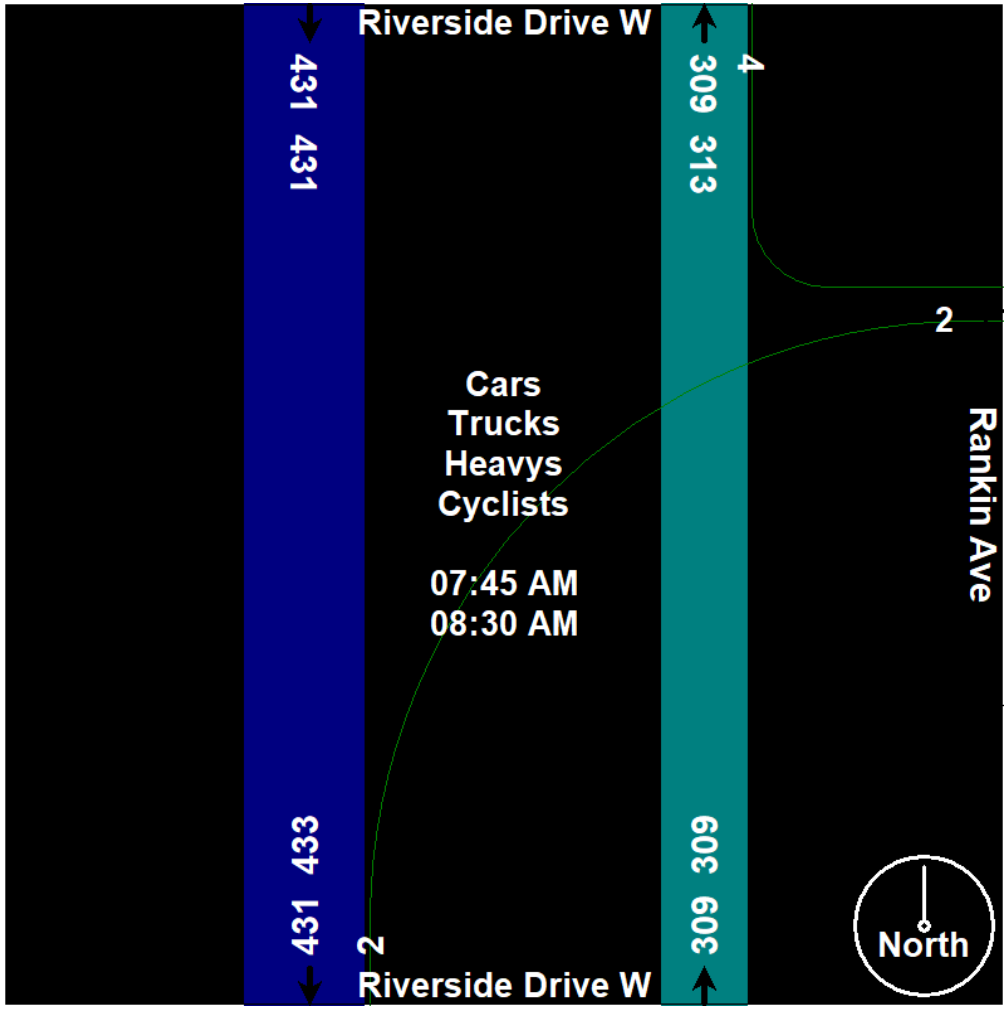
Your Traffic Count Specialist

File Name : Riverside Drive West at Rankin Avenue
Site Code : 00000000
Start Date : 2024-06-28
Page No : 5



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Your Traffic Count Specialist

File Name : Riverside Drive West at Rankin Avenue
Site Code : 00000000
Start Date : 2024-06-28
Page No : 6

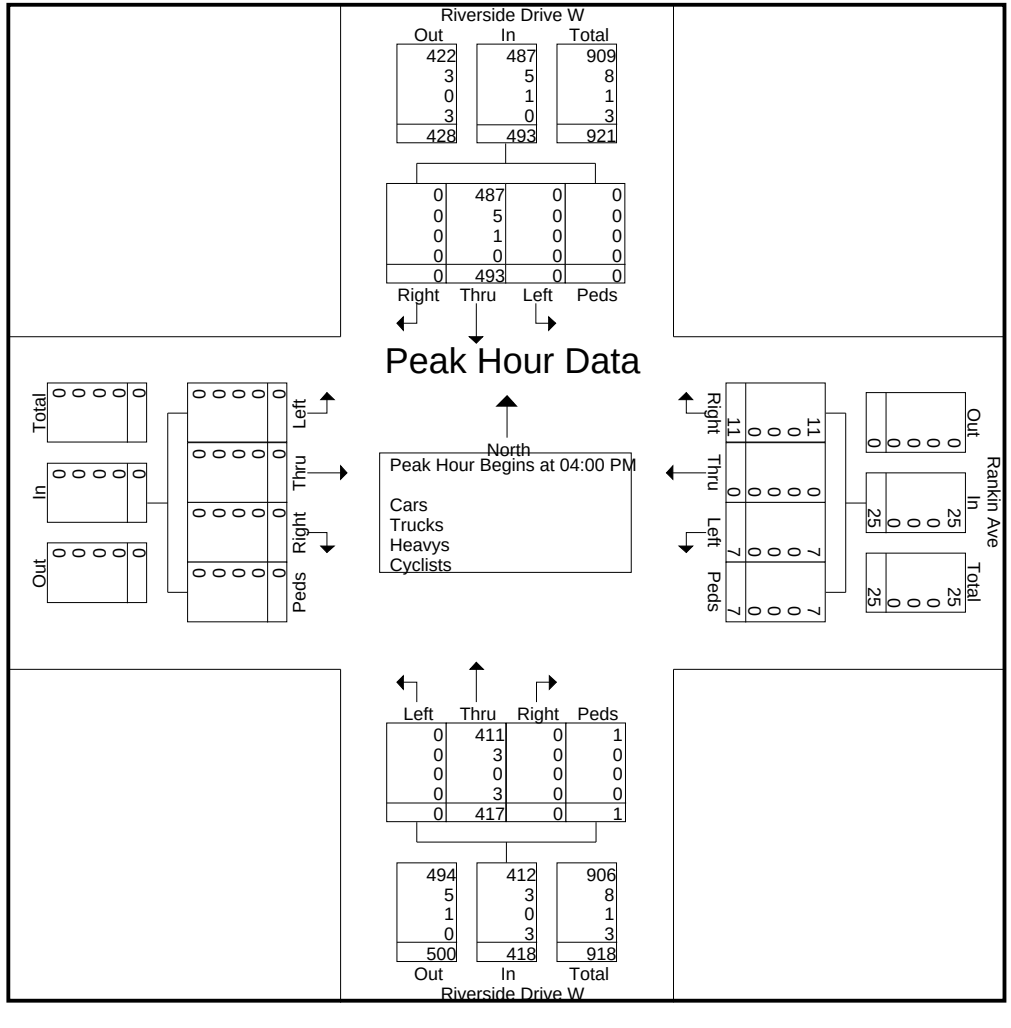
	Riverside Drive W From North					Rankin Ave From East					Riverside Drive W From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	**147**	0	0	**147**	3	0	1	0	4	0	121	0	0	121	0	0	0	0	0	**272**
04:15 PM	0	111	0	0	111	2	0	1	**6**	**9**	0	85	0	0	85	0	0	0	0	0	205
04:30 PM	0	130	0	0	130	**4**	0	**3**	1	8	0	**127**	0	**1**	**128**	0	0	0	0	0	266
04:45 PM	0	105	0	0	105	2	0	2	0	4	0	84	0	0	84	0	0	0	0	0	193
Total Volume	0	493	0	0	493	11	0	7	7	25	0	417	0	1	418	0	0	0	0	0	936
% App. Total	0	100	0	0		44	0	28	28		0	99.8	0	0.2		0	0	0	0		
PHF	.000	.838	.000	.000	.838	.688	.000	.583	.292	.694	.000	.821	.000	.250	.816	.000	.000	.000	.000	.000	.860
Cars	0	487	0	0	487	11	0	7	7	25	0	411	0	1	412	0	0	0	0	0	924
% Cars	0	98.8	0	0	98.8	100	0	100	100	100	0	98.6	0	100	98.6	0	0	0	0	0	98.7
Trucks	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
% Trucks	0	1.0	0	0	1.0	0	0	0	0	0	0	0.7	0	0	0.7	0	0	0	0	0	0.9
Heavys	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Heavys	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Cyclists	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0.7	0	0	0.7	0	0	0	0	0	0.3

Horizon Data Services Ltd

(416) 840-6619

Your Traffic Count Specialist

File Name : Riverside Drive West at Rankin Avenue
Site Code : 00000000
Start Date : 2024-06-28
Page No : 7

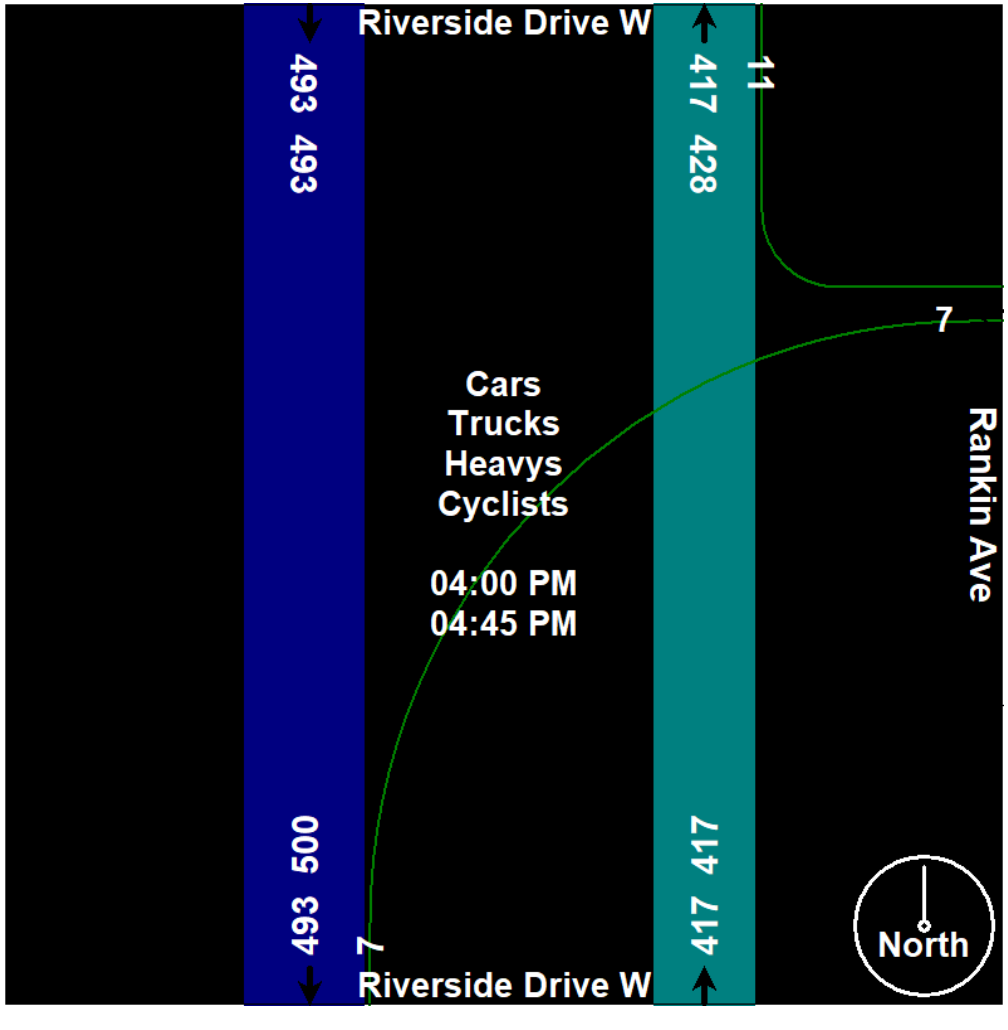


Horizon Data Services Ltd

(416) 840-6619

Your Traffic Count Specialist

File Name : Riverside Drive West at Rankin Avenue
Site Code : 00000000
Start Date : 2024-06-28
Page No : 8



Horizon Data Services Ltd

(416) 840-6619

Your Traffic Count Specialist

File Name : University Avenue West at Rankin Avenue
Site Code : 00000000
Start Date : 2024-06-28
Page No : 1

Groups Printed- Cars - Trucks - Heavys - Cyclists

	University Drive W From North					Rankin Ave From East					University Drive W From South					Rankin Ave From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	13	1	4	18	1	0	2	1	4	2	20	1	0	23	1	0	0	2	3	48
07:15 AM	1	28	2	7	38	1	0	0	5	6	0	35	1	2	38	0	0	0	2	2	84
07:30 AM	1	32	4	0	37	2	0	0	2	4	3	44	0	2	49	0	0	0	3	3	93
07:45 AM	0	48	2	1	51	4	0	0	7	11	2	32	0	0	34	0	0	0	1	1	97
Total	2	121	9	12	144	8	0	2	15	25	7	131	2	4	144	1	0	0	8	9	322
08:00 AM	2	44	2	1	49	4	0	2	6	12	1	49	0	0	50	0	0	0	6	6	117
08:15 AM	0	37	2	0	39	3	0	4	3	10	1	48	0	0	49	0	0	0	5	5	103
08:30 AM	1	36	3	0	40	1	0	1	4	6	0	56	0	4	60	0	0	0	3	3	109
08:45 AM	0	36	1	4	41	5	0	1	5	11	1	52	1	0	54	0	0	0	2	2	108
Total	3	153	8	5	169	13	0	8	18	39	3	205	1	4	213	0	0	0	16	16	437
04:00 PM	1	64	5	3	73	6	1	0	21	28	1	50	0	6	57	0	0	0	6	6	164
04:15 PM	1	61	5	3	70	8	3	2	7	20	2	52	3	3	60	0	0	0	7	7	157
04:30 PM	6	66	10	0	82	5	0	0	15	20	6	59	1	7	73	0	0	0	5	5	180
04:45 PM	2	77	4	4	87	5	1	3	9	18	1	58	2	4	65	0	0	0	4	4	174
Total	10	268	24	10	312	24	5	5	52	86	10	219	6	20	255	0	0	0	22	22	675
05:00 PM	2	67	2	3	74	6	1	1	3	11	4	52	0	2	58	0	0	0	9	9	152
05:15 PM	3	62	2	4	71	7	1	2	7	17	5	49	2	2	58	0	0	0	7	7	153
05:30 PM	4	67	3	6	80	8	1	4	2	15	1	66	1	7	75	0	0	0	4	4	174
05:45 PM	1	51	5	3	60	4	1	5	6	16	4	52	0	2	58	0	0	0	2	2	136
Total	10	247	12	16	285	25	4	12	18	59	14	219	3	13	249	0	0	0	22	22	615
Grand Total	25	789	53	43	910	70	9	27	103	209	34	774	12	41	861	1	0	0	68	69	2049
Apprch %	2.7	86.7	5.8	4.7		33.5	4.3	12.9	49.3		3.9	89.9	1.4	4.8		1.4	0	0	98.6		
Total %	1.2	38.5	2.6	2.1	44.4	3.4	0.4	1.3	5	10.2	1.7	37.8	0.6	2	42	0	0	0	3.3	3.4	
Cars	25	753	53	43	874	70	9	25	103	207	33	732	12	41	818	1	0	0	68	69	1968
% Cars	100	95.4	100	100	96	100	100	92.6	100	99	97.1	94.6	100	100	95	100	0	0	100	100	96
Trucks	0	8	0	0	8	0	0	0	0	0	1	7	0	0	8	0	0	0	0	0	16
% Trucks	0	1	0	0	0.9	0	0	0	0	0	2.9	0.9	0	0	0.9	0	0	0	0	0	0.8
Heavys	0	22	0	0	22	0	0	1	0	1	0	30	0	0	30	0	0	0	0	0	53
% Heavys	0	2.8	0	0	2.4	0	0	3.7	0	0.5	0	3.9	0	0	3.5	0	0	0	0	0	2.6
Cyclists	0	6	0	0	6	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	12
% Cyclists	0	0.8	0	0	0.7	0	0	3.7	0	0.5	0	0.6	0	0	0.6	0	0	0	0	0	0.6

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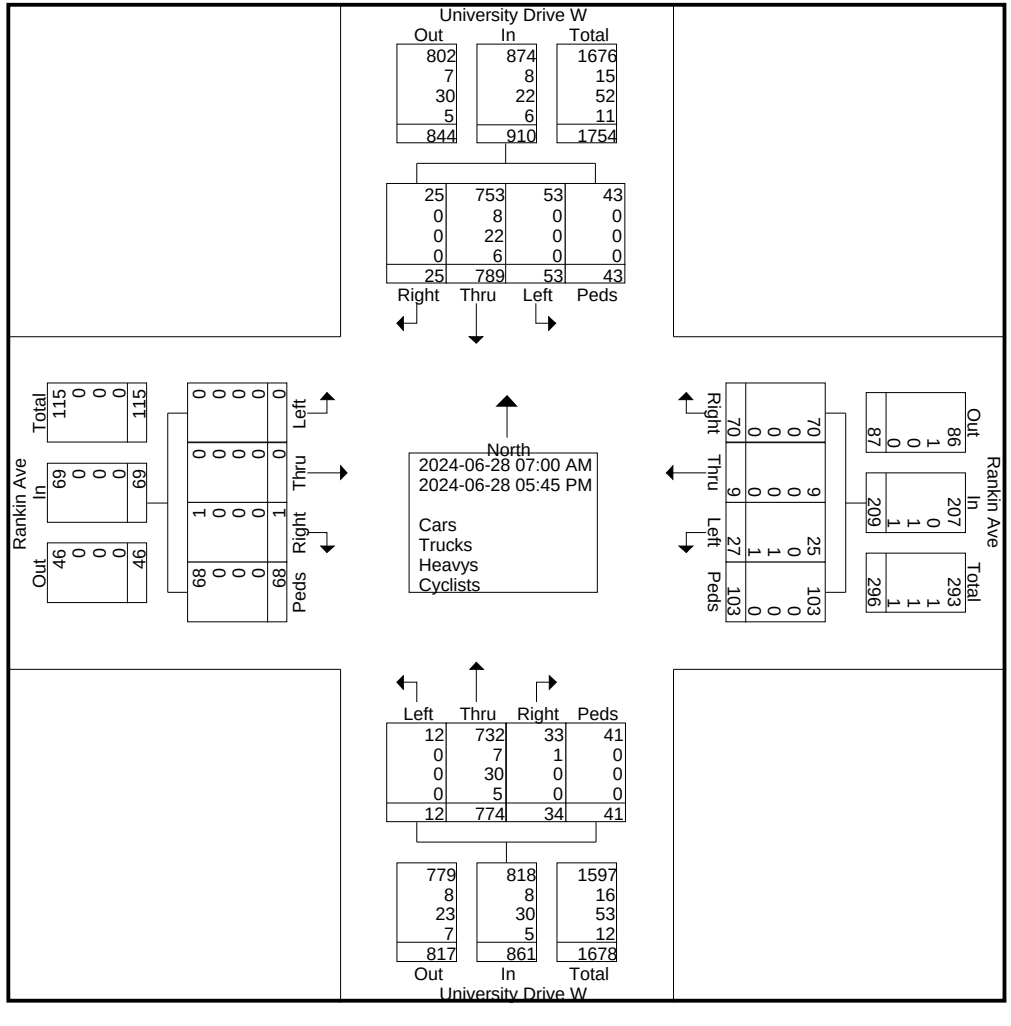

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Site Code : 00000000
Start Date : 2024-06-28
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	University Drive W From North					Rankin Ave From East					University Drive W From South					Rankin Ave From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	**2**	**44**	2	1	**49**	4	0	2	**6**	**12**	**1**	49	0	0	50	0	0	0	**6**	**6**	**117**
08:15 AM	0	37	2	0	39	3	0	**4**	3	10	1	48	0	0	49	0	0	0	5	5	103
08:30 AM	1	36	**3**	0	40	1	0	1	4	6	0	**56**	0	**4**	**60**	0	0	0	3	3	109
08:45 AM	0	36	1	**4**	41	**5**	0	1	5	11	1	52	**1**	0	54	0	0	0	2	2	108
Total Volume	3	153	8	5	169	13	0	8	18	39	3	205	1	4	213	0	0	0	16	16	437
% App. Total	1.8	90.5	4.7	3		33.3	0	20.5	46.2		1.4	96.2	0.5	1.9		0	0	0	100		
PHF	.375	.869	.667	.313	.862	.650	.000	.500	.750	.813	.750	.915	.250	.250	.888	.000	.000	.000	.667	.667	.934
Cars	3	139	8	5	155	13	0	6	18	37	3	190	1	4	198	0	0	0	16	16	406
% Cars	100	90.8	100	100	91.7	100	0	75.0	100	94.9	100	92.7	100	100	93.0	0	0	0	100	100	92.9
Trucks	0	5	0	0	5	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	12
% Trucks	0	3.3	0	0	3.0	0	0	0	0	0	0	3.4	0	0	3.3	0	0	0	0	0	2.7
Heavys	0	7	0	0	7	0	0	1	0	1	0	8	0	0	8	0	0	0	0	0	16
% Heavys	0	4.6	0	0	4.1	0	0	12.5	0	2.6	0	3.9	0	0	3.8	0	0	0	0	0	3.7
Cyclists	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3
% Cyclists	0	1.3	0	0	1.2	0	0	12.5	0	2.6	0	0	0	0	0	0	0	0	0	0	0.7

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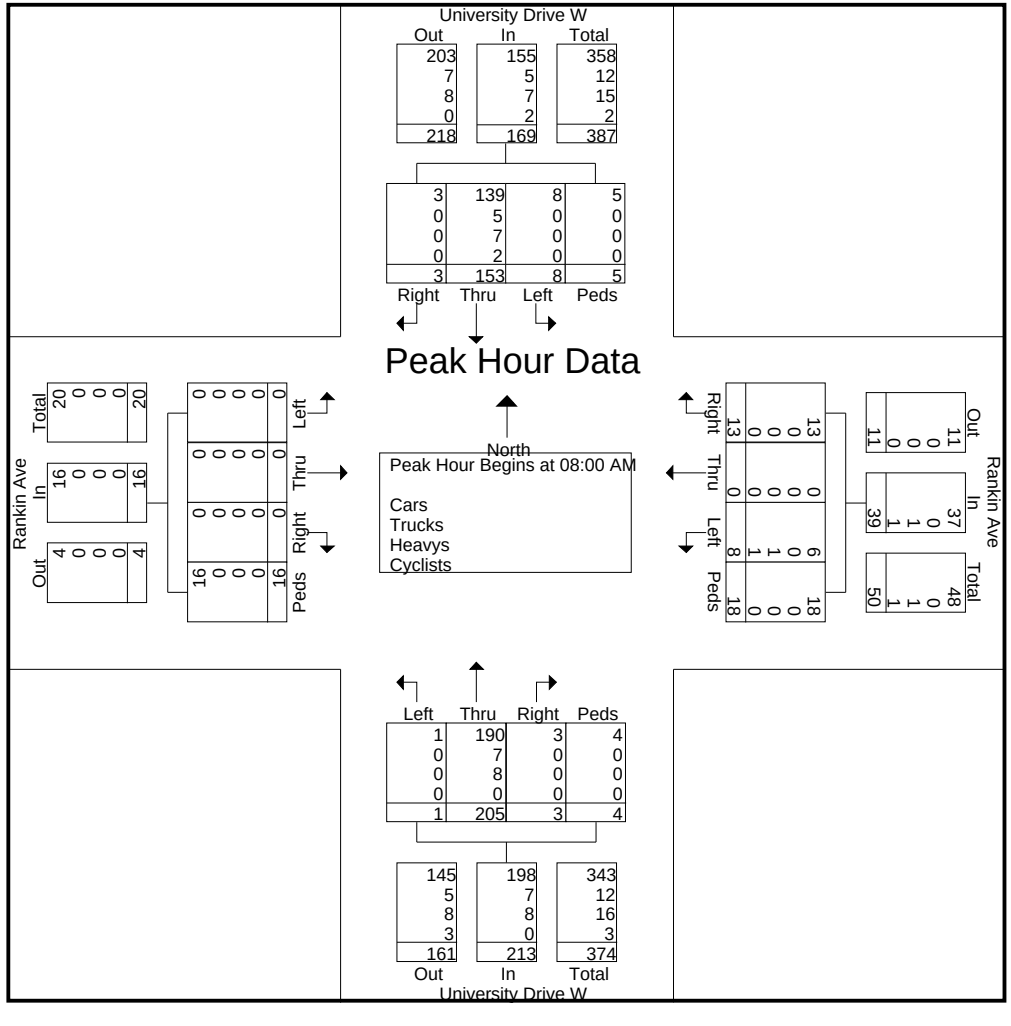

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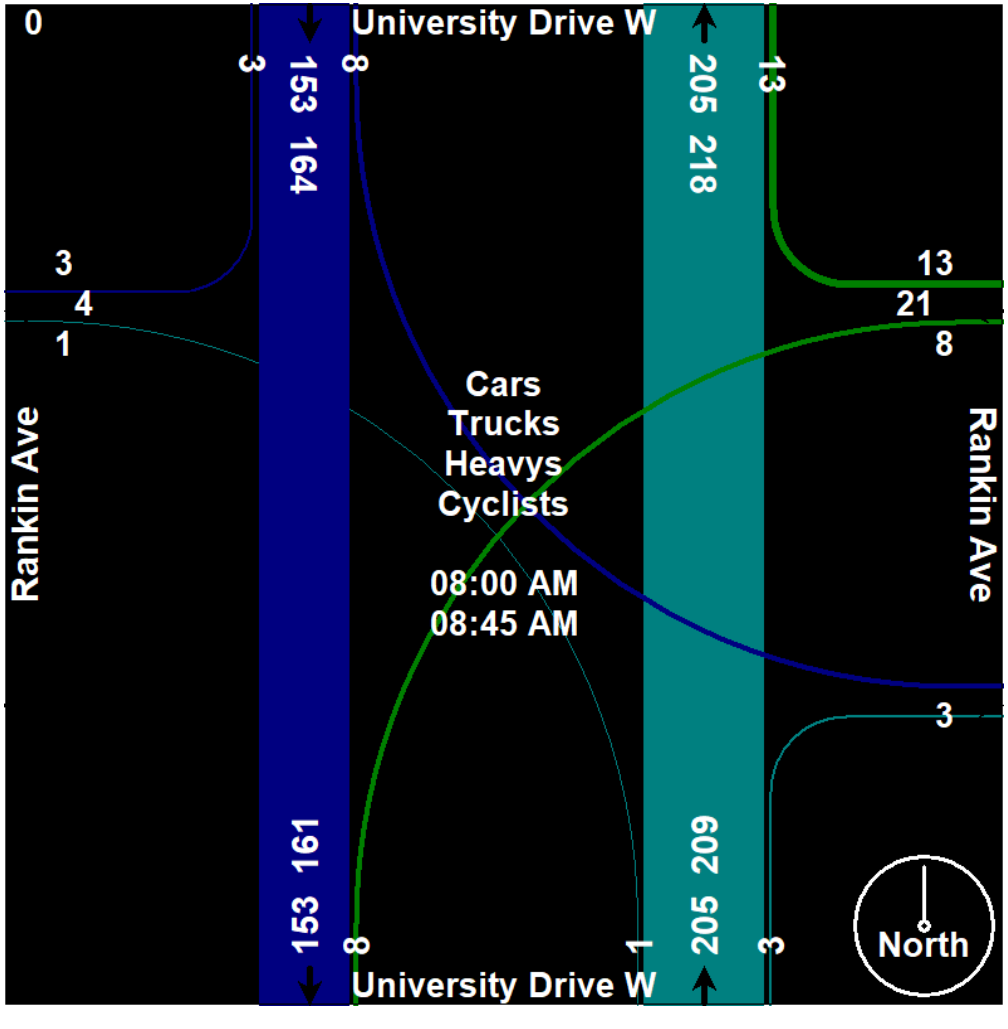

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Site Code : 00000000
Start Date : 2024-06-28
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	University Drive W From North					Rankin Ave From East					University Drive W From South					Rankin Ave From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	1	64	5	3	73	6	1	0	**21**	**28**	1	50	0	6	57	0	0	0	6	6	164
04:15 PM	1	61	5	3	70	**8**	**3**	2	7	20	2	52	**3**	3	60	0	0	0	**7**	**7**	157
04:30 PM	**6**	66	**10**	0	82	5	0	0	15	20	**6**	**59**	1	**7**	**73**	0	0	0	5	5	**180**
04:45 PM	2	**77**	4	**4**	**87**	5	1	**3**	9	18	1	58	2	4	65	0	0	0	4	4	174
Total Volume	10	268	24	10	312	24	5	5	52	86	10	219	6	20	255	0	0	0	22	22	675
% App. Total	3.2	85.9	7.7	3.2		27.9	5.8	5.8	60.5		3.9	85.9	2.4	7.8		0	0	0	100		
PHF	.417	.870	.600	.625	.897	.750	.417	.417	.619	.768	.417	.928	.500	.714	.873	.000	.000	.000	.786	.786	.938
Cars	10	258	24	10	302	24	5	5	52	86	10	211	6	20	247	0	0	0	22	22	657
% Cars	100	96.3	100	100	96.8	100	100	100	100	100	100	96.3	100	100	96.9	0	0	0	100	100	97.3
Trucks	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Trucks	0	0.7	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3
Heavys	0	6	0	0	6	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	12
% Heavys	0	2.2	0	0	1.9	0	0	0	0	0	0	2.7	0	0	2.4	0	0	0	0	0	1.8
Cyclists	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
% Cyclists	0	0.7	0	0	0.6	0	0	0	0	0	0	0.9	0	0	0.8	0	0	0	0	0	0.6

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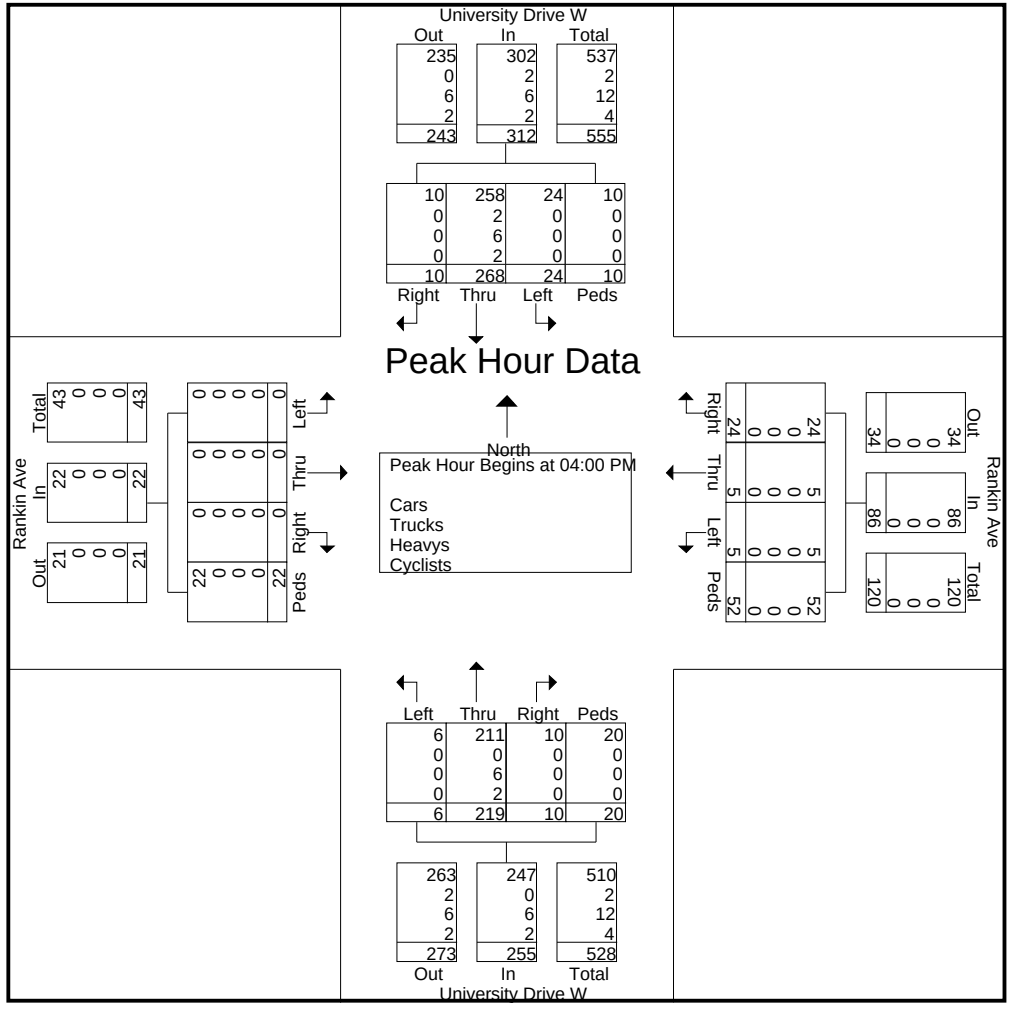

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Site Code : 00000000
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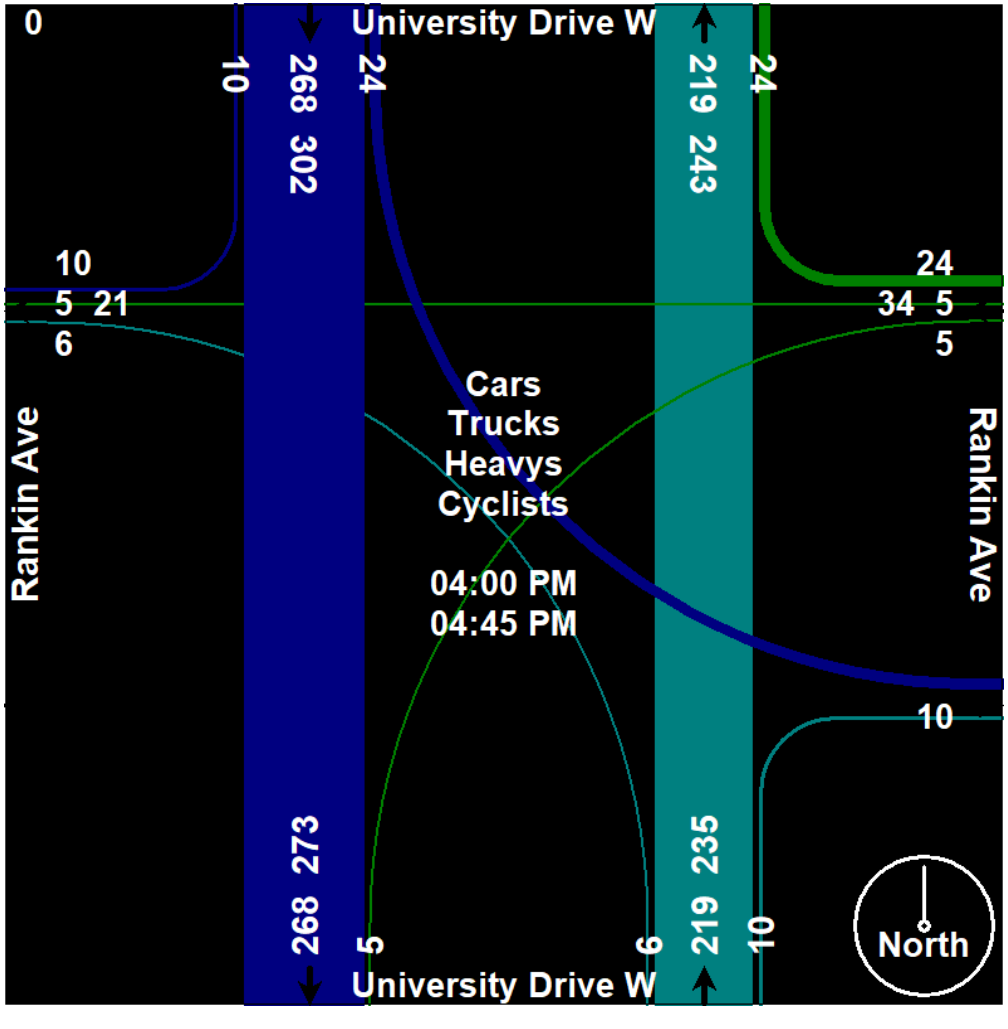


Appendix C

Level of Service Definitions

Highway Capacity Manual 2010

Signalized intersection level of service (LOS) is defined in terms of a weighted average control delay for the entire intersection. Control delay quantifies the increase in travel time that a vehicle experiences due to the traffic signal control as well as provides a surrogate measure for driver discomfort and fuel consumption. Signalized intersection LOS is stated in terms of average control delay per vehicle (in seconds) during a specified time period (e.g., weekday PM peak hour). Control delay is a complex measure based on many variables, including signal phasing and coordination (i.e., progression of movements through the intersection and along the corridor), signal cycle length, and traffic volumes with respect to intersection capacity and resulting queues. Table 1 summarizes the LOS criteria for signalized intersections, as described in the *Highway Capacity Manual 2010* (Transportation Research Board, 2010).

Table 1. Level of Service Criteria for Signalized Intersections

Level of Service	Average Control Delay (seconds/vehicle)	General Description
A	≤10	Free Flow
B	>10 – 20	Stable Flow (slight delays)
C	>20 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F[1]	>80	Forced flow (congested and queues fail to clear)

Source: *Highway Capacity Manual 2010*, Transportation Research Board, 2010.

1. If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0 LOS F is assigned to the individual lane group. LOS for overall approach or intersection is determined solely by the control delay.

Unsignalized intersection LOS criteria can be further reduced into three intersection types: all-way stop, two-way stop, and roundabout control. All-way stop and roundabout control intersection LOS is expressed in terms of the weighted average control delay of the overall intersection or by approach. Two-way stop-controlled intersection LOS is defined in terms of the average control delay for each minor-street movement (or shared movement) as well as major-street left-turns. This approach is because major-street through vehicles are assumed to experience zero delay, a weighted average of all movements results in very low overall average delay, and this calculated low delay could mask deficiencies of minor movements. Table 2 shows LOS criteria for unsignalized intersections.

Table 2. Level of Service Criteria for Unsignalized Intersections

Level of Service	Average Control Delay (seconds/vehicle)
A	0 – 10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F[1]	>50

Source: *Highway Capacity Manual 2010*, Transportation Research Board, 2010.

1. If the volume-to-capacity (v/c) ratio exceeds 1.0, LOS F is assigned an individual lane group for all unsignalized intersections, or minor street approach at two-way stop-controlled intersections. Overall intersection LOS is determined solely by control delay.

Appendix D

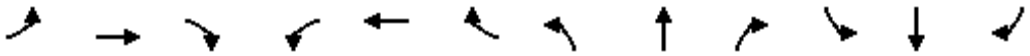
Synchro Analysis Worksheets

DILLON CONSULTING

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	309	0	0	431	2	4
Future Volume (Veh/h)	309	0	0	431	2	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	336	0	0	468	2	4
Pedestrians	1				5	
Lane Width (m)	3.7				3.7	
Walking Speed (m/s)	1.1				1.1	
Percent Blockage	0				0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			341		810	341
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			341		810	341
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1223		350	703

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	336	468	2	4
Volume Left	0	0	2	0
Volume Right	0	0	0	4
cSH	1700	1700	350	703
Volume to Capacity	0.20	0.28	0.01	0.01
Queue Length 95th (m)	0.0	0.0	0.1	0.1
Control Delay (s)	0.0	0.0	15.3	10.2
Lane LOS			C	B
Approach Delay (s)	0.0	0.0	11.9	
Approach LOS			B	

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	205	3	8	153	3	8	0	13	0	0	0
Future Volume (Veh/h)	1	205	3	8	153	3	8	0	13	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)	1	223	3	9	166	3	9	0	14	0	0	0
Pedestrians		4			5			18			16	
Lane Width (m)		3.7			3.7			3.7			0.0	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		0			0			2			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	185			244			434	448	248	447	448	188
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	185			244			434	448	248	447	448	188
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			98	100	98	100	100	100
cM capacity (veh/h)	1402			1311			493	496	778	503	496	856

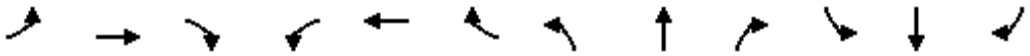
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	227	178	23
Volume Left	1	9	9
Volume Right	3	3	14
cSH	1402	1311	635
Volume to Capacity	0.00	0.01	0.04
Queue Length 95th (m)	0.0	0.2	0.9
Control Delay (s)	0.0	0.4	10.9
Lane LOS	A	A	B
Approach Delay (s)	0.0	0.4	10.9
Approach LOS			B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	29.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	417	0	0	493	7	11
Future Volume (Veh/h)	417	0	0	493	7	11
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	453	0	0	536	8	12
Pedestrians	1				7	
Lane Width (m)	3.7				3.7	
Walking Speed (m/s)	1.1				1.1	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			460		997	460
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			460		997	460
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	98
cM capacity (veh/h)			1104		271	601

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	453	536	8	12
Volume Left	0	0	8	0
Volume Right	0	0	0	12
cSH	1700	1700	271	601
Volume to Capacity	0.27	0.32	0.03	0.02
Queue Length 95th (m)	0.0	0.0	0.7	0.5
Control Delay (s)	0.0	0.0	18.7	11.1
Lane LOS			C	B
Approach Delay (s)	0.0	0.0	14.1	
Approach LOS			B	

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	35.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	219	10	24	268	10	5	5	24	0	0	0
Future Volume (Veh/h)	6	219	10	24	268	10	5	5	24	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)	7	238	11	26	291	11	5	5	26	0	0	0
Pedestrians		20			10			52			22	
Lane Width (m)		3.7			3.7			3.7			0.0	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			1			5			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	324			301			678	686	306	666	686	338
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	324			301			678	686	306	666	686	338
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			98	99	96	100	100	100
cM capacity (veh/h)	1247			1207			323	344	695	333	344	694

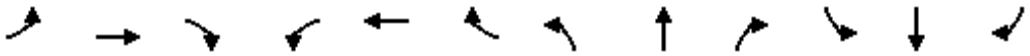
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	256	328	36
Volume Left	7	26	5
Volume Right	11	11	26
cSH	1247	1207	534
Volume to Capacity	0.01	0.02	0.07
Queue Length 95th (m)	0.1	0.5	1.6
Control Delay (s)	0.3	0.8	12.2
Lane LOS	A	A	B
Approach Delay (s)	0.3	0.8	12.2
Approach LOS			B

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	315	0	0	440	2	4
Future Volume (Veh/h)	315	0	0	440	2	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	342	0	0	478	2	4
Pedestrians	1				5	
Lane Width (m)	3.7				3.7	
Walking Speed (m/s)	1.1				1.1	
Percent Blockage	0				0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			347		826	347
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			347		826	347
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1217		343	697

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	342	478	2	4
Volume Left	0	0	2	0
Volume Right	0	0	0	4
cSH	1700	1700	343	697
Volume to Capacity	0.20	0.28	0.01	0.01
Queue Length 95th (m)	0.0	0.0	0.1	0.1
Control Delay (s)	0.0	0.0	15.6	10.2
Lane LOS			C	B
Approach Delay (s)	0.0	0.0	12.0	
Approach LOS			B	

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	33.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	209	3	8	156	3	8	0	13	0	0	0
Future Volume (Veh/h)	1	209	3	8	156	3	8	0	13	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)	1	227	3	9	170	3	9	0	14	0	0	0
Pedestrians		4			5			18			16	
Lane Width (m)		3.7			3.7			3.7			0.0	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		0			0			2			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	189			248			442	456	252	455	456	192
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	189			248			442	456	252	455	456	192
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			98	100	98	100	100	100
cM capacity (veh/h)	1397			1306			487	491	774	497	491	852

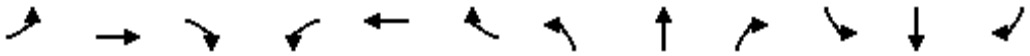
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	231	182	23
Volume Left	1	9	9
Volume Right	3	3	14
cSH	1397	1306	629
Volume to Capacity	0.00	0.01	0.04
Queue Length 95th (m)	0.0	0.2	0.9
Control Delay (s)	0.0	0.4	10.9
Lane LOS	A	A	B
Approach Delay (s)	0.0	0.4	10.9
Approach LOS			B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	29.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	425	0	0	503	7	11
Future Volume (Veh/h)	425	0	0	503	7	11
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	462	0	0	547	8	12
Pedestrians	1				7	
Lane Width (m)	3.7				3.7	
Walking Speed (m/s)	1.1				1.1	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			469		1017	469
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			469		1017	469
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	98
cM capacity (veh/h)			1096		263	594

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	462	547	8	12
Volume Left	0	0	8	0
Volume Right	0	0	0	12
cSH	1700	1700	263	594
Volume to Capacity	0.27	0.32	0.03	0.02
Queue Length 95th (m)	0.0	0.0	0.7	0.5
Control Delay (s)	0.0	0.0	19.1	11.2
Lane LOS			C	B
Approach Delay (s)	0.0	0.0	14.3	
Approach LOS			B	

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	223	10	24	273	10	5	5	24	0	0	0
Future Volume (Veh/h)	6	223	10	24	273	10	5	5	24	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)	7	242	11	26	297	11	5	5	26	0	0	0
Pedestrians		20			10			52			22	
Lane Width (m)		3.7			3.7			3.7			0.0	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			1			5			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	330			305			688	696	310	676	696	344
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	330			305			688	696	310	676	696	344
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			98	99	96	100	100	100
cM capacity (veh/h)	1241			1203			318	340	691	328	340	689

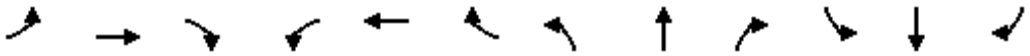
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	260	334	36
Volume Left	7	26	5
Volume Right	11	11	26
cSH	1241	1203	529
Volume to Capacity	0.01	0.02	0.07
Queue Length 95th (m)	0.1	0.5	1.7
Control Delay (s)	0.3	0.8	12.3
Lane LOS	A	A	B
Approach Delay (s)	0.3	0.8	12.3
Approach LOS			B

Intersection Summary				
Average Delay	1.2			
Intersection Capacity Utilization	41.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	315	0	0	440	4	6
Future Volume (Veh/h)	315	0	0	440	4	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	342	0	0	478	4	7
Pedestrians	1				5	
Lane Width (m)	3.7				3.7	
Walking Speed (m/s)	1.1				1.1	
Percent Blockage	0				0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			347		826	347
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			347		826	347
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1217		343	697

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	342	478	4	7
Volume Left	0	0	4	0
Volume Right	0	0	0	7
cSH	1700	1700	343	697
Volume to Capacity	0.20	0.28	0.01	0.01
Queue Length 95th (m)	0.0	0.0	0.3	0.2
Control Delay (s)	0.0	0.0	15.6	10.2
Lane LOS			C	B
Approach Delay (s)	0.0	0.0	12.2	
Approach LOS			B	

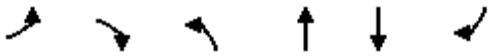
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	33.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	209	3	8	156	4	8	0	13	0	0	0
Future Volume (Veh/h)	2	209	3	8	156	4	8	0	13	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)	2	227	3	9	170	4	9	0	14	0	0	0
Pedestrians		4			5			18			16	
Lane Width (m)		3.7			3.7			3.7			0.0	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		0			0			2			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	190			248			444	458	252	458	458	192
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	190			248			444	458	252	458	458	192
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			98	100	98	100	100	100
cM capacity (veh/h)	1396			1306			485	489	774	495	489	851

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	232	183	23
Volume Left	2	9	9
Volume Right	3	4	14
cSH	1396	1306	628
Volume to Capacity	0.00	0.01	0.04
Queue Length 95th (m)	0.0	0.2	0.9
Control Delay (s)	0.1	0.4	11.0
Lane LOS	A	A	B
Approach Delay (s)	0.1	0.4	11.0
Approach LOS			B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	29.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	4	0	2	6	0	0
Future Volume (Veh/h)	4	0	2	6	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	0	2	7	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	8	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	8	0	0			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	1011	1084	1622			

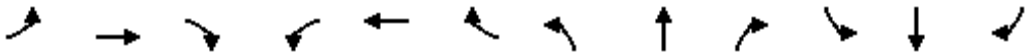
Direction, Lane #	EB 1	NB 1	NB 2
Volume Total	4	4	5
Volume Left	4	2	0
Volume Right	0	0	0
cSH	1011	1622	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (m)	0.1	0.0	0.0
Control Delay (s)	8.6	3.3	0.0
Lane LOS	A	A	
Approach Delay (s)	8.6	1.6	
Approach LOS	A		

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	425	0	0	503	10	14
Future Volume (Veh/h)	425	0	0	503	10	14
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	462	0	0	547	11	15
Pedestrians	1				7	
Lane Width (m)	3.7				3.7	
Walking Speed (m/s)	1.1				1.1	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			469		1017	469
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			469		1017	469
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	97
cM capacity (veh/h)			1096		263	594

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	462	547	11	15
Volume Left	0	0	11	0
Volume Right	0	0	0	15
cSH	1700	1700	263	594
Volume to Capacity	0.27	0.32	0.04	0.03
Queue Length 95th (m)	0.0	0.0	1.0	0.6
Control Delay (s)	0.0	0.0	19.3	11.2
Lane LOS			C	B
Approach Delay (s)	0.0	0.0	14.6	
Approach LOS			B	

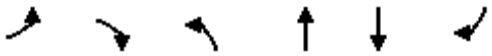
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	223	10	24	273	13	5	5	24	0	0	0
Future Volume (Veh/h)	9	223	10	24	273	13	5	5	24	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)	10	242	11	26	297	14	5	5	26	0	0	0
Pedestrians		20			10			52			22	
Lane Width (m)		3.7			3.7			3.7			0.0	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			1			5			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	333			305			696	704	310	684	703	346
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	333			305			696	704	310	684	703	346
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			98	99	96	100	100	100
cM capacity (veh/h)	1238			1203			314	335	691	324	336	688

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	263	337	36
Volume Left	10	26	5
Volume Right	11	14	26
cSH	1238	1203	526
Volume to Capacity	0.01	0.02	0.07
Queue Length 95th (m)	0.2	0.5	1.7
Control Delay (s)	0.4	0.8	12.4
Lane LOS	A	A	B
Approach Delay (s)	0.4	0.8	12.4
Approach LOS			B

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	39.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	0	6	18	0	0
Future Volume (Veh/h)	5	0	6	18	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	0	7	20	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	24	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	24	0	0			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	984	1084	1622			

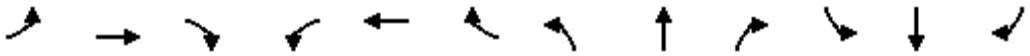
Direction, Lane #	EB 1	NB 1	NB 2
Volume Total	5	14	13
Volume Left	5	7	0
Volume Right	0	0	0
cSH	984	1622	1700
Volume to Capacity	0.01	0.00	0.01
Queue Length 95th (m)	0.1	0.1	0.0
Control Delay (s)	8.7	3.7	0.0
Lane LOS	A	A	
Approach Delay (s)	8.7	1.9	
Approach LOS	A		

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	331	0	0	462	2	4
Future Volume (Veh/h)	331	0	0	462	2	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	360	0	0	502	2	4
Pedestrians	1				5	
Lane Width (m)	3.7				3.7	
Walking Speed (m/s)	1.1				1.1	
Percent Blockage	0				0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			365		868	365
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			365		868	365
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1199		324	681

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	360	502	2	4
Volume Left	0	0	2	0
Volume Right	0	0	0	4
cSH	1700	1700	324	681
Volume to Capacity	0.21	0.30	0.01	0.01
Queue Length 95th (m)	0.0	0.0	0.1	0.1
Control Delay (s)	0.0	0.0	16.2	10.3
Lane LOS			C	B
Approach Delay (s)	0.0	0.0	12.3	
Approach LOS			B	

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	34.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	220	3	9	164	3	9	0	14	0	0	0
Future Volume (Veh/h)	1	220	3	9	164	3	9	0	14	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)	1	239	3	10	178	3	10	0	15	0	0	0
Pedestrians		4			5			18			16	
Lane Width (m)		3.7			3.7			3.7			0.0	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		0			0			2			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	197			260			464	478	264	478	478	200
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	197			260			464	478	264	478	478	200
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			98	100	98	100	100	100
cM capacity (veh/h)	1388			1293			470	477	763	479	477	843

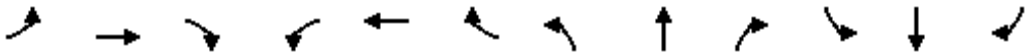
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	243	191	25
Volume Left	1	10	10
Volume Right	3	3	15
cSH	1388	1293	611
Volume to Capacity	0.00	0.01	0.04
Queue Length 95th (m)	0.0	0.2	1.0
Control Delay (s)	0.0	0.5	11.1
Lane LOS	A	A	B
Approach Delay (s)	0.0	0.5	11.1
Approach LOS			B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	31.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	447	0	0	529	8	12
Future Volume (Veh/h)	447	0	0	529	8	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	486	0	0	575	9	13
Pedestrians	1				7	
Lane Width (m)	3.7				3.7	
Walking Speed (m/s)	1.1				1.1	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			493		1069	493
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			493		1069	493
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	98
cM capacity (veh/h)			1074		245	576

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	486	575	9	13
Volume Left	0	0	9	0
Volume Right	0	0	0	13
cSH	1700	1700	245	576
Volume to Capacity	0.29	0.34	0.04	0.02
Queue Length 95th (m)	0.0	0.0	0.9	0.5
Control Delay (s)	0.0	0.0	20.2	11.4
Lane LOS			C	B
Approach Delay (s)	0.0	0.0	15.0	
Approach LOS			C	

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	37.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	235	11	26	287	11	5	5	26	0	0	0
Future Volume (Veh/h)	6	235	11	26	287	11	5	5	26	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)	7	255	12	28	312	12	5	5	28	0	0	0
Pedestrians		20			10			52			22	
Lane Width (m)		3.7			3.7			3.7			0.0	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			1			5			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	346			319			721	729	323	712	729	360
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	346			319			721	729	323	712	729	360
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			98	98	96	100	100	100
cM capacity (veh/h)	1224			1189			288	324	679	309	324	676

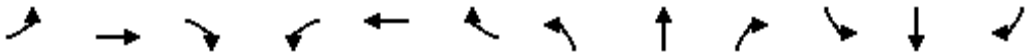
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	274	352	38
Volume Left	7	28	5
Volume Right	12	12	28
cSH	1224	1189	513
Volume to Capacity	0.01	0.02	0.07
Queue Length 95th (m)	0.1	0.5	1.8
Control Delay (s)	0.3	0.9	12.6
Lane LOS	A	A	B
Approach Delay (s)	0.3	0.9	12.6
Approach LOS			B

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	331	0	0	462	5	7
Future Volume (Veh/h)	331	0	0	462	5	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	360	0	0	502	5	8
Pedestrians	1				5	
Lane Width (m)	3.7				3.7	
Walking Speed (m/s)	1.1				1.1	
Percent Blockage	0				0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			365		868	365
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			365		868	365
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			1199		324	681

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	360	502	5	8
Volume Left	0	0	5	0
Volume Right	0	0	0	8
cSH	1700	1700	324	681
Volume to Capacity	0.21	0.30	0.02	0.01
Queue Length 95th (m)	0.0	0.0	0.4	0.3
Control Delay (s)	0.0	0.0	16.3	10.3
Lane LOS			C	B
Approach Delay (s)	0.0	0.0	12.6	
Approach LOS			B	

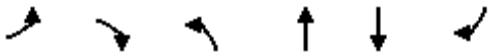
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	34.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	220	3	9	164	6	9	0	14	0	0	0
Future Volume (Veh/h)	4	220	3	9	164	6	9	0	14	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)	4	239	3	10	178	7	10	0	15	0	0	0
Pedestrians		4			5			18			16	
Lane Width (m)		3.7			3.7			3.7			0.0	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		0			0			2			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	201			260			472	488	264	486	486	202
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	201			260			472	488	264	486	486	202
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			98	100	98	100	100	100
cM capacity (veh/h)	1383			1293			464	470	763	472	471	841

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	246	195	25
Volume Left	4	10	10
Volume Right	3	7	15
cSH	1383	1293	606
Volume to Capacity	0.00	0.01	0.04
Queue Length 95th (m)	0.1	0.2	1.0
Control Delay (s)	0.1	0.5	11.2
Lane LOS	A	A	B
Approach Delay (s)	0.1	0.5	11.2
Approach LOS			B

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	29.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	0	6	6	0	0
Future Volume (Veh/h)	5	0	6	6	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	0	7	7	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	18	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	18	0	0			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	993	1084	1622			

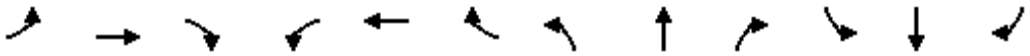
Direction, Lane #	EB 1	NB 1	NB 2
Volume Total	5	9	5
Volume Left	5	7	0
Volume Right	0	0	0
cSH	993	1622	1700
Volume to Capacity	0.01	0.00	0.00
Queue Length 95th (m)	0.1	0.1	0.0
Control Delay (s)	8.6	5.4	0.0
Lane LOS	A	A	
Approach Delay (s)	8.6	3.6	
Approach LOS	A		

Intersection Summary			
Average Delay	4.9		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	447	0	0	529	11	15
Future Volume (Veh/h)	447	0	0	529	11	15
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	486	0	0	575	12	16
Pedestrians	1				7	
Lane Width (m)	3.7				3.7	
Walking Speed (m/s)	1.1				1.1	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			493		1069	493
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			493		1069	493
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	97
cM capacity (veh/h)			1074		245	576

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	486	575	12	16
Volume Left	0	0	12	0
Volume Right	0	0	0	16
cSH	1700	1700	245	576
Volume to Capacity	0.29	0.34	0.05	0.03
Queue Length 95th (m)	0.0	0.0	1.2	0.7
Control Delay (s)	0.0	0.0	20.4	11.4
Lane LOS			C	B
Approach Delay (s)	0.0	0.0	15.3	
Approach LOS			C	

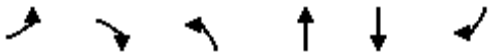
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	37.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	235	11	26	287	14	5	5	26	0	0	0
Future Volume (Veh/h)	9	235	11	26	287	14	5	5	26	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)	10	255	12	28	312	15	5	5	28	0	0	0
Pedestrians		20			10			52			22	
Lane Width (m)		3.7			3.7			3.7			0.0	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			1			5			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	349			319			728	738	323	719	736	362
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	349			319			728	738	323	719	736	362
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			98	98	96	100	100	100
cM capacity (veh/h)	1221			1189			298	320	679	305	320	674

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	277	355	38
Volume Left	10	28	5
Volume Right	12	15	28
cSH	1221	1189	516
Volume to Capacity	0.01	0.02	0.07
Queue Length 95th (m)	0.2	0.5	1.8
Control Delay (s)	0.4	0.9	12.5
Lane LOS	A	A	B
Approach Delay (s)	0.4	0.9	12.5
Approach LOS			B

Intersection Summary				
Average Delay	1.3			
Intersection Capacity Utilization	41.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	0	6	20	0	0
Future Volume (Veh/h)	5	0	6	20	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	0	7	22	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	25	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	25	0	0			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	983	1084	1622			

Direction, Lane #	EB 1	NB 1	NB 2
Volume Total	5	14	15
Volume Left	5	7	0
Volume Right	0	0	0
cSH	983	1622	1700
Volume to Capacity	0.01	0.00	0.01
Queue Length 95th (m)	0.1	0.1	0.0
Control Delay (s)	8.7	3.5	0.0
Lane LOS	A	A	
Approach Delay (s)	8.7	1.8	
Approach LOS	A		

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		