Traffic and Parking Impact Study
Proposed CityGate II Apartments

Naperville, Illinois

Prepared For:

Willow Bridge

KLOA

Kenig, Lindgren, O'Hara, Aboona, Inc.

April 2, 2026

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic and parking impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed residential development within the CityGate Centre which is located in the southwest quadrant of the intersection of Ferry Road with Comfort Drive in Naperville, Illinois. As proposed, the site, which contains a surface parking lot, will be developed with an apartment building containing approximately 297 units, a parking garage with approximately 414 parking spaces for residents, and a surface parking lot containing approximately eight (8) parking spaces. Access to the proposed residential parking garage will be provided via a full-movement access drive off Comfort Drive.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed development and to evaluate the adequacy of the proposed parking supply in accommodating the projected parking demand of the proposed residential development.

Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

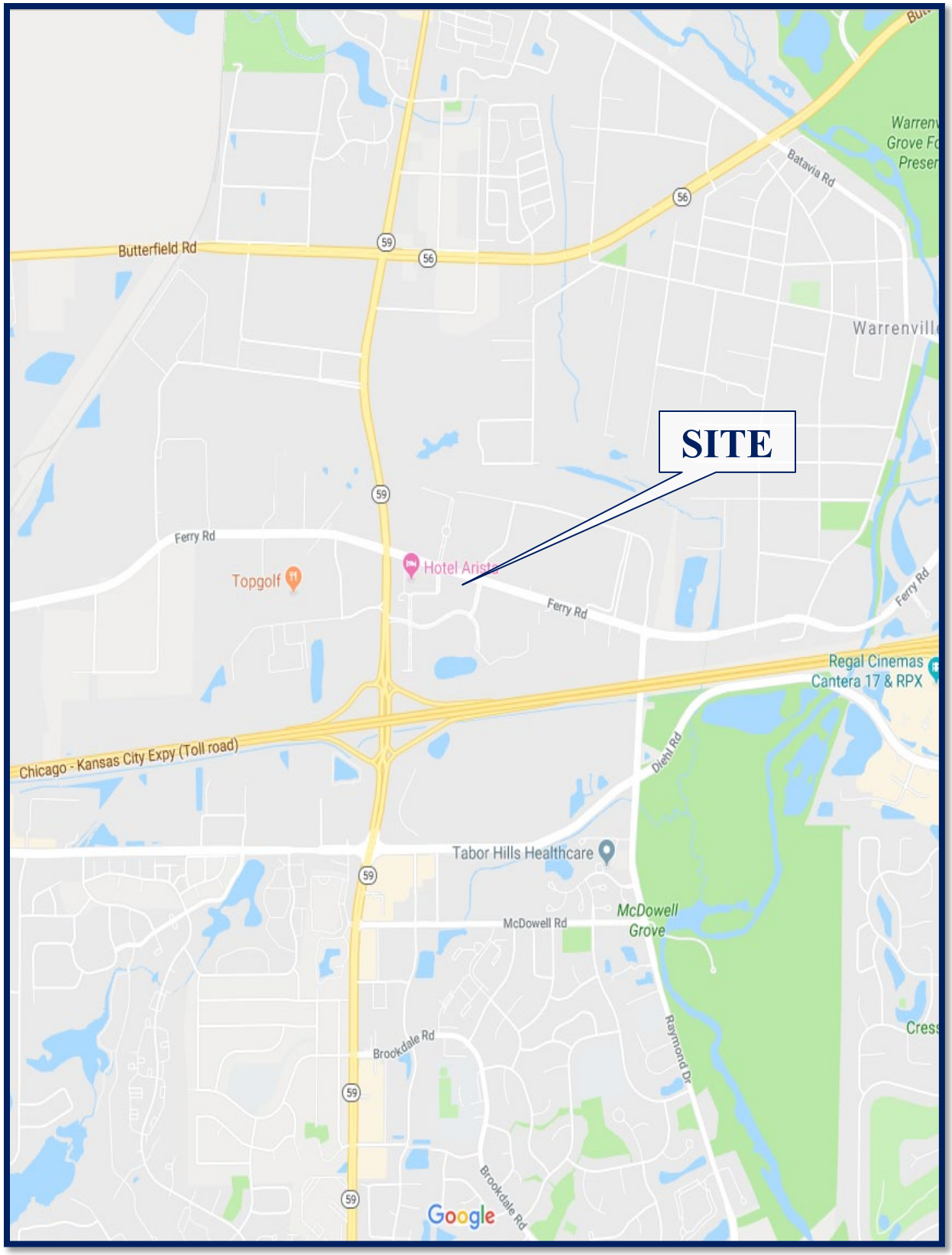
- Existing roadway conditions
- A description of the proposed residential development
- Directional distribution of the residential development traffic
- Vehicle trip generation for the residential development
- Future traffic conditions including access to the residential development
- Traffic analyses for the weekday morning and weekday evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system
- Evaluation of the proposed parking supply

Traffic capacity analyses were conducted for the weekday morning and weekday evening for the following conditions:

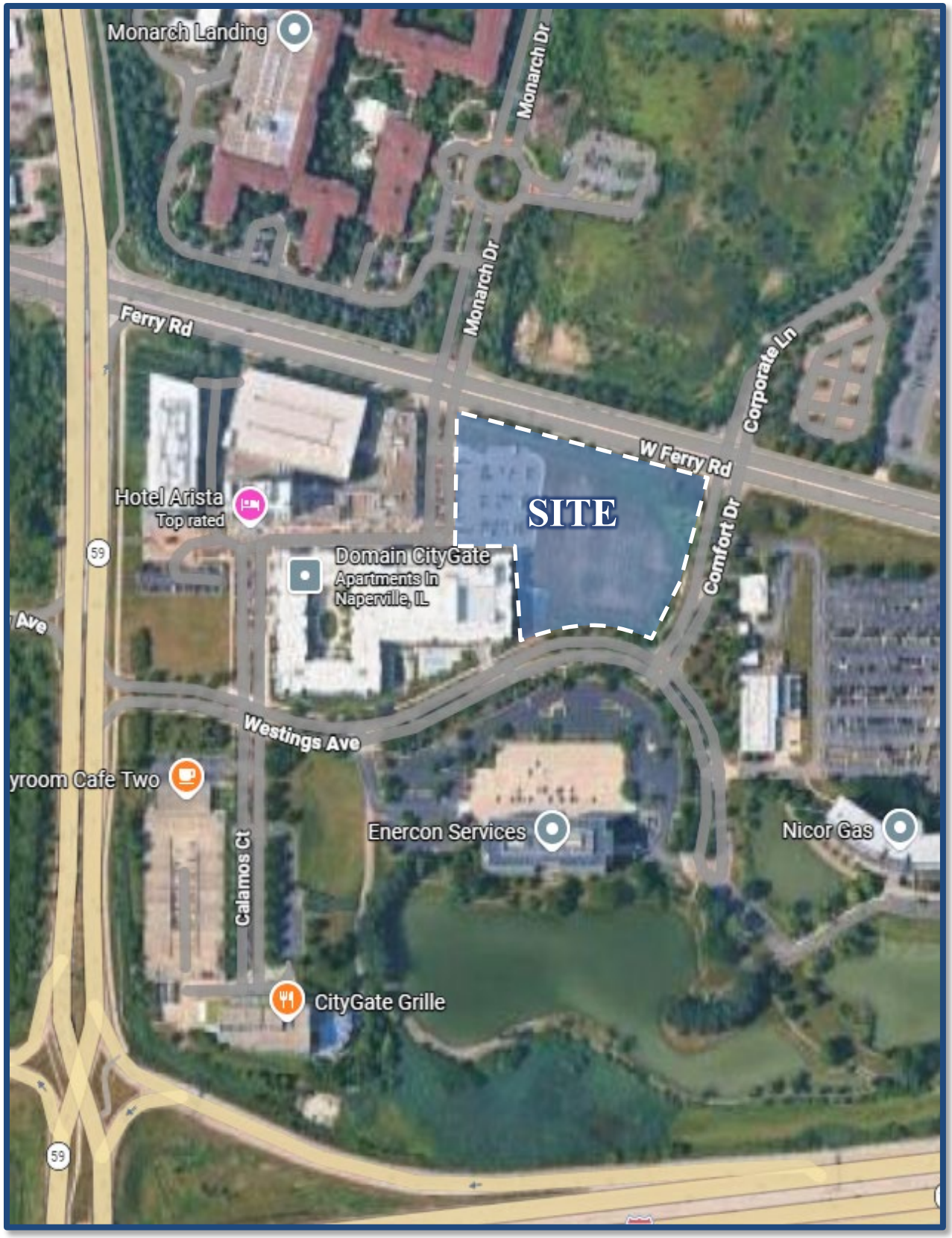
1. Existing Condition - Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. Year 2031 No-Build Conditions – Analyzes the capacity of the existing roadway system using the existing peak hour traffic volumes increased by an ambient area growth not attributable to any particular development.

3. Year 2031 Total Projected Conditions – Analyzes the capacity of the future roadway system using the projected traffic volumes that include the existing traffic volumes, ambient area growth not attributable to any particular development, and the traffic estimated to be generated by the full buildout of the proposed development.



Site Location **Figure 1**



Aerial View of Site **Figure 2**

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices and existing peak hour traffic volumes.

Site Location

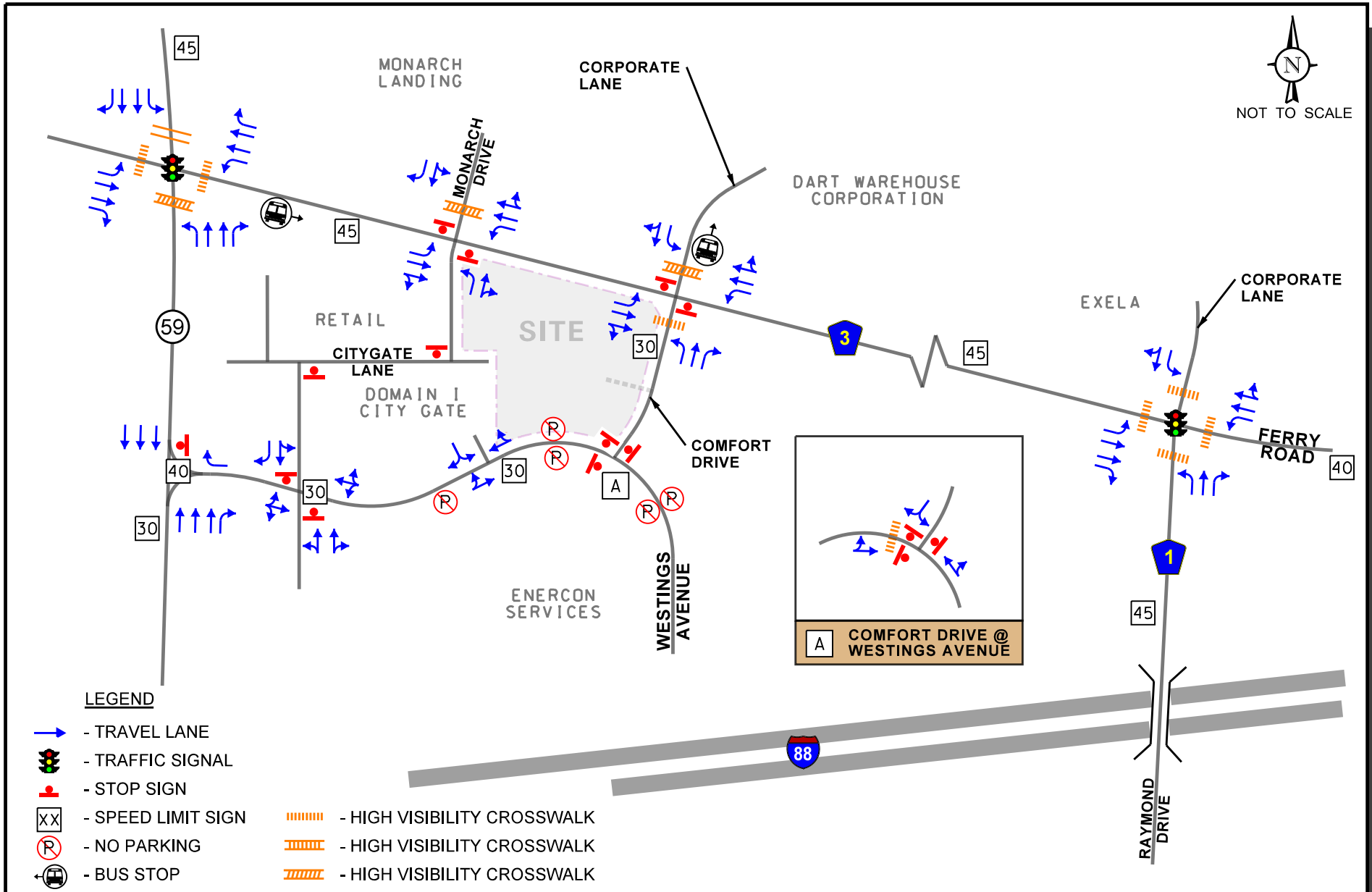
The site, which is currently vacant, is located in the southwest quadrant of the intersection of Ferry Road with Comfort Drive within the CityGate Centre. Land uses in the vicinity of the include Calamos corporate headquarters and Enercon Services to the south, Hotel Arista, Che Figata, Lavazza, Tap In Pub & Carvery, and Monarch Landing to the west and Dart Warehouse Corporation to the northeast.

Existing Roadway System Characteristics

The characteristics of the existing roadways near the development are described below. **Figure 3** illustrates the existing roadway characteristics.

IL Route 59 is a north-south other principal arterial roadway that provides two travel lanes in each direction north of Ferry Road and three travel lanes in each direction south of Ferry Road. At its signalized intersection with Ferry Road, IL Route 59 provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on the northbound and southbound approaches. A high-visibility crosswalk is provided on the northbound approach and a standard crosswalk is provided on the southbound approach. At its unsignalized intersection with Westings Avenue, IL Route 59 provides three through lanes and an exclusive right-turn lane on the northbound approach and three through lanes on the southbound approach. IL Route 59 is designated as a Strategic Regional Arterial (SRA), is under the jurisdiction of the Illinois Department of Transportation (IDOT) and carries an average annual daily traffic (AADT) of 34,200 vehicles (IDOT 2023). IL Route 59 has a posted speed limit of 45 miles per hour north of Ferry Road, 40 miles per hour on the northbound approach south of Ferry Road, and 30 miles per hour on the southbound approach south of Ferry Road.

Raymond Drive is a north-south minor arterial roadway that in the vicinity of the site provides two travel lanes in each direction. At its signalized intersection with Ferry Road, Raymond Drive provides an exclusive left-turn lane, a through lane, and an exclusive right-turn lane on the northbound approach. A high-visibility crosswalk is provided on the northbound approach. Raymond Drive is under the jurisdiction of DuDOT, carries an AADT of 22,00 (IDOT 2024), and has a posted speed limit of 45 miles per hour.



CityGate II
Naperville, Illinois

Existing Roadway Characteristics

Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 25-326

Figure: 3

Ferry Road is an east-west roadway that is classified as a minor arterial roadway east of IL Route 59 and a major collector roadway west of IL Route 59 that in the vicinity of the site provides two travel lanes in each direction. At its signalized intersection with IL Route 59, Ferry Road provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on the eastbound and westbound approaches. High-visibility crosswalks are provided on both approaches. At its signalized intersection with Corporate Lane/Raymond Drive, Ferry Road provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on the eastbound approach and an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on the westbound approach. High-visibility crosswalks are provided on both approaches. At its unsignalized intersections with Monarch Drive/CityGate Lane and Corporate Lane/Comfort Drive, Ferry Road provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on the eastbound and westbound approaches. Ferry Road is under the jurisdiction of the DuPage County of Transportation (DuDOT), carries an AADT of 12,800 vehicles east of Corporate Lane/Raymond Drive (IDOT 2024), 12,900 vehicles between IL Route 59 and Corporate Lane/Raymond Drive (IDOT 2024), and 7,950 vehicles west of IL Route 59 (IDOT 2024). Ferry Road has a posted speed limit of 45 miles per hour west of Corporate Lane/Raymond Drive and 40 miles per hour east of Corporate Lane/Raymond Drive.

Westings Avenue is a local roadway that extends in an east-west orientation from IL Route 59 east approximately 2,000 feet to a cul-de-sac within the Westings Corporate Center and has a two-lane divided cross section with one approximately 20-foot lane in each direction and a landscaped median. At its unsignalized intersection with IL Route 59, Westings Avenue provides an exclusive right-turn lane on the westbound approach and is under stop sign control. A high visibility crosswalk is provided on the westbound approach. At its unsignalized intersection with CityGate Lane/Calamos Court, Westings Avenue provides a shared left-turn/through/right-turn lane on the eastbound and westbound approaches. A high-visibility crosswalk is provided on the eastbound approach. At its unsignalized intersection with the Domain I access drive, Westings Avenue provides a shared left-turn/through lane on the eastbound approach and a shared through/right-turn lane on the westbound approach. At its unsignalized intersection with Comfort Drive, Westings Avenue provides a shared left-turn/through lane on the eastbound approach and a shared through/right-turn lane on the westbound approach. Both approaches are under stop sign control and a high-visibility crosswalk is provided on the eastbound approach. Westings Avenue is under the jurisdiction of the City of Naperville and has a posted speed limit of 30 miles per hour.

Comfort Drive is a north-south local roadway that extends from Ferry Road (opposite Corporate Lane) south to Westings Avenue and provides one travel lane in each direction. At its unsignalized intersection with Ferry Road, Comfort Drive provides an exclusive left-turn lane, a through lane, and an exclusive right-turn lane on the northbound approach and is under stop sign control. A high visibility crosswalk is provided on the northbound approach. At its unsignalized intersection with Westings Avenue, Comfort Drive provides an exclusive left-turn lane and an exclusive right-turn lane on the southbound approach and is under stop sign control. There is a sidewalk along the west side of Comfort Drive. Comfort Drive is under the jurisdiction of the City of Naperville, has a posted speed limit of 30 mph, and parking is not permitted on the street.

CityGate Lane is a private drive that extends from Westings Avenue north through the CityGate Centre complex to Ferry Road (opposite Monarch Drive) and provides one travel lane in each direction with parallel parking permitted on both sides of several segments of the street. At its unsignalized intersection with Ferry Road, CityGate Lane provides an exclusive left-turn lane and a shared through/right-turn lane on the northbound approach and is under stop sign control. At its unsignalized intersection with Westings Avenue, CityGate Lane provides a shared left-turn/through lane and an exclusive right-turn lane on the southbound approach and is under stop sign control.

Calamos Court is a north-south local roadway that extends from Westings Avenue south to the Calamos Corporate Center Complex. At its unsignalized intersection with Westings Avenue, Calamos Court provides a shared left-turn/through lane and a shared through/right-turn lane on the northbound approach and is under stop sign control. Calamos Court is under the jurisdiction of the City of Naperville.

Monarch Drive is a north-south local roadway that provides access to the Monarch's Landing development and provides one travel lane in each direction. At its unsignalized intersection with Ferry Road, Monarch Drive provides a shared left-turn/through lane and an exclusive right-turn lane on the southbound approach and is under stop sign control. A high-visibility crosswalk is provided on the southbound approach. Monarch Drive is under the jurisdiction of the City of Naperville.

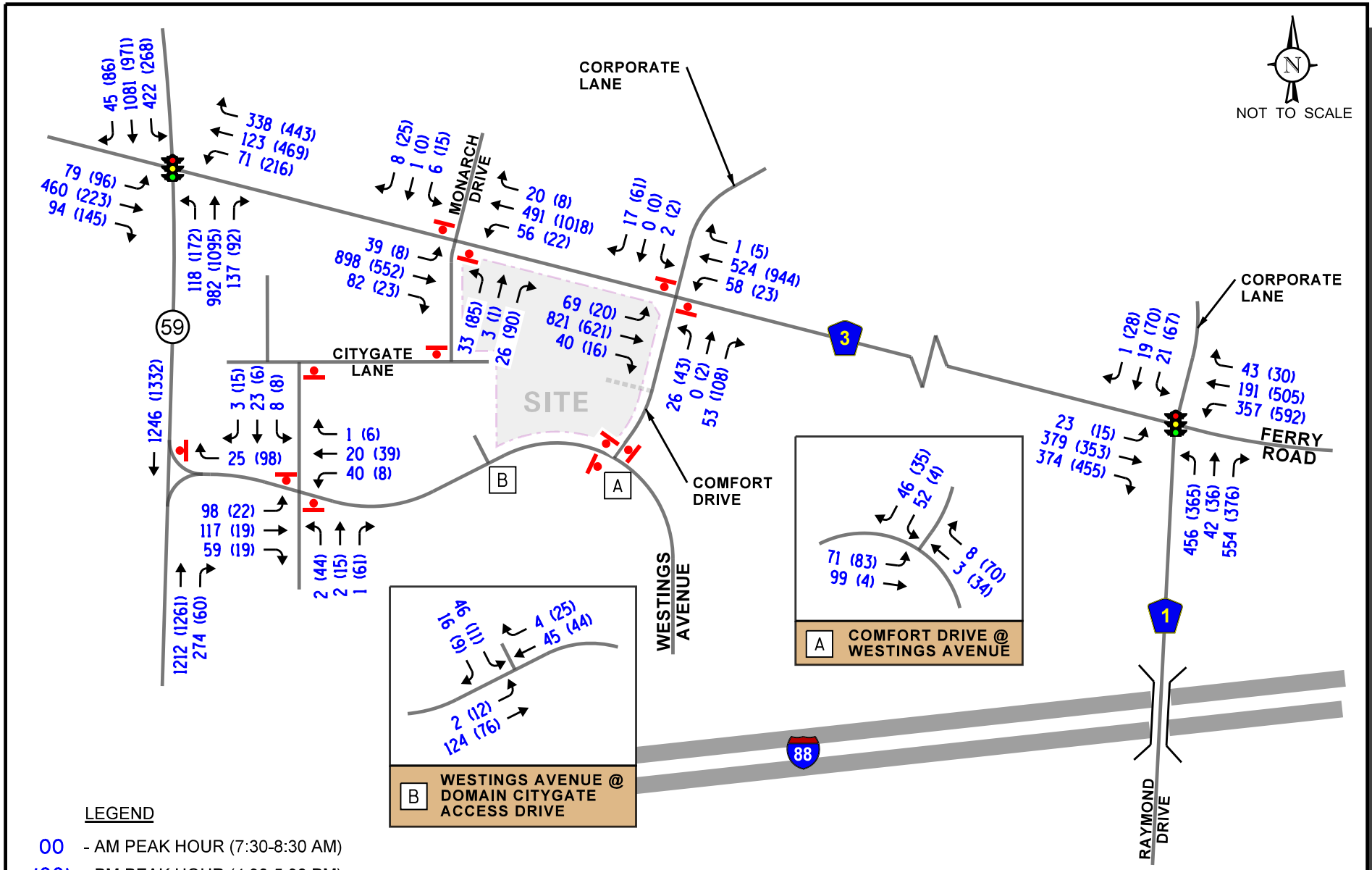
Corporate Lane is primarily an east-west local roadway that turns south to intersect with Ferry Road opposite of Raymond Drive and Comfort Drive and provides one travel lane in each direction. At its signalized intersection with Ferry Road, Corporate Lane provides an exclusive left-turn lane and a shared through/right-turn lane on the southbound approach. A high-visibility crosswalk is provided on the southbound approach. At its unsignalized intersection with Ferry Road, Corporate Lane provides an exclusive left-turn lane and a shared through/right-turn lane on the southbound approach and is under stop sign control. A high visibility crosswalk is provided on the southbound approach. Corporate Lane is under the jurisdiction of the City of Naperville.

Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts using Miovision Scout Video Collection Units on Tuesday, November 18, 2025 during the weekday morning (7:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:00 P.M.) peak periods at the following intersections:

- Ferry Road with Comfort Drive/Corporate Lane
- Ferry Road with CityGate Lane/Monarch Drive
- Westings Avenue with Comfort Drive
- Westings Avenue with Domain I Garage Access Drive
- Westings Avenue with CityGate Lane/Calamos Court
- IL Route 59 with Westings Avenue
- IL Route 59 with Ferry Road
- Ferry Road with Corporate Lane/Raymond Drive

The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 7:30 A.M. to 8:30 A.M. and the weekday evening peak hour of traffic occurs from 4:30 P.M. to 5:30 P.M. **Figure 4** illustrates the existing peak hour traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.



CityGate II
Naperville, Illinois

Existing Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 25-326 Figure: 4

3. Traffic Characteristics of the Proposed Development

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed residential development, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

As proposed, the plans call developing the site with an apartment building containing approximately 297 units, an approximately 414-space parking garage for residents of the apartment units, and approximately eight (8) surface parking spaces. Access will be provided via the following:

- Access to the residential parking garage will be provided via a full-movement access drive off Comfort Drive approximately 285 feet south of Ferry Road. This access drive will provide one inbound lane and one outbound lane. Outbound movements should be under stop sign control. Additionally, it should be noted that the existing median on Comfort Drive will need to be modified to allow for northbound left-turn movements onto the access drive.

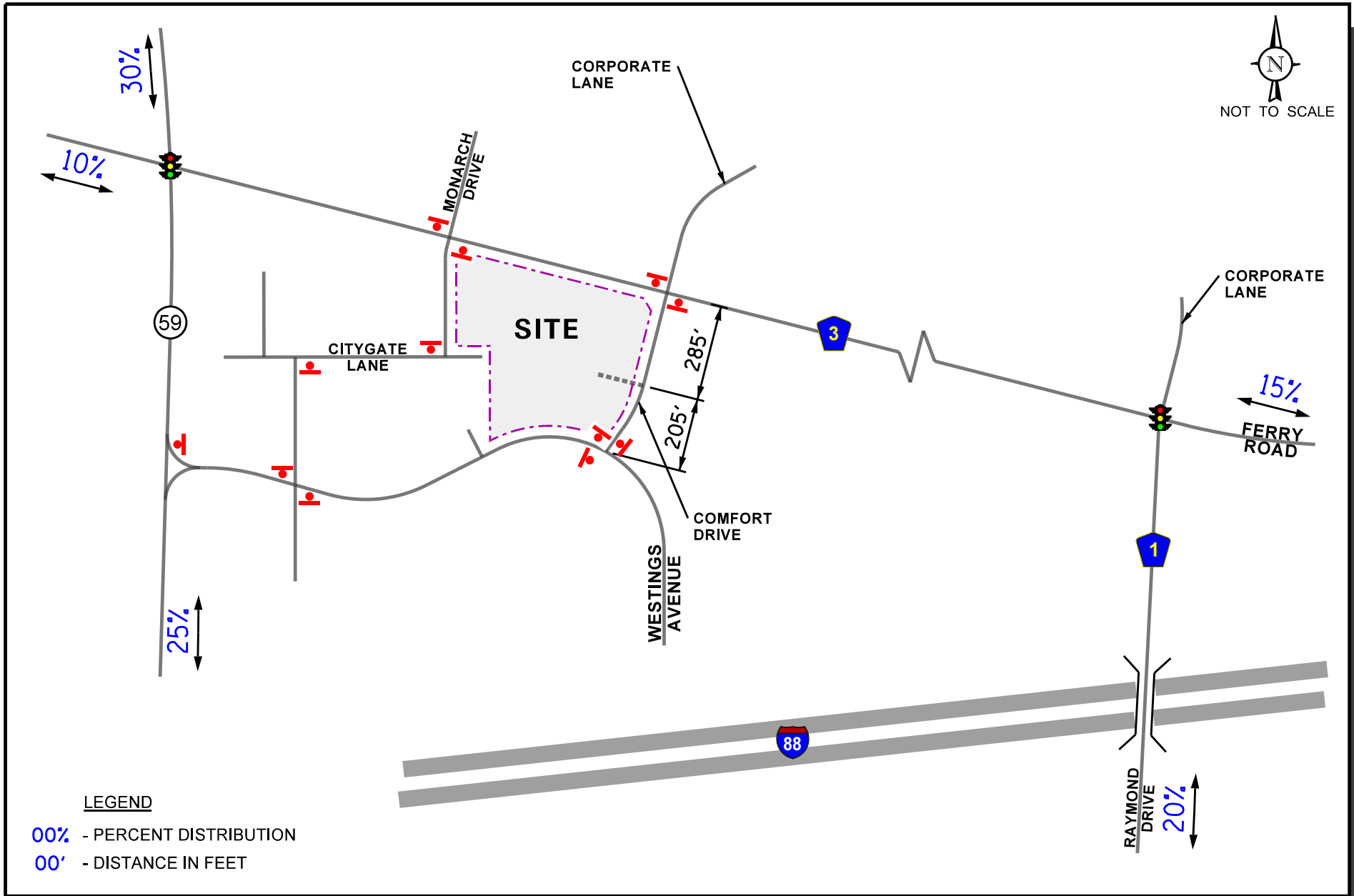
- Access to the surface parking lot will be provided via a full-movement access drives off CityGate Lane. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

It is important to note that the parking lot on site, which currently contains a total of 79 parking spaces including 36 non-reserved spaces, 34 Domain I guest reserved spaces, and nine handicapped spaces, will be removed. As part of the proposed residential development, CityGate II will provide a surface parking lot on the east side of CityGate Lane containing a total of eight (8) parking spaces, including two handicapped spaces. Furthermore, guests will be able to park (1) in the surface parking lot on the east side of CityGate Lane containing a total of eight (8) parking spaces, (2) in the residential parking garage, or (3) in on-street parking spaces with overnight parking restrictions.

A copy of the site plan depicting the proposed development and vehicle access is included in the Appendix.

Directional Distribution

The directions from which residents and guests of the proposed development will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of the development-generated traffic.



CityGate II
Naperville, Illinois

Directional Distribution

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 25-326

Figure: 5

Peak Hour Traffic Volumes

The number of peak hour trips estimated to be generated by the proposed development was based on vehicle trip generation rates contained in *Trip Generation Manual*, 12th Edition, published by the Institute of Transportation Engineers (ITE). The "Multifamily Housing – Mid-Rise" (Land-Use Code 221) rate was used for the proposed development. It is important to note that based on the traffic counts that were conducted at the intersection of Westings Avenue and the Domain I Access Drive, Domain I generated 34 percent fewer trips during the weekday morning peak hour and 43 percent fewer trips during the weekday evening peak hour when compared to the ITE trip generation rates. To provide a conservative analysis, no reductions were applied to the CityGate II trip estimates

Table 1 shows the estimated vehicle trip generation for the weekday morning and weekday evening peak hours.

Table 1
SITE-GENERATED TRIP ESTIMATES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
		In	Out	Total	In	Out	Total
221	Multifamily Housing Mid-Rise (297 units)	25	85	110	66	38	104

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The estimated weekday morning and weekday evening peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). **Figure 6** illustrates the development traffic assignments.

Background Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on 2050 Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the existing traffic volumes were increased by an annually compounded growth rate of .66 percent for six years (one-year buildout plus five years) totaling five percent to represent Year 2031 no-build conditions.

Event Center

The traffic that will be generated by the Event Center that was constructed as part of Domain I was also included as part of the background traffic conditions. The center is anticipated to have events with 350 to 400 people on weekdays, generally between 9:00 A.M. and 4:00 P.M. For the purposes of the traffic study, the trip generation was assumed to coincide with the roadway system peak hours. **Table A** in the Appendix summarizes the trip generation estimates.

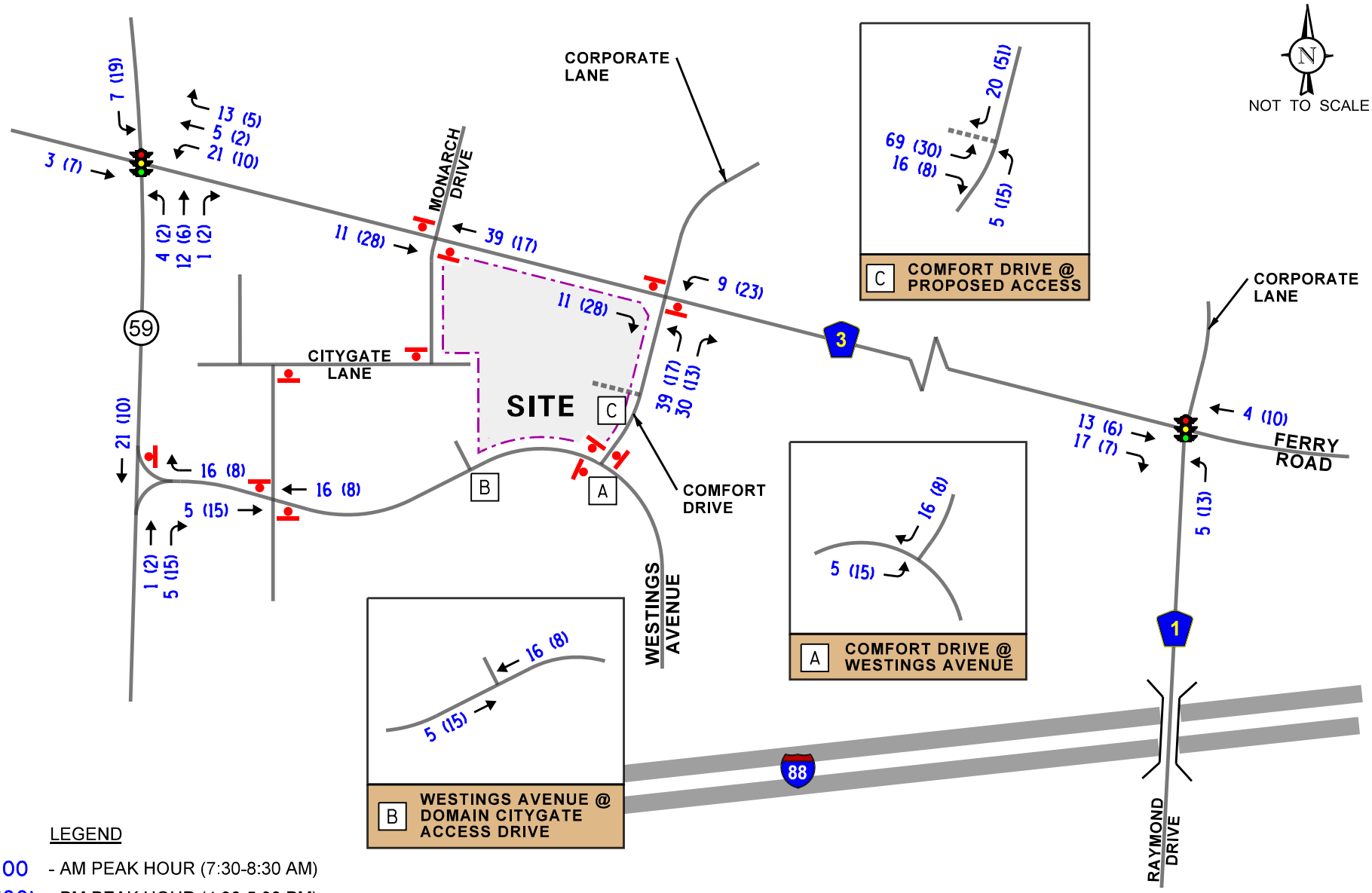
Other Area Developments

To account for traffic generated by other future developments in the area, the traffic impact study conducted by V3 for the proposed 171-unit residential development to be located on the north side of Ferry Road was utilized.

The Year 2031 no-build traffic volumes that include the growth factor, event center traffic, and the proposed residential development to the north are illustrated in **Figure 7**.

Year 2031 Total Projected Traffic Volumes

The new development-generated traffic (Figure 6) was added to the Year 2031 no-build traffic volumes (Figure 7) to determine the Year 2031 total projected traffic volumes, as illustrated in **Figure 8.**

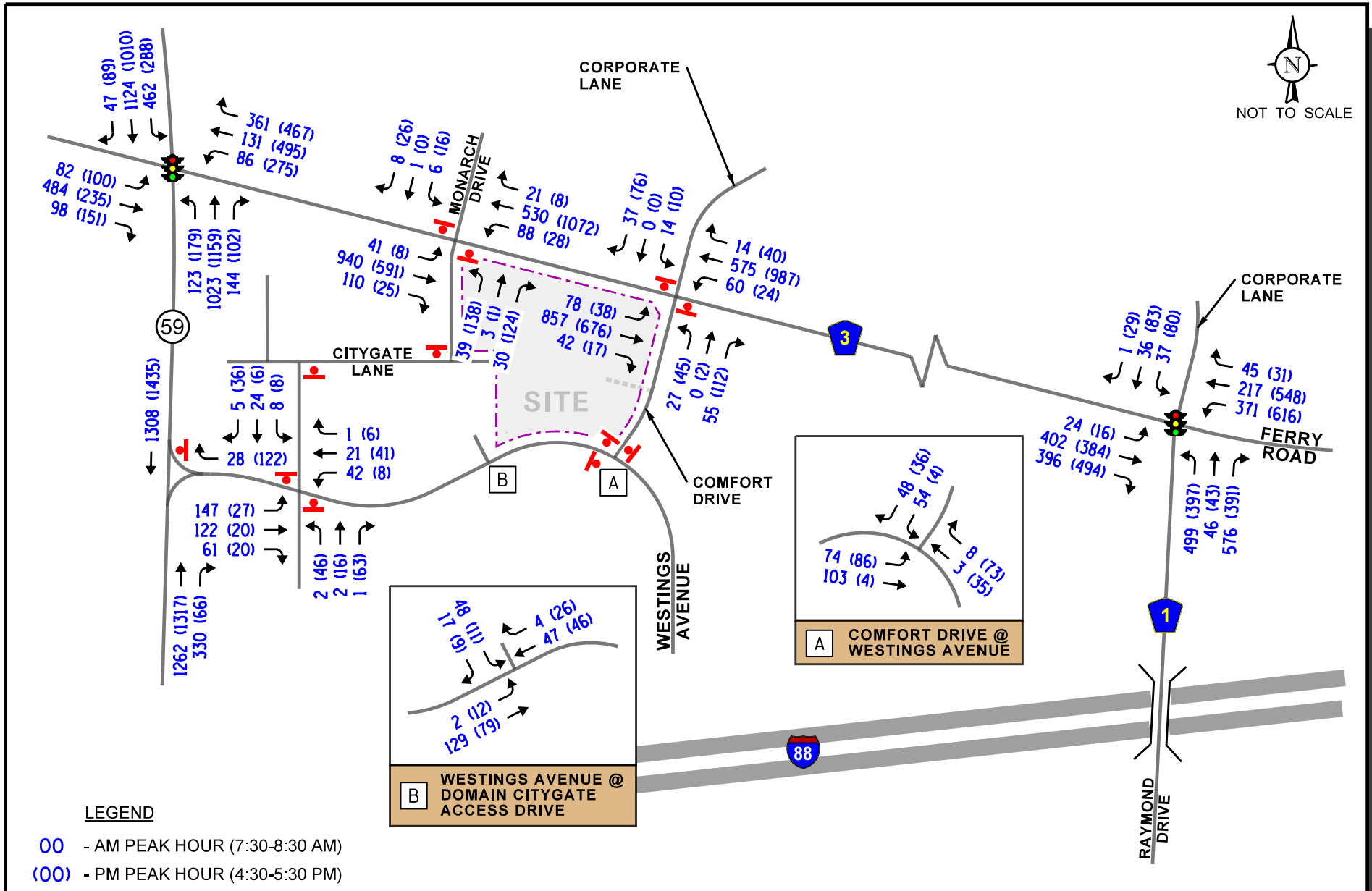


CityGate II
Naperville, Illinois

Site-Generated Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 25-326 Figure: 6

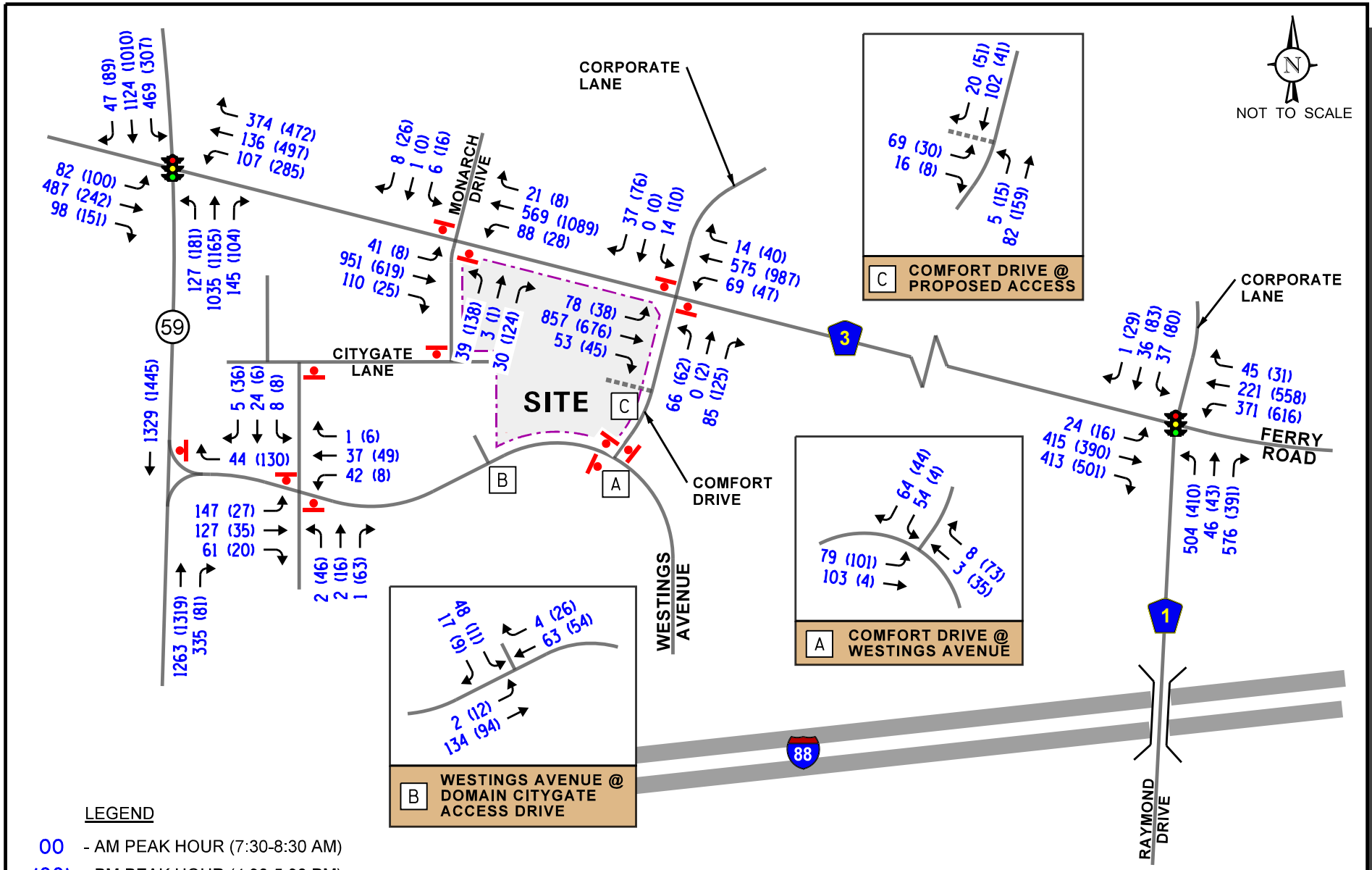


CityGate II
Naperville, Illinois

Year 2031 No-Build Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 25-326 Figure: 7



CityGate II
Naperville, Illinois

Year 2031 Total Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 25-326 Figure: 8

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and weekday evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access roads are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Capacity analyses were performed for the included intersections in the study area for the weekday morning and weekday evening peak hours for the existing, Year 2031 no-build, and Year 2031 total projected conditions.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual* (HCM), 7th Edition and using Synchro/SimTraffic 12 analysis software. The analysis for the traffic-signal controlled intersections were accomplished using actual cycle lengths and phasings to determine the average overall vehicle delay and levels of services.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

A summary of the traffic analysis results showing the level of service and delay (measured in seconds) for the intersections under the existing, 2031 no-build conditions, and Year 2031 total projected conditions are shown in **Tables 2** through **6**. Copies of the capacity analysis reports are included in the Appendix. A discussion of each of the intersections follows.

Table 2
CAPACITY ANALYSIS RESULTS – IL ROUTE 59 WITH FERRY ROAD – SIGNALIZIED

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Existing Conditions	**Weekday Morning**	D 38.2	E 61.1	A 6.7	D 43.3	D 50.6	B 14.0	C 24.9	E 68.2	A 9.1	D 49.7	C 26.0	A 2.6	D 42.0
		D – 50.2			C – 26.4			E – 57.5			C – 31.8			
	Weekday Evening	D 46.0	E 65.0	B 12.1	D 47.6	E 58.6	D 38.0	B 18.4	C 32.5	A 1.9	D 37.1	C 24.9	A 3.7	C 34.8
		D – 44.5			D – 48.4			C – 28.6			C – 26.0			
No-Build Conditions	**Weekday Morning**	D 37.4	E 60.8	B 10.6	D 46.2	D 49.8	B 15.1	C 26.8	F 83.5	A 9.7	E 60.2	C 28.1	A 2.9	D 47.8
		D – 50.5			C – 27.6			E – 69.9			D – 36.5			
	Weekday Evening	D 44.4	E 66.5	B 19.9	D 51.8	E 55.5	D 36.1	C 21.9	D 37.7	A 2.4	D 58.6	C 27.8	A 4.2	D 38.4
		D – 47.5			D – 47.3			C – 33.3			C – 32.7			
Projected Conditions	**Weekday Morning**	D 37.2	E 60.8	B 12.1	D 52.7	D 49.6	B 15.7	C 28.1	F 86.9	A 9.8	E 64.0	C 28.7	A 2.9	D 49.5
		D – 50.7			C – 29.6			E – 72.6			D – 38.1			
	Weekday Evening	D 43.9	E 66.7	C 20.7	D 52.8	D 54.7	D 35.1	C 22.9	D 39.7	A 3.3	E 69.2	C 28.3	A 4.2	D 39.9
		D – 48.0			D – 46.9			C – 35.0			C – 35.7			

Letter denotes Level of Service L – Left Turn R – Right Turn
Delay is measured in seconds. T – Through

Table 3
CAPACITY ANALYSIS RESULTS – FERRY ROAD WITH CORPORATE LANE/RAYMOND DRIVE – SIGNALIZIED

	Peak Hour	Eastbound			Westbound		Northbound			Southbound		Overall
		L	T	R	L	T/R	L	T	R	L	T/R	
Existing Conditions	Weekday Morning	B 12.0	C 31.9	A 6.3	C 20.2	B 14.6	C 34.5	C 27.3	A 6.1	C 21.4	B 12.0	B 19.1
		B – 19.0			B – 18.0		B – 19.3			C – 29.6		
	Weekday Evening	B 18.3	D 51.4	A 8.0	C 31.6	C 20.6	D 44.0	D 44.8	A 7.0	C 34.6	B 18.3	C 27.5
		C – 26.8			C – 26.3		C – 26.1			D – 45.6		
No-Build Conditions	Weekday Morning	B 11.5	C 31.2	A 6.2	C 20.2	B 14.7	D 43.2	C 30.3	A 7.1	C 22.6	D 40.7	C 21.1
		B – 18.5			B – 17.9		C – 24.1			C – 31.7		
	Weekday Evening	B 18.6	D 51.2	B 11.9	C 33.4	C 19.6	D 50.9	D 46.0	A 7.3	D 36.2	E 58.3	C 28.8
		C – 28.9			C – 25.4		C – 30.1			D – 49.1		
Projected Conditions	Weekday Morning	B 11.5	C 31.1	A 6.2	C 20.2	B 14.6	D 45.0	C 30.3	A 7.4	C 22.7	D 40.8	C 21.5
		B – 18.5			B – 17.9		C – 25.2			C – 31.7		
	Weekday Evening	B 18.3	D 51.1	B 12.6	C 33.8	C 19.9	D 52.4	D 46.1	A 7.4	D 36.5	E 59.6	C 30.2
		C – 28.7			C – 27.0		C – 31.2			D – 49.9		

Letter denotes Level of Service L – Left Turn R – Right Turn
Delay is measured in seconds. T – Through

Table 4
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Westings Avenue with Comfort Drive[1]				
• Overall	A	8.4	A	7.5
• Eastbound Approach	A	8.7	A	7.9
• Westbound Approach	A	7.1	A	7.2
• Southbound Approach	A	8.1	A	7.3
Ferry Road with CityGate Lane/Monarch Drive[2]				
• Northbound Approach	B	18.5	C	16.2
• Southbound Approach	C	14.6	C	19.1
• Eastbound Left Turn	A	8.8	B	10.7
• Westbound Left Turn	A	9.9	A	8.2
Ferry Road with Comfort Drive/Corporate Lane[2]				
• Northbound Approach	B	13.6	B	11.9
• Southbound Approach	A	9.8	B	10.3
• Eastbound Left Turn	A	8.4	A	9.5
• Westbound Left Turn	A	9.2	A	8.3
IL Route 59 with Westings Avenue[2]				
• Westbound Approach	C	15.4	C	19.3
Westings Avenue with Calamos Court/CityGate Lane[2]				
• Northbound Approach	B	13.5	A	9.5
• Southbound Approach	B	14.7	A	9.4
• Eastbound Left Turn	A	7.5	A	7.4
• Westbound Left Turn	A	7.7	A	7.3
Westings Avenue with Domain I Access Drive[2]				
• Southbound Approach	A	9.6	A	9.1
• Eastbound Left Turn	A	7.3	A	7.4

LOS = Level of Service
Delay is measured in seconds.
1 – All-way stop control
2 – Two-way stop control

Table 5
CAPACITY ANALYSIS RESULTS – NO-BUILD CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Westings Avenue with Comfort Drive[1]				
• Overall	A	8.5	A	7.5
• Eastbound Approach	A	8.8	A	7.9
• Westbound Approach	A	7.1	A	7.3
• Southbound Approach	A	8.2	A	7.3
Ferry Road with CityGate Lane/Monarch Drive[2]				
• Northbound Approach	C	21.7	C	23.1
• Southbound Approach	C	16.3	C	20.8
• Eastbound Left Turn	A	8.9	B	11.0
• Westbound Left Turn	B	10.6	A	8.4
Ferry Road with Comfort Drive/Corporate Lane[2]				
• Northbound Approach	B	14.3	B	12.8
• Southbound Approach	B	11.8	B	11.8
• Eastbound Left Turn	A	8.6	B	10.1
• Westbound Left Turn	A	9.4	A	8.5
IL Route 59 with Westings Avenue[2]				
• Westbound Approach	C	15.9	C	21.9
Westings Avenue with Calamos Court/CityGate Lane[2]				
• Northbound Approach	C	15.7	A	9.7
• Southbound Approach	C	17.1	A	9.2
• Eastbound Left Turn	A	7.6	A	7.4
• Westbound Left Turn	A	7.8	A	7.3
Westings Avenue with Domain I Access Drive[2]				
• Southbound Approach	A	9.7	A	9.1
• Eastbound Left Turn	A	7.3	A	7.4

LOS = Level of Service
Delay is measured in seconds.
1 – All-way stop control
2 – Two-way stop control

Table 6
CAPACITY ANALYSIS RESULTS – PROJECTED CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Westings Avenue with Comfort Drive[1]				
• Overall	A	8.6	A	7.6
• Eastbound Approach	A	9.0	A	8.1
• Westbound Approach	A	7.1	A	7.3
• Southbound Approach	A	8.1	A	7.4
Ferry Road with CityGate Lane/Monarch Drive[2]				
• Northbound Approach	C	22.3	C	23.8
• Southbound Approach	C	16.8	C	21.2
• Eastbound Left Turn	A	9.1	B	11.1
• Westbound Left Turn	B	10.6	A	8.4
Ferry Road with Comfort Drive/Corporate Lane[2]				
• Northbound Approach	C	18.8	B	13.9
• Southbound Approach	B	12.1	B	12.1
• Eastbound Left Turn	A	8.6	B	10.1
• Westbound Left Turn	A	9.5	A	8.7
IL Route 59 with Westings Avenue[2]				
• Westbound Approach	C	16.6	C	22.6
Westings Avenue with Calamos Court/CityGate Lane[2]				
• Northbound Approach	C	16.1	A	9.8
• Southbound Approach	C	17.6	A	9.3
• Eastbound Left Turn	A	7.6	A	7.4
• Westbound Left Turn	A	7.8	A	7.3
Westings Avenue with Domain I Access Drive[2]				
• Southbound Approach	A	9.8	A	9.2
• Eastbound Left Turn	A	7.3	A	7.4

LOS = Level of Service
Delay is measured in seconds.
1 – All-way stop control
2 – Two-way stop control

Table 6 (continued)
CAPACITY ANALYSIS RESULTS – PROJECTED CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Comfort Drive with Proposed Access Drive[2]				
• Eastbound Approach	B	10.2	B	10.3
• Northbound Left Turn	A	7.5	A	7.4

LOS = Level of Service
Delay is measured in seconds.
1 – All-way stop control
2 – Two-way stop control

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the development-generated traffic.

IL Route 59 with Ferry Road

The results of the capacity analyses indicate that overall, this intersection operates at Levels of Service (LOS) D during the weekday morning peak hour and LOS C during the weekday evening peak hour. All approaches currently operate at LOS D or better during both peak hours, except for the northbound approach during the weekday morning peak hour which operates at LOS E. Under Year 2031 no-build and total projected conditions, this intersection is projected to operate at an overall LOS D during the weekday morning and weekday evening peak hours with an increase in delays of less than eight seconds over existing conditions. It is important to note that traffic estimated to be generated by the proposed development will increase traffic traversing the intersection by less than two percent. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements or traffic control adjustments will be required.

Ferry Road Corporate Lane/Raymond Drive

The results of the capacity analyses indicate that overall, this intersection operates at Levels of Service (LOS) B during the weekday morning peak hour and LOS C during the weekday evening peak hour. All approaches currently operate at LOS D or better during both peak hours. Under Year 2031 no-build and total projected conditions, this intersection is projected to operate at an overall LOS C during the weekday morning and weekday evening peak hours with an increase in delays of less than three seconds over existing conditions. It is important to note that the simulation showed that northbound left-turn and westbound left-turn queues clear every cycle during both peak hours. Furthermore, the traffic estimated to be generated by the proposed development will increase traffic traversing the intersection by less than two percent. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements or traffic control adjustments will be required.

Westings Avenue with Comfort Drive

The results of the capacity analysis indicate that this all way stop sign control intersection currently operates at an overall LOS A during the weekday morning and weekday evening peak hours. Furthermore, all approaches and critical movements currently operate at LOS A during both peak hours. Under Year 2031 no-build and total projected conditions this intersection is projected to continue to operate at the same LOS as existing conditions. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements or traffic control adjustments will be required.

Ferry Road with Comfort Drive/Corporate Lane

The results of the capacity analysis indicate that northbound and southbound approaches currently operate at LOS C or better during the weekday morning and weekday evening peak hours. Furthermore, the eastbound and westbound left turn movement currently operates at LOS B or better during both peak hours. Under Year 2031 no-build and total projected conditions, all approaches and critical movements are projected to continue to operate at the same LOS as existing conditions, except under total projected conditions for the northbound approach during the weekday morning peak hour which is projected to operate at LOS C with an increase in delay of less than two seconds. Furthermore, the northbound queues are projected to be one to two vehicles during both peak hours with a Volume to Capacity (v/c) ratio of less than one which can be accommodated by the turn lanes without extending to or beyond the CityGate II proposed access drive. It is important to note that all conditions were evaluated as part of the intersection analysis, including upstream signal influences. Additionally, field observations indicate that both northbound and southbound left-turn movements utilize the median storage to complete the left turn. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements or traffic control adjustments will be required.

Ferry Road with CityGate Lane/Monarch Drive

The results of the capacity analysis indicate that northbound and southbound approaches currently operate at LOS C or better during the weekday morning and weekday evening peak hours. Furthermore, the eastbound and westbound left turn movement currently operates at LOS B or better during both peak hours. Under Year 2031 no-build and total projected conditions, all approaches and critical movements are projected to continue to operate at the same LOS as existing conditions, except for the northbound approach during the weekday morning peak hour which is projected to operate at LOS C with an increase in delay of less than four seconds. It is important to note that all conditions were evaluated as part of the intersection analysis, including upstream signal influences. Additionally, field observations indicate that both northbound and southbound left-turn movements utilize the median storage to complete the left turn. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements or traffic control adjustments will be required.

Westings Avenue with Calamos Court/CityGate Lane

The results of the capacity analysis indicate that northbound and southbound approaches currently operate at LOS B or better during the weekday morning and weekday evening peak hours. Furthermore, the eastbound and westbound left turn movement currently operates at LOS A during both peak hours. Under Year 2031 no-build and total projected conditions, all approaches and critical movements are projected to continue to operate at the same LOS as existing conditions, except for the southbound and northbound approaches during the weekday morning peak hours which are projected to operate at LOS C with an increase in delay of less than three seconds. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements or traffic control adjustments will be required.

IL Route 59 with Westings Avenue

The results of the capacity analysis indicate that the westbound approach currently operates at LOS C during the weekday morning and weekday evening peak hours. Under Year 2031 no-build and total projected conditions, this intersection is projected to continue to operate at the same LOS as existing conditions with an increase in delay of less than four seconds. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements or traffic control adjustments will be required.

Westings Avenue with Domain I Access Drive

The results of the capacity analysis indicate that the southbound approach and the westbound left turn movement currently operate at LOS A during the weekday morning and weekday evening peak hours. Under year 2031 no-build and total projected conditions this intersection is projected to continue to operate at the same LOS as existing conditions with an increase in delay of less than one second. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements or traffic control adjustments will be required.

Comfort Drive with Proposed Access Drive

As proposed and mentioned previously, the garage access drive located approximately 285 feet south of Ferry Road will provide one inbound lane and one outbound lane with outbound movements under stop sign control. Additionally, left-turn movements will be accommodated within the existing median opening on Comfort Drive.

The results of the capacity analysis indicate that the outbound movements from the proposed access are projected to operate at LOS B during the weekday morning and weekday evening peak hours. Furthermore, the northbound left turn movements into the site access drive are projected to operate at LOS A during the weekday morning and weekday evening peak hours. It is important that the northbound queues at the intersection of Ferry Road with Corporate Lane/Comfort Drive will not extend to or beyond this access drive. As such, this access drive will have adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development.

Traffic Signal Warrant Evaluation

The existing and projected weekday morning and weekday evening peak hour were compared to the peak hour traffic signal warrant (Warrant 3) criteria published in the *Manual on Uniform Traffic Control Devices* (MUTCD) to determine if a traffic signal is warranted during either peak hour. It should be noted that since Ferry Road has a posted speed limit of 45 miles per hour. The traffic signal warrant criteria reflecting the 70 percent factor was utilized. Additionally, the minor approach right-turn movements were reduced based on Pagones Theorem to account for right-turn on red maneuvers. **Table 7** summarizes the mainline congestion reduction factors and the right-turn movement reductions for the minor approaches and **Table 8** summarizes the traffic signal warrant evaluation for existing and projected conditions with the right-turn movement reductions.

As can be seen from Table 8, when the existing traffic and total projected volumes are compared to the peak hour traffic signal warrant (Warrant 3) criteria published in the MUTCD, taking into consideration a reduction in the right-turn movements based on Pagones Theorem on the minor street approaches, a traffic signal is not warranted at this intersection during either peak hour.

Table 7
PEAK HOUR MAINLINE AND RIGHT-TURN REDUCTIONS – FERRY ROAD WITH COMFORT DRIVE

	Time Period	Eastbound Congestion Factor Reduction	Westbound Congestion Factor Reduction	Minor Approach Right-Turn Movement Reductions	
				Northbound	Southbound
Existing Conditions	Weekday Morning Peak Hour	5%	0%	70%	60%
	Weekday Evening Peak Hour	0%	5%	75%	55%
Projected Conditions	Weekday Morning Peak Hour	5%	0%	70%	60%
	Weekday Evening Peak Hour	0%	10%	75%	50%

Table 8
PEAK HOUR TRAFFIC SIGNAL WARRANT WITH RIGHT-TURN MOVEMENT REDUCTIONS – FERRY ROAD WITH COMFORT DRIVE

	Time Period	Major Approach Total Volume	Minor Approach Volume		Peak Hour Warrant Met?
			Northbound	Southbound	
Existing Conditions	Weekday Morning Peak Hour	1513	42	18	No
	Weekday Evening Peak Hour	1629	70	62	No
Projected Conditions	Weekday Morning Peak Hour	1646	92	43	No
	Weekday Evening Peak Hour	1833	95	81	No

6. Parking Evaluation

As proposed, the development will provide 297 units with 370 bedrooms. Parking for the development will be accommodated via 422 total parking spaces consisting of 414 garage spaces and eight (8) surface spaces. In conjunction with the proposed development, the existing 79-space surface parking lot located north of Domain I east of CityGate Lane that provides 36 guest parking spaces for Domain I will be eliminated.

Parking for the residents of the proposed development will be accommodated via 369 parking spaces within the parking garage for a ratio of one parking space per bedroom, which is consistent with other recently approved multifamily residential developments in the City of Naperville. (A list is included in the Appendix.) The remaining 53 parking spaces (45 garage spaces and eight [8] surface lot spaces) will be reserved for guest parking at a ratio of 0.18 guest spaces per unit.

In order to determine the adequacy of the proposed guest parking space ratio, KLOA, Inc. reviewed the overnight guest parking permit information that is available for Domain I for the last two years. This data indicates that on average, five guest parking permits are issued on a single day with a maximum of 20 permits issued on a single day. The maximum of 20 guest permits translates to 0.07 spaces per unit. As such, the proposed 0.18 guest parking spaces will be adequate in accommodating the estimated guest parking demand for the proposed residential development.

As previously indicated, in conjunction with the proposed development, the existing surface parking lot located north of Domain I east of CityGate Lane will be eliminated. With 285 units (359 bedrooms) and a parking garage with 429 parking spaces, if utilized at one parking space per bedroom, Domain I would have a surplus of 58 spaces (0.20 space per unit) available to accommodate guest parking within the existing parking garage. The resulting parking spaces per unit and allocated guest parking will be adequate to accommodate the parking demand for Domain I based on the following:

- Leasing information available indicates that residential parking permits are currently leased at 1.2 spaces per occupied unit. When this ratio is applied to the 285 units, a total of 342 parking spaces will be occupied resulting in a surplus of 87 garage parking spaces.

- Based on guest parking permits issued, a maximum of 20 guest permits were issued at a time with an average of five permits issued per day.

As such, based on the existing parking permit information for resident and guest parking as part of Domain I, and with resident parking provided at a ratio of one parking space per bedroom, the parking supply for the proposed residential development will be adequate in accommodating the proposed parking demand.

In addition, KLOA, Inc. conducted supplemental surveys on Wednesday, February 25, 2026, of the parking garage at 2129 CityGate Lane. The surveys were conducted from 7:00 A.M. to 10:00 P.M. and indicated the following:

- Of the approximately 496 non-reserved parking spaces, a maximum of 221 spaces were occupied at 11:00 A.M. This represents a peak of 45 percent, leaving a minimum of 275 parking spaces available throughout the day.

- The approximately 100 customer parking spaces were utilized at 90 percent or higher between 9:00 A.M. and 3:00 P.M.

- The eight visitor parking spaces were at 100 percent utilization between 9:00 A.M. and 12:00 noon.

Based on the above, the available non-reserved parking spaces will be more than adequate to accommodate the displacement of parking from the surface parking lot that will be eliminated as part of the proposed development.

7. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The traffic that will be generated by the proposed development can be accommodated by the area roadway system.

- A traffic signal will not be warranted at the intersection of Ferry Road with Comfort Drive/Corporate Lane during the weekday evening peak hour under Year 2031 projected traffic conditions.

- The proposed residential site access will be adequate in accommodating the projected traffic volumes entering and exiting the proposed development. The existing median break on Comfort Drive will allow for left-turn movements to/from the access drive.

- The proposed residential parking supply will be adequate to accommodate the resident and guest parking demand based on the following:

    - Resident parking is provided at a ratio of one parking space per bedroom, which is consistent with other recently approved multifamily residential developments within the City.

    - Existing leasing data for Domain I indicate an average resident parking demand of approximately 1.2 spaces per occupied unit, resulting in surplus parking within the existing parking garage.

    - Guest parking permit records show low guest parking demand, with an average of five permits issued per day and a maximum of 20 permits issued at one time, equivalent to approximately 0.07 guest spaces per unit.

    - Surplus parking available within the Calamos parking garage will adequately accommodate the displacement of non-reserved parking from the surface parking lot that will be eliminated as part of the proposed development.

    - Based on existing resident and guest parking utilization data, the proposed parking supply is sufficient to accommodate anticipated parking demand for the proposed residential development

- The proposed 414 garage parking spaces with the eight (8) surface parking spaces will be adequate in accommodating the parking for guests of the proposed apartment development.

Appendix

Traffic Count Summary Sheets
Site Plan
CMAP Projections Letter
Event Center Trip Generation
Level of Service Criteria
Capacity Analysis Summary Sheets
Parking Ratio Table

Traffic Count Summary Sheets

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: CityGate+Ln/Westings+Avenue
TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Data

Start Time	Westing ln Eastbound						Westing ln Westbound						City Gain Ln Northbound						City Gain Ln Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	8	23	6	1	37	0	4	7	0	0	11	0	0	1	0	0	1	0	0	2	1	2	3	52
7:15 AM	0	9	23	8	1	40	0	3	3	1	0	7	0	0	0	0	0	0	1	3	1	2	1	7	54
7:30 AM	0	17	24	10	0	51	0	6	4	0	1	10	0	1	1	0	0	2	0	1	3	0	0	4	67
7:45 AM	0	27	36	8	0	71	0	10	3	0	1	13	0	0	0	0	0	0	0	0	6	1	0	7	91
Hourly Total	0	61	106	32	2	199	0	23	17	1	2	41	0	1	2	0	0	3	1	4	12	4	3	21	264
8:00 AM	0	31	24	13	0	68	0	6	2	0	2	8	0	1	0	1	0	2	0	6	8	2	0	16	94
8:15 AM	0	23	33	26	0	82	0	13	6	1	0	20	0	0	1	0	0	1	0	1	6	0	0	7	110
8:30 AM	0	17	22	19	0	58	0	10	2	0	0	12	0	1	0	1	0	2	1	2	7	1	0	11	83
8:45 AM	0	22	12	6	0	40	0	7	1	0	0	8	0	0	0	0	0	0	0	0	5	1	1	6	54
Hourly Total	0	93	91	64	0	248	0	36	11	1	2	48	0	2	1	2	0	5	1	9	26	4	1	40	341
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	11	4	3	0	18	0	2	7	1	1	10	0	10	2	20	0	32	0	0	0	4	1	4	64
4:15 PM	0	6	5	2	0	13	0	0	5	1	0	6	0	11	6	12	0	29	1	4	3	4	0	12	60
4:30 PM	0	4	5	1	0	10	0	2	11	2	2	15	0	8	5	15	0	28	0	0	2	2	0	4	57
4:45 PM	0	8	3	3	1	14	0	2	12	1	1	15	0	3	3	10	0	16	1	2	1	2	0	6	51
Hourly Total	0	29	17	9	1	55	0	6	35	5	4	46	0	32	16	57	0	105	2	6	6	12	1	26	232
5:00 PM	0	5	4	3	0	12	1	1	9	0	1	11	0	18	5	19	0	42	0	2	3	10	0	15	80
5:15 PM	0	5	7	12	2	24	1	3	7	3	1	14	0	12	2	12	0	26	0	4	0	1	1	5	69
5:30 PM	0	2	7	6	1	15	0	1	4	4	0	9	0	12	0	11	0	23	0	2	3	2	1	7	54
5:45 PM	0	6	7	3	0	16	0	0	1	2	1	3	0	9	2	5	1	16	0	5	3	1	0	9	44
Hourly Total	0	18	25	24	3	67	2	5	21	9	3	37	0	51	9	47	1	107	0	13	9	14	2	36	247
Grand Total	0	201	239	129	6	569	2	70	84	16	11	172	0	86	28	106	1	220	4	32	53	34	7	123	1084
Approach %	0.0	35.3	42.0	22.7	-	-	1.2	40.7	48.8	9.3	-	-	0.0	39.1	12.7	48.2	-	-	3.3	26.0	43.1	27.6	-	-	-
Total %	0.0	18.5	22.0	11.9	-	52.5	0.2	6.5	7.7	1.5	-	15.9	0.0	7.9	2.6	9.8	-	20.3	0.4	3.0	4.9	3.1	-	11.3	-
Lights	0	196	239	129	-	564	2	70	84	16	-	172	0	86	28	106	-	220	4	32	53	34	-	123	1079
% Lights	-	97.5	100.0	100.0	-	99.1	100.0	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	-	100.0	99.5
Buses	0	3	0	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	3
% Buses	-	1.5	0.0	0.0	-	0.5	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.3
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Articulated Trucks	-	0.5	0.0	0.0	-	0.2	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1

% Bicycles on Road	-	0.5	0.0	0.0	-	0.2	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.1
Pedestrians	-	-	-	-	6	-	-	-	-	-	11	-	-	-	-	-	1	-	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: CityGate+Ln/Westings+Avenue
TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Westing ln Eastbound						Westing ln Westbound						City Gain Ln Northbound						City Gain Ln Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	17	24	10	0	51	0	6	4	0	1	10	0	1	1	0	0	2	0	1	3	0	0	4	67
7:45 AM	0	27	36	8	0	71	0	10	3	0	1	13	0	0	0	0	0	0	0	0	6	1	0	7	91
8:00 AM	0	31	24	13	0	68	0	6	2	0	2	8	0	1	0	1	0	2	0	6	8	2	0	16	94
8:15 AM	0	23	33	26	0	82	0	13	6	1	0	20	0	0	1	0	0	1	0	1	6	0	0	7	110
Total	0	98	117	57	0	272	0	35	15	1	4	51	0	2	2	1	0	5	0	8	23	3	0	34	362
Approach %	0.0	36.0	43.0	21.0	-	-	0.0	68.6	29.4	2.0	-	-	0.0	40.0	40.0	20.0	-	-	0.0	23.5	67.6	8.8	-	-	-
Total %	0.0	27.1	32.3	15.7	-	75.1	0.0	9.7	4.1	0.3	-	14.1	0.0	0.6	0.6	0.3	-	1.4	0.0	2.2	6.4	0.8	-	9.4	-
PHF	0.000	0.790	0.813	0.548	-	0.829	0.000	0.673	0.625	0.250	-	0.638	0.000	0.500	0.500	0.250	-	0.625	0.000	0.333	0.719	0.375	-	0.531	0.823
Lights	0	96	117	57	-	270	0	35	15	1	-	51	0	2	2	1	-	5	0	8	23	3	-	34	360
% Lights	-	98.0	100.0	100.0	-	99.3	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	99.4
Buses	0	2	0	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2
% Buses	-	2.0	0.0	0.0	-	0.7	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.6
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: CityGate+Ln/Westings+Avenue
TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Westing ln Eastbound						Westing ln Westbound						City Gain Ln Northbound						City Gain Ln Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	0	4	5	1	0	10	0	2	11	2	2	15	0	8	5	15	0	28	0	0	2	2	0	4	57
4:45 PM	0	8	3	3	1	14	0	2	12	1	1	15	0	3	3	10	0	16	1	2	1	2	0	6	51
5:00 PM	0	5	4	3	0	12	1	1	9	0	1	11	0	18	5	19	0	42	0	2	3	10	0	15	80
5:15 PM	0	5	7	12	2	24	1	3	7	3	1	14	0	12	2	12	0	26	0	4	0	1	1	5	69
Total	0	22	19	19	3	60	2	8	39	6	5	55	0	41	15	56	0	112	1	8	6	15	1	30	257
Approach %	0.0	36.7	31.7	31.7	-	-	3.6	14.5	70.9	10.9	-	-	0.0	36.6	13.4	50.0	-	-	3.3	26.7	20.0	50.0	-	-	-
Total %	0.0	8.6	7.4	7.4	-	23.3	0.8	3.1	15.2	2.3	-	21.4	0.0	16.0	5.8	21.8	-	43.6	0.4	3.1	2.3	5.8	-	11.7	-
PHF	0.000	0.688	0.679	0.396	-	0.625	0.500	0.667	0.813	0.500	-	0.917	0.000	0.569	0.750	0.737	-	0.667	0.250	0.500	0.500	0.375	-	0.500	0.803
Lights	0	21	19	19	-	59	2	8	39	6	-	55	0	41	15	56	-	112	1	8	6	15	-	30	256
% Lights	-	95.5	100.0	100.0	-	98.3	100.0	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	-	100.0	99.6
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Articulated Trucks	-	4.5	0.0	0.0	-	1.7	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	3	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Ferry Rd and Corportae/raymond ln TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Data

Start Time	Ferry Rd Eastbound						Ferry Rd Westbound						Raymond Rd Northbound						Corporate Ln Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	5	55	89	0	149	0	64	37	9	0	110	0	80	7	95	0	182	0	2	1	0	0	3	444
7:15 AM	0	3	77	102	0	182	0	96	40	7	0	143	0	86	12	133	0	231	0	1	5	1	0	7	563
7:30 AM	0	11	99	109	0	219	0	86	37	10	0	133	0	114	8	166	0	288	0	4	6	0	0	10	650
7:45 AM	0	6	106	86	0	198	0	91	54	12	0	157	0	123	15	145	0	283	0	4	5	0	0	9	647
Hourly Total	0	25	337	386	0	748	0	337	168	38	0	543	0	403	42	539	0	984	0	11	17	1	0	29	2304
8:00 AM	0	4	95	91	0	190	0	92	52	11	0	155	0	106	7	121	0	234	0	4	3	1	0	8	587
8:15 AM	0	2	79	88	0	169	0	88	48	10	1	146	0	113	12	122	0	247	0	9	5	0	0	14	576
8:30 AM	0	6	77	95	0	178	0	82	42	11	0	135	0	116	12	110	0	238	0	4	9	1	0	14	565
8:45 AM	0	5	68	80	0	153	0	91	59	10	0	160	0	121	15	124	0	260	0	6	3	2	0	11	584
Hourly Total	0	17	319	354	0	690	0	353	201	42	1	596	0	456	46	477	0	979	0	23	20	4	0	47	2312
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	1	95	102	0	198	0	122	99	8	0	229	1	106	20	92	0	219	0	25	11	3	0	39	685
4:15 PM	0	2	82	114	0	198	0	104	103	9	0	216	0	90	6	100	0	196	0	11	11	2	0	24	634
4:30 PM	0	1	81	113	0	195	0	154	129	3	0	286	0	90	7	107	0	204	0	15	19	7	1	41	726
4:45 PM	0	8	71	116	0	195	0	149	132	11	0	292	0	101	14	91	0	206	0	17	19	6	0	42	735
Hourly Total	0	12	329	445	0	786	0	529	463	31	0	1023	1	387	47	390	0	825	0	68	60	18	1	146	2780
5:00 PM	0	5	117	126	3	248	1	139	117	8	0	265	0	83	9	76	0	168	0	20	25	12	2	57	738
5:15 PM	0	1	84	100	0	185	0	150	127	8	0	285	1	91	6	102	0	200	0	15	7	3	0	25	695
5:30 PM	0	1	87	102	0	190	0	135	115	6	0	256	0	94	9	77	0	180	0	13	11	2	0	26	652
5:45 PM	0	6	68	94	0	168	0	138	78	16	0	232	0	88	25	63	0	176	0	12	21	3	0	36	612
Hourly Total	0	13	356	422	3	791	1	562	437	38	0	1038	1	356	49	318	0	724	0	60	64	20	2	144	2697
Grand Total	0	67	1341	1607	3	3015	1	1781	1269	149	1	3200	2	1602	184	1724	0	3512	0	162	161	43	3	366	10093
Approach %	0.0	2.2	44.5	53.3	-	-	0.0	55.7	39.7	4.7	-	-	0.1	45.6	5.2	49.1	-	-	0.0	44.3	44.0	11.7	-	-	-
Total %	0.0	0.7	13.3	15.9	-	29.9	0.0	17.6	12.6	1.5	-	31.7	0.0	15.9	1.8	17.1	-	34.8	0.0	1.6	1.6	0.4	-	3.6	-
Lights	0	61	1325	1579	-	2965	1	1762	1245	136	-	3144	2	1570	177	1706	-	3455	0	146	146	38	-	330	9894
% Lights	-	91.0	98.8	98.3	-	98.3	100.0	98.9	98.1	91.3	-	98.3	100.0	98.0	96.2	99.0	-	98.4	-	90.1	90.7	88.4	-	90.2	98.0
Buses	0	0	3	4	-	7	0	10	5	0	-	15	0	5	0	5	-	10	0	0	8	0	-	8	40
% Buses	-	0.0	0.2	0.2	-	0.2	0.0	0.6	0.4	0.0	-	0.5	0.0	0.3	0.0	0.3	-	0.3	-	0.0	5.0	0.0	-	2.2	0.4
Single-Unit Trucks	0	2	5	22	-	29	0	8	9	6	-	23	0	22	1	10	-	33	0	3	5	0	-	8	93
% Single-Unit Trucks	-	3.0	0.4	1.4	-	1.0	0.0	0.4	0.7	4.0	-	0.7	0.0	1.4	0.5	0.6	-	0.9	-	1.9	3.1	0.0	-	2.2	0.9
Articulated Trucks	0	4	8	2	-	14	0	1	10	7	-	18	0	5	6	3	-	14	0	13	2	5	-	20	66
% Articulated Trucks	-	6.0	0.6	0.1	-	0.5	0.0	0.1	0.8	4.7	-	0.6	0.0	0.3	3.3	0.2	-	0.4	-	8.0	1.2	11.6	-	5.5	0.7
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0

% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Ferry Rd and Corportae/raymond In TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Ferry Rd Eastbound						Ferry Rd Westbound						Raymond Rd Northbound						Corporate Ln Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	11	99	109	0	219	0	86	37	10	0	133	0	114	8	166	0	288	0	4	6	0	0	10	650
7:45 AM	0	6	106	86	0	198	0	91	54	12	0	157	0	123	15	145	0	283	0	4	5	0	0	9	647
8:00 AM	0	4	95	91	0	190	0	92	52	11	0	155	0	106	7	121	0	234	0	4	3	1	0	8	587
8:15 AM	0	2	79	88	0	169	0	88	48	10	1	146	0	113	12	122	0	247	0	9	5	0	0	14	576
Total	0	23	379	374	0	776	0	357	191	43	1	591	0	456	42	554	0	1052	0	21	19	1	0	41	2460
Approach %	0.0	3.0	48.8	48.2	-	-	0.0	60.4	32.3	7.3	-	-	0.0	43.3	4.0	52.7	-	-	0.0	51.2	46.3	2.4	-	-	-
Total %	0.0	0.9	15.4	15.2	-	31.5	0.0	14.5	7.8	1.7	-	24.0	0.0	18.5	1.7	22.5	-	42.8	0.0	0.9	0.8	0.0	-	1.7	-
PHF	0.000	0.523	0.894	0.858	-	0.886	0.000	0.970	0.884	0.896	-	0.941	0.000	0.927	0.700	0.834	-	0.913	0.000	0.583	0.792	0.250	-	0.732	0.946
Lights	0	22	377	366	-	765	0	353	182	37	-	572	0	447	41	547	-	1035	0	15	17	0	-	32	2404
% Lights	-	95.7	99.5	97.9	-	98.6	-	98.9	95.3	86.0	-	96.8	-	98.0	97.6	98.7	-	98.4	-	71.4	89.5	0.0	-	78.0	97.7
Buses	0	0	0	1	-	1	0	1	3	0	-	4	0	2	0	2	-	4	0	0	2	0	-	2	11
% Buses	-	0.0	0.0	0.3	-	0.1	-	0.3	1.6	0.0	-	0.7	-	0.4	0.0	0.4	-	0.4	-	0.0	10.5	0.0	-	4.9	0.4
Single-Unit Trucks	0	0	0	7	-	7	0	2	2	2	-	6	0	7	1	5	-	13	0	2	0	0	-	2	28
% Single-Unit Trucks	-	0.0	0.0	1.9	-	0.9	-	0.6	1.0	4.7	-	1.0	-	1.5	2.4	0.9	-	1.2	-	9.5	0.0	0.0	-	4.9	1.1
Articulated Trucks	0	1	2	0	-	3	0	1	4	4	-	9	0	0	0	0	-	0	0	4	0	1	-	5	17
% Articulated Trucks	-	4.3	0.5	0.0	-	0.4	-	0.3	2.1	9.3	-	1.5	-	0.0	0.0	0.0	-	0.0	-	19.0	0.0	100.0	-	12.2	0.7
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Ferry Rd and Corportae/raymond In TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Ferry Rd Eastbound						Ferry Rd Westbound						Raymond Rd Northbound						Corporate Ln Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	1	81	113	0	195	0	154	129	3	0	286	0	90	7	107	0	204	0	15	19	7	1	41	726
4:45 PM	0	8	71	116	0	195	0	149	132	11	0	292	0	101	14	91	0	206	0	17	19	6	0	42	735
5:00 PM	0	5	117	126	3	248	1	139	117	8	0	265	0	83	9	76	0	168	0	20	25	12	2	57	738
5:15 PM	0	1	84	100	0	185	0	150	127	8	0	285	1	91	6	102	0	200	0	15	7	3	0	25	695
Total	0	15	353	455	3	823	1	592	505	30	0	1128	1	365	36	376	0	778	0	67	70	28	3	165	2894
Approach %	0.0	1.8	42.9	55.3	-	-	0.1	52.5	44.8	2.7	-	-	0.1	46.9	4.6	48.3	-	-	0.0	40.6	42.4	17.0	-	-	-
Total %	0.0	0.5	12.2	15.7	-	28.4	0.0	20.5	17.4	1.0	-	39.0	0.0	12.6	1.2	13.0	-	26.9	0.0	2.3	2.4	1.0	-	5.7	-
PHF	0.000	0.469	0.754	0.903	-	0.830	0.250	0.961	0.956	0.682	-	0.966	0.250	0.903	0.643	0.879	-	0.944	0.000	0.838	0.700	0.583	-	0.724	0.980
Lights	0	15	347	450	-	812	1	590	498	30	-	1119	1	358	33	374	-	766	0	60	65	25	-	150	2847
% Lights	-	100.0	98.3	98.9	-	98.7	100.0	99.7	98.6	100.0	-	99.2	100.0	98.1	91.7	99.5	-	98.5	-	89.6	92.9	89.3	-	90.9	98.4
Buses	0	0	0	0	-	0	0	1	1	0	-	2	0	1	0	0	-	1	0	0	2	0	-	2	5
% Buses	-	0.0	0.0	0.0	-	0.0	0.0	0.2	0.2	0.0	-	0.2	0.0	0.3	0.0	0.0	-	0.1	-	0.0	2.9	0.0	-	1.2	0.2
Single-Unit Trucks	0	0	2	5	-	7	0	1	2	0	-	3	0	4	0	1	-	5	0	1	1	0	-	2	17
% Single-Unit Trucks	-	0.0	0.6	1.1	-	0.9	0.0	0.2	0.4	0.0	-	0.3	0.0	1.1	0.0	0.3	-	0.6	-	1.5	1.4	0.0	-	1.2	0.6
Articulated Trucks	0	0	4	0	-	4	0	0	4	0	-	4	0	2	3	1	-	6	0	6	2	3	-	11	25
% Articulated Trucks	-	0.0	1.1	0.0	-	0.5	0.0	0.0	0.8	0.0	-	0.4	0.0	0.5	8.3	0.3	-	0.8	-	9.0	2.9	10.7	-	6.7	0.9
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Ferry+Rd/CityGate+Ln/Monarch+Dr TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Data

Start Time	Ferry Rd Eastbound						Ferry Rd Westbound						City Gate Ln Northbound						Monarch Rd Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	10	167	13	0	190	0	7	101	1	0	109	0	2	1	2	0	5	0	3	0	5	0	8	312
7:15 AM	1	4	211	15	0	231	0	4	105	1	0	110	0	2	0	4	0	6	0	0	0	2	0	2	349
7:30 AM	0	6	222	13	0	241	0	5	115	4	0	124	0	8	1	7	0	16	0	2	0	2	0	4	385
7:45 AM	0	4	251	24	0	279	0	18	127	5	0	150	0	7	0	9	0	16	0	2	1	1	0	4	449
Hourly Total	1	24	851	65	0	941	0	34	448	11	0	493	0	19	2	22	0	43	0	7	1	10	0	18	1495
8:00 AM	1	19	218	26	0	264	0	18	119	2	0	139	0	8	2	5	0	15	0	0	0	1	0	1	419
8:15 AM	0	10	183	19	1	212	0	15	123	9	0	147	0	10	0	5	0	15	0	2	0	4	0	6	380
8:30 AM	0	7	194	32	0	233	0	16	106	5	0	127	0	8	0	10	0	18	0	2	0	2	0	4	382
8:45 AM	0	7	159	21	1	187	0	10	132	17	0	159	0	12	0	8	0	20	0	1	0	1	0	2	368
Hourly Total	1	43	754	98	2	896	0	59	480	33	0	572	0	38	2	28	0	68	0	5	0	8	0	13	1549
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	1	2	124	8	0	135	0	8	243	5	0	256	0	26	0	7	0	33	0	4	0	15	0	19	443
4:15 PM	0	5	140	3	0	148	0	7	218	5	0	230	0	22	0	10	0	32	0	3	0	2	0	5	415
4:30 PM	0	4	126	6	1	136	0	4	245	2	0	251	0	19	0	19	1	38	0	5	0	3	0	8	433
4:45 PM	0	2	151	3	0	156	0	9	283	2	0	294	0	13	1	18	0	32	0	3	0	10	0	13	495
Hourly Total	1	13	541	20	1	575	0	28	989	14	0	1031	0	80	1	54	1	135	0	15	0	30	0	45	1786
5:00 PM	0	2	143	5	0	150	0	3	252	2	0	257	0	30	0	30	0	60	1	6	0	8	0	15	482
5:15 PM	2	0	122	9	0	133	0	6	238	2	0	246	0	23	0	23	0	46	0	1	0	4	2	5	430
5:30 PM	1	1	121	6	0	129	0	1	232	2	0	235	0	15	1	21	0	37	0	2	0	3	0	5	406
5:45 PM	8	5	129	7	0	149	0	6	158	2	0	166	0	16	0	12	0	28	0	3	0	6	0	9	352
Hourly Total	11	8	515	27	0	561	0	16	880	8	0	904	0	84	1	86	0	171	1	12	0	21	2	34	1670
Grand Total	14	88	2661	210	3	2973	0	137	2797	66	0	3000	0	221	6	190	1	417	1	39	1	69	2	110	6500
Approach %	0.5	3.0	89.5	7.1	-	-	0.0	4.6	93.2	2.2	-	-	0.0	53.0	1.4	45.6	-	-	0.9	35.5	0.9	62.7	-	-	-
Total %	0.2	1.4	40.9	3.2	-	45.7	0.0	2.1	43.0	1.0	-	46.2	0.0	3.4	0.1	2.9	-	6.4	0.0	0.6	0.0	1.1	-	1.7	-
Lights	14	87	2600	209	-	2910	0	134	2730	64	-	2928	0	216	6	187	-	409	1	38	1	68	-	108	6355
% Lights	100.0	98.9	97.7	99.5	-	97.9	-	97.8	97.6	97.0	-	97.6	-	97.7	100.0	98.4	-	98.1	100.0	97.4	100.0	98.6	-	98.2	97.8
Buses	0	0	17	0	-	17	0	0	8	0	-	8	0	3	0	0	-	3	0	0	0	0	-	0	28
% Buses	0.0	0.0	0.6	0.0	-	0.6	-	0.0	0.3	0.0	-	0.3	-	1.4	0.0	0.0	-	0.7	0.0	0.0	0.0	0.0	-	0.0	0.4
Single-Unit Trucks	0	1	26	1	-	28	0	3	37	2	-	42	0	2	0	2	-	4	0	1	0	1	-	2	76
% Single-Unit Trucks	0.0	1.1	1.0	0.5	-	0.9	-	2.2	1.3	3.0	-	1.4	-	0.9	0.0	1.1	-	1.0	0.0	2.6	0.0	1.4	-	1.8	1.2
Articulated Trucks	0	0	18	0	-	18	0	0	22	0	-	22	0	0	0	1	-	1	0	0	0	0	-	0	41
% Articulated Trucks	0.0	0.0	0.7	0.0	-	0.6	-	0.0	0.8	0.0	-	0.7	-	0.0	0.0	0.5	-	0.2	0.0	0.0	0.0	0.0	-	0.0	0.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0

% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Ferry+Rd/CityGate+Ln/Monarch+Dr TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Ferry Rd Eastbound						Ferry Rd Westbound						City Gate Ln Northbound						Monarch Rd Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	6	222	13	0	241	0	5	115	4	0	124	0	8	1	7	0	16	0	2	0	2	0	4	385
7:45 AM	0	4	251	24	0	279	0	18	127	5	0	150	0	7	0	9	0	16	0	2	1	1	0	4	449
8:00 AM	1	19	218	26	0	264	0	18	119	2	0	139	0	8	2	5	0	15	0	0	0	1	0	1	419
8:15 AM	0	10	183	19	1	212	0	15	123	9	0	147	0	10	0	5	0	15	0	2	0	4	0	6	380
Total	1	39	874	82	1	996	0	56	484	20	0	560	0	33	3	26	0	62	0	6	1	8	0	15	1633
Approach %	0.1	3.9	87.8	8.2	-	-	0.0	10.0	86.4	3.6	-	-	0.0	53.2	4.8	41.9	-	-	0.0	40.0	6.7	53.3	-	-	-
Total %	0.1	2.4	53.5	5.0	-	61.0	0.0	3.4	29.6	1.2	-	34.3	0.0	2.0	0.2	1.6	-	3.8	0.0	0.4	0.1	0.5	-	0.9	-
PHF	0.250	0.513	0.871	0.788	-	0.892	0.000	0.778	0.953	0.556	-	0.933	0.000	0.825	0.375	0.722	-	0.969	0.000	0.750	0.250	0.500	-	0.625	0.909
Lights	1	38	861	81	-	981	0	54	468	19	-	541	0	31	3	26	-	60	0	6	1	8	-	15	1597
% Lights	100.0	97.4	98.5	98.8	-	98.5	-	96.4	96.7	95.0	-	96.6	-	93.9	100.0	100.0	-	96.8	-	100.0	100.0	100.0	-	100.0	97.8
Buses	0	0	2	0	-	2	0	0	6	0	-	6	0	2	0	0	-	2	0	0	0	0	-	0	10
% Buses	0.0	0.0	0.2	0.0	-	0.2	-	0.0	1.2	0.0	-	1.1	-	6.1	0.0	0.0	-	3.2	-	0.0	0.0	0.0	-	0.0	0.6
Single-Unit Trucks	0	1	7	1	-	9	0	2	8	1	-	11	0	0	0	0	-	0	0	0	0	0	-	0	20
% Single-Unit Trucks	0.0	2.6	0.8	1.2	-	0.9	-	3.6	1.7	5.0	-	2.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	1.2
Articulated Trucks	0	0	4	0	-	4	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	6
% Articulated Trucks	0.0	0.0	0.5	0.0	-	0.4	-	0.0	0.4	0.0	-	0.4	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Ferry+Rd/CityGate+Ln/Monarch+Dr TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Ferry Rd Eastbound						Ferry Rd Westbound						City Gate Ln Northbound						Monarch Rd Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	4	126	6	1	136	0	4	245	2	0	251	0	19	0	19	1	38	0	5	0	3	0	8	433
4:45 PM	0	2	151	3	0	156	0	9	283	2	0	294	0	13	1	18	0	32	0	3	0	10	0	13	495
5:00 PM	0	2	143	5	0	150	0	3	252	2	0	257	0	30	0	30	0	60	1	6	0	8	0	15	482
5:15 PM	2	0	122	9	0	133	0	6	238	2	0	246	0	23	0	23	0	46	0	1	0	4	2	5	430
Total	2	8	542	23	1	575	0	22	1018	8	0	1048	0	85	1	90	1	176	1	15	0	25	2	41	1840
Approach %	0.3	1.4	94.3	4.0	-	-	0.0	2.1	97.1	0.8	-	-	0.0	48.3	0.6	51.1	-	-	2.4	36.6	0.0	61.0	-	-	-
Total %	0.1	0.4	29.5	1.3	-	31.3	0.0	1.2	55.3	0.4	-	57.0	0.0	4.6	0.1	4.9	-	9.6	0.1	0.8	0.0	1.4	-	2.2	-
PHF	0.250	0.500	0.897	0.639	-	0.921	0.000	0.611	0.899	1.000	-	0.891	0.000	0.708	0.250	0.750	-	0.733	0.250	0.625	0.000	0.625	-	0.683	0.929
Lights	2	8	531	23	-	564	0	21	996	8	-	1025	0	85	1	88	-	174	1	14	0	25	-	40	1803
% Lights	100.0	100.0	98.0	100.0	-	98.1	-	95.5	97.8	100.0	-	97.8	-	100.0	100.0	97.8	-	98.9	100.0	93.3	-	100.0	-	97.6	98.0
Buses	0	0	3	0	-	3	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	4
% Buses	0.0	0.0	0.6	0.0	-	0.5	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.2
Single-Unit Trucks	0	0	4	0	-	4	0	1	9	0	-	10	0	0	0	1	-	1	0	1	0	0	-	1	16
% Single-Unit Trucks	0.0	0.0	0.7	0.0	-	0.7	-	4.5	0.9	0.0	-	1.0	-	0.0	0.0	1.1	-	0.6	0.0	6.7	-	0.0	-	2.4	0.9
Articulated Trucks	0	0	4	0	-	4	0	0	12	0	-	12	0	0	0	1	-	1	0	0	0	0	-	0	17
% Articulated Trucks	0.0	0.0	0.7	0.0	-	0.7	-	0.0	1.2	0.0	-	1.1	-	0.0	0.0	1.1	-	0.6	0.0	0.0	-	0.0	-	0.0	0.9
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Ferry+Rd/Corporate+Ln/Comfort+Dr TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Data

Start Time	Comfort Ln Eastbound						Corporate ln Westbound						Ferry Rd Northbound						Ferry Rd Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	10	161	8	0	179	0	13	96	0	0	109	0	3	0	5	0	8	0	0	0	6	0	6	302
7:15 AM	0	15	196	5	0	216	0	12	107	0	0	119	0	6	0	13	0	19	0	1	0	3	0	4	358
7:30 AM	0	13	216	5	0	234	0	9	123	0	0	132	0	4	0	12	0	16	0	1	0	5	0	6	388
7:45 AM	0	24	231	12	0	267	0	20	137	0	0	157	0	3	0	12	0	15	0	0	0	2	0	2	441
Hourly Total	0	62	804	30	0	896	0	54	463	0	0	517	0	16	0	42	0	58	0	2	0	16	0	18	1489
8:00 AM	0	16	193	12	0	221	0	8	133	0	0	141	0	8	0	11	0	19	0	0	0	7	0	7	388
8:15 AM	0	16	181	11	0	208	0	19	129	1	0	149	0	3	0	6	0	9	0	1	0	3	0	4	370
8:30 AM	0	12	166	3	0	181	0	17	133	0	0	150	0	2	0	11	0	13	0	1	0	5	0	6	350
8:45 AM	1	12	164	3	0	180	0	10	148	1	0	159	0	0	1	2	0	3	0	0	0	4	0	4	346
Hourly Total	1	56	704	29	0	790	0	54	543	2	0	599	0	13	1	30	0	44	0	2	0	19	0	21	1454
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	12	111	3	0	126	0	3	224	2	0	229	0	17	0	45	0	62	0	0	0	16	0	16	433
4:15 PM	0	8	149	4	0	161	0	4	197	0	0	201	0	15	0	26	0	41	0	1	0	13	0	14	417
4:30 PM	0	4	131	6	0	141	0	5	228	1	0	234	0	14	0	30	1	44	0	1	0	21	0	22	441
4:45 PM	0	5	157	4	0	166	0	5	244	3	0	252	0	14	0	21	1	35	0	0	0	13	0	13	466
Hourly Total	0	29	548	17	0	594	0	17	893	6	0	916	0	60	0	122	2	182	0	2	0	63	0	65	1757
5:00 PM	0	4	185	3	0	192	0	8	234	1	0	243	0	9	1	30	0	40	0	1	0	17	0	18	493
5:15 PM	0	7	138	3	0	148	0	5	226	0	0	231	0	6	1	27	0	34	0	0	0	10	0	10	423
5:30 PM	0	11	150	1	0	162	0	11	205	1	0	217	0	7	0	18	0	25	0	1	1	16	0	18	422
5:45 PM	1	12	138	2	0	153	0	5	164	1	0	170	0	2	0	11	0	13	0	1	0	5	0	6	342
Hourly Total	1	34	611	9	0	655	0	29	829	3	0	861	0	24	2	86	0	112	0	3	1	48	0	52	1680
Grand Total	2	181	2667	85	0	2935	0	154	2728	11	0	2893	0	113	3	280	2	396	0	9	1	146	0	156	6380
Approach %	0.1	6.2	90.9	2.9	-	-	0.0	5.3	94.3	0.4	-	-	0.0	28.5	0.8	70.7	-	-	0.0	5.8	0.6	93.6	-	-	-
Total %	0.0	2.8	41.8	1.3	-	46.0	0.0	2.4	42.8	0.2	-	45.3	0.0	1.8	0.0	4.4	-	6.2	0.0	0.1	0.0	2.3	-	2.4	-
Lights	2	166	2621	85	-	2874	0	153	2670	10	-	2833	0	113	3	280	-	396	0	8	1	135	-	144	6247
% Lights	100.0	91.7	98.3	100.0	-	97.9	-	99.4	97.9	90.9	-	97.9	-	100.0	100.0	100.0	-	100.0	-	88.9	100.0	92.5	-	92.3	97.9
Buses	0	8	10	0	-	18	0	0	10	0	-	10	0	0	0	0	-	0	0	0	0	0	-	0	28
% Buses	0.0	4.4	0.4	0.0	-	0.6	-	0.0	0.4	0.0	-	0.3	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.4
Single-Unit Trucks	0	2	24	0	-	26	0	1	32	0	-	33	0	0	0	0	-	0	0	0	0	6	-	6	65
% Single-Unit Trucks	0.0	1.1	0.9	0.0	-	0.9	-	0.6	1.2	0.0	-	1.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	4.1	-	3.8	1.0
Articulated Trucks	0	5	12	0	-	17	0	0	16	1	-	17	0	0	0	0	-	0	0	1	0	5	-	6	40
% Articulated Trucks	0.0	2.8	0.4	0.0	-	0.6	-	0.0	0.6	9.1	-	0.6	-	0.0	0.0	0.0	-	0.0	-	11.1	0.0	3.4	-	3.8	0.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0

% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Ferry+Rd/Corporate+Ln/Comfort+Dr TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Comfort Ln Eastbound						Corporate ln Westbound						Ferry Rd Northbound						Ferry Rd Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	13	216	5	0	234	0	9	123	0	0	132	0	4	0	12	0	16	0	1	0	5	0	6	388
7:45 AM	0	24	231	12	0	267	0	20	137	0	0	157	0	3	0	12	0	15	0	0	0	2	0	2	441
8:00 AM	0	16	193	12	0	221	0	8	133	0	0	141	0	8	0	11	0	19	0	0	0	7	0	7	388
8:15 AM	0	16	181	11	0	208	0	19	129	1	0	149	0	3	0	6	0	9	0	1	0	3	0	4	370
Total	0	69	821	40	0	930	0	56	522	1	0	579	0	18	0	41	0	59	0	2	0	17	0	19	1587
Approach %	0.0	7.4	88.3	4.3	-	-	0.0	9.7	90.2	0.2	-	-	0.0	30.5	0.0	69.5	-	-	0.0	10.5	0.0	89.5	-	-	-
Total %	0.0	4.3	51.7	2.5	-	58.6	0.0	3.5	32.9	0.1	-	36.5	0.0	1.1	0.0	2.6	-	3.7	0.0	0.1	0.0	1.1	-	1.2	-
PHF	0.000	0.719	0.889	0.833	-	0.871	0.000	0.700	0.953	0.250	-	0.922	0.000	0.563	0.000	0.854	-	0.776	0.000	0.500	0.000	0.607	-	0.679	0.900
Lights	0	66	811	40	-	917	0	56	503	1	-	560	0	18	0	41	-	59	0	2	0	15	-	17	1553
% Lights	-	95.7	98.8	100.0	-	98.6	-	100.0	96.4	100.0	-	96.7	-	100.0	-	100.0	-	100.0	-	100.0	-	88.2	-	89.5	97.9
Buses	0	2	1	0	-	3	0	0	5	0	-	5	0	0	0	0	-	0	0	0	0	0	-	0	8
% Buses	-	2.9	0.1	0.0	-	0.3	-	0.0	1.0	0.0	-	0.9	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.5
Single-Unit Trucks	0	0	7	0	-	7	0	0	10	0	-	10	0	0	0	0	-	0	0	0	0	2	-	2	19
% Single-Unit Trucks	-	0.0	0.9	0.0	-	0.8	-	0.0	1.9	0.0	-	1.7	-	0.0	-	0.0	-	0.0	-	0.0	-	11.8	-	10.5	1.2
Articulated Trucks	0	1	2	0	-	3	0	0	4	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	7
% Articulated Trucks	-	1.4	0.2	0.0	-	0.3	-	0.0	0.8	0.0	-	0.7	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Ferry+Rd/Corporate+Ln/Comfort+Dr TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Comfort Ln Eastbound						Corporate ln Westbound						Ferry Rd Northbound						Ferry Rd Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	4	131	6	0	141	0	5	228	1	0	234	0	14	0	30	1	44	0	1	0	21	0	22	441
4:45 PM	0	5	157	4	0	166	0	5	244	3	0	252	0	14	0	21	1	35	0	0	0	13	0	13	466
5:00 PM	0	4	185	3	0	192	0	8	234	1	0	243	0	9	1	30	0	40	0	1	0	17	0	18	493
5:15 PM	0	7	138	3	0	148	0	5	226	0	0	231	0	6	1	27	0	34	0	0	0	10	0	10	423
Total	0	20	611	16	0	647	0	23	932	5	0	960	0	43	2	108	2	153	0	2	0	61	0	63	1823
Approach %	0.0	3.1	94.4	2.5	-	-	0.0	2.4	97.1	0.5	-	-	0.0	28.1	1.3	70.6	-	-	0.0	3.2	0.0	96.8	-	-	-
Total %	0.0	1.1	33.5	0.9	-	35.5	0.0	1.3	51.1	0.3	-	52.7	0.0	2.4	0.1	5.9	-	8.4	0.0	0.1	0.0	3.3	-	3.5	-
PHF	0.000	0.714	0.826	0.667	-	0.842	0.000	0.719	0.955	0.417	-	0.952	0.000	0.768	0.500	0.900	-	0.869	0.000	0.500	0.000	0.726	-	0.716	0.924
Lights	0	17	600	16	-	633	0	23	918	4	-	945	0	43	2	108	-	153	0	1	0	57	-	58	1789
% Lights	-	85.0	98.2	100.0	-	97.8	-	100.0	98.5	80.0	-	98.4	-	100.0	100.0	100.0	-	100.0	-	50.0	-	93.4	-	92.1	98.1
Buses	0	2	1	0	-	3	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	5
% Buses	-	10.0	0.2	0.0	-	0.5	-	0.0	0.2	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.3
Single-Unit Trucks	0	0	6	0	-	6	0	0	5	0	-	5	0	0	0	0	-	0	0	0	0	1	-	1	12
% Single-Unit Trucks	-	0.0	1.0	0.0	-	0.9	-	0.0	0.5	0.0	-	0.5	-	0.0	0.0	0.0	-	0.0	-	0.0	-	1.6	-	1.6	0.7
Articulated Trucks	0	1	4	0	-	5	0	0	7	1	-	8	0	0	0	0	-	0	0	1	0	3	-	4	17
% Articulated Trucks	-	5.0	0.7	0.0	-	0.8	-	0.0	0.8	20.0	-	0.8	-	0.0	0.0	0.0	-	0.0	-	50.0	-	4.9	-	6.3	0.9
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: IL+59+with+Westings TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Data

Start Time	Westings Ave Westbound					Il 59 Northbound					Il 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	0	0	11	0	11	0	312	34	0	346	0	0	247	0	247	604
7:15 AM	0	0	4	0	4	0	292	44	0	336	0	0	277	0	277	617
7:30 AM	0	0	6	0	6	0	282	47	0	329	0	0	261	0	261	596
7:45 AM	0	0	4	0	4	0	266	71	0	337	0	0	281	0	281	622
Hourly Total	0	0	25	0	25	0	1152	196	0	1348	0	0	1066	0	1066	2439
8:00 AM	0	0	4	0	4	0	243	76	0	319	0	0	300	0	300	623
8:15 AM	0	0	6	0	6	0	262	80	0	342	0	0	293	0	293	641
8:30 AM	0	0	4	0	4	0	250	56	0	306	0	0	259	0	259	569
8:45 AM	0	0	3	0	3	0	236	37	0	273	0	0	247	0	247	523
Hourly Total	0	0	17	0	17	0	991	249	0	1240	0	0	1099	0	1099	2356
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	22	0	22	0	297	17	0	314	0	0	417	0	417	753
4:15 PM	0	0	20	0	20	0	300	13	0	313	0	0	339	0	339	672
4:30 PM	0	0	22	0	22	0	297	12	0	309	0	0	369	0	369	700
4:45 PM	0	0	15	0	15	0	328	12	0	340	0	0	289	0	289	644
Hourly Total	0	0	79	0	79	0	1222	54	0	1276	0	0	1414	0	1414	2769
5:00 PM	0	0	40	0	40	0	347	13	0	360	0	0	315	0	315	715
5:15 PM	0	0	21	0	21	0	289	23	0	312	0	0	359	0	359	692
5:30 PM	0	0	17	2	17	0	360	16	0	376	0	0	370	0	370	763
5:45 PM	0	0	12	0	12	0	304	15	0	319	0	0	322	0	322	653
Hourly Total	0	0	90	2	90	0	1300	67	0	1367	0	0	1366	0	1366	2823
Grand Total	0	0	211	2	211	0	4665	566	0	5231	0	0	4945	0	4945	10387
Approach %	0.0	0.0	100.0	-	-	0.0	89.2	10.8	-	-	0.0	0.0	100.0	-	-	-
Total %	0.0	0.0	2.0	-	2.0	0.0	44.9	5.4	-	50.4	0.0	0.0	47.6	-	47.6	-
Lights	0	0	211	-	211	0	4218	563	-	4781	0	0	4498	-	4498	9490
% Lights	-	-	100.0	-	100.0	-	90.4	99.5	-	91.4	-	-	91.0	-	91.0	91.4
Buses	0	0	0	-	0	0	18	2	-	20	0	0	10	-	10	30
% Buses	-	-	0.0	-	0.0	-	0.4	0.4	-	0.4	-	-	0.2	-	0.2	0.3
Single-Unit Trucks	0	0	0	-	0	0	115	0	-	115	0	0	144	-	144	259
% Single-Unit Trucks	-	-	0.0	-	0.0	-	2.5	0.0	-	2.2	-	-	2.9	-	2.9	2.5
Articulated Trucks	0	0	0	-	0	0	314	1	-	315	0	0	293	-	293	608
% Articulated Trucks	-	-	0.0	-	0.0	-	6.7	0.2	-	6.0	-	-	5.9	-	5.9	5.9
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	2	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: IL+59+with+Westings TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Westings Ave Westbound					Il 59 Northbound					Il 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:30 AM	0	0	6	0	6	0	282	47	0	329	0	0	261	0	261	596
7:45 AM	0	0	4	0	4	0	266	71	0	337	0	0	281	0	281	622
8:00 AM	0	0	4	0	4	0	243	76	0	319	0	0	300	0	300	623
8:15 AM	0	0	6	0	6	0	262	80	0	342	0	0	293	0	293	641
Total	0	0	20	0	20	0	1053	274	0	1327	0	0	1135	0	1135	2482
Approach %	0.0	0.0	100.0	-	-	0.0	79.4	20.6	-	-	0.0	0.0	100.0	-	-	-
Total %	0.0	0.0	0.8	-	0.8	0.0	42.4	11.0	-	53.5	0.0	0.0	45.7	-	45.7	-
PHF	0.000	0.000	0.833	-	0.833	0.000	0.934	0.856	-	0.970	0.000	0.000	0.946	-	0.946	0.968
Lights	0	0	20	-	20	0	935	272	-	1207	0	0	999	-	999	2226
% Lights	-	-	100.0	-	100.0	-	88.8	99.3	-	91.0	-	-	88.0	-	88.0	89.7
Buses	0	0	0	-	0	0	8	2	-	10	0	0	5	-	5	15
% Buses	-	-	0.0	-	0.0	-	0.8	0.7	-	0.8	-	-	0.4	-	0.4	0.6
Single-Unit Trucks	0	0	0	-	0	0	22	0	-	22	0	0	49	-	49	71
% Single-Unit Trucks	-	-	0.0	-	0.0	-	2.1	0.0	-	1.7	-	-	4.3	-	4.3	2.9
Articulated Trucks	0	0	0	-	0	0	88	0	-	88	0	0	82	-	82	170
% Articulated Trucks	-	-	0.0	-	0.0	-	8.4	0.0	-	6.6	-	-	7.2	-	7.2	6.8
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: IL+59+with+Westings TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Westings Ave Westbound					Il 59 Northbound					Il 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
4:30 PM	0	0	22	0	22	0	297	12	0	309	0	0	369	0	369	700
4:45 PM	0	0	15	0	15	0	328	12	0	340	0	0	289	0	289	644
5:00 PM	0	0	40	0	40	0	347	13	0	360	0	0	315	0	315	715
5:15 PM	0	0	21	0	21	0	289	23	0	312	0	0	359	0	359	692
Total	0	0	98	0	98	0	1261	60	0	1321	0	0	1332	0	1332	2751
Approach %	0.0	0.0	100.0	-	-	0.0	95.5	4.5	-	-	0.0	0.0	100.0	-	-	-
Total %	0.0	0.0	3.6	-	3.6	0.0	45.8	2.2	-	48.0	0.0	0.0	48.4	-	48.4	-
PHF	0.000	0.000	0.613	-	0.613	0.000	0.909	0.652	-	0.917	0.000	0.000	0.902	-	0.902	0.962
Lights	0	0	98	-	98	0	1165	59	-	1224	0	0	1245	-	1245	2567
% Lights	-	-	100.0	-	100.0	-	92.4	98.3	-	92.7	-	-	93.5	-	93.5	93.3
Buses	0	0	0	-	0	0	4	0	-	4	0	0	0	-	0	4
% Buses	-	-	0.0	-	0.0	-	0.3	0.0	-	0.3	-	-	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	0	-	0	0	30	0	-	30	0	0	30	-	30	60
% Single-Unit Trucks	-	-	0.0	-	0.0	-	2.4	0.0	-	2.3	-	-	2.3	-	2.3	2.2
Articulated Trucks	0	0	0	-	0	0	62	1	-	63	0	0	57	-	57	120
% Articulated Trucks	-	-	0.0	-	0.0	-	4.9	1.7	-	4.8	-	-	4.3	-	4.3	4.4
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Route+59+and+Ferry+Road TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Data

Start Time	Ferry Rd Eastbound						Ferry Rd Westbound						IL 59 Northbound						IL 59 Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	9	64	28	0	101	0	12	25	60	0	97	5	38	277	26	0	346	0	106	248	10	0	364	908
7:15 AM	0	13	80	31	0	124	0	14	19	77	0	110	2	25	295	39	0	361	0	106	274	6	0	386	981
7:30 AM	0	22	104	22	0	148	0	13	28	91	0	132	2	23	292	26	0	343	1	110	268	15	0	394	1017
7:45 AM	0	22	131	25	0	178	0	16	29	76	0	121	3	33	288	38	0	362	0	98	309	11	0	418	1079
Hourly Total	0	66	379	106	0	551	0	55	101	304	0	460	12	119	1152	129	0	1412	1	420	1099	42	0	1562	3985
8:00 AM	0	22	120	29	0	171	0	21	37	90	0	148	2	30	177	36	0	245	0	97	246	11	0	354	918
8:15 AM	0	13	87	18	0	118	0	21	27	73	0	121	5	32	220	33	0	290	0	99	258	8	0	365	894
8:30 AM	0	12	83	25	0	120	0	19	31	87	0	137	2	31	195	33	0	261	0	92	233	7	0	332	850
8:45 AM	1	9	65	13	0	88	0	20	25	86	0	131	0	28	220	20	0	268	0	91	226	13	0	330	817
Hourly Total	1	56	355	85	0	497	0	81	120	336	0	537	9	121	812	122	0	1064	0	379	963	39	0	1381	3479
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	13	50	30	0	93	0	69	96	124	0	289	8	37	257	18	0	320	0	61	293	12	0	366	1068
4:15 PM	0	21	44	27	1	92	0	55	76	103	0	234	16	38	248	14	0	316	0	86	254	12	0	352	994
4:30 PM	0	15	44	47	0	106	0	51	103	111	0	265	8	49	253	13	0	323	1	64	316	19	0	400	1094
4:45 PM	0	15	58	20	0	93	1	54	126	111	0	292	8	46	244	29	0	327	0	70	218	27	0	315	1027
Hourly Total	0	64	196	124	1	384	1	229	401	449	0	1080	40	170	1002	74	0	1286	1	281	1081	70	0	1433	4183
5:00 PM	0	19	59	43	0	121	1	47	118	103	0	269	12	34	297	27	0	370	1	66	205	23	0	295	1055
5:15 PM	0	47	62	28	0	137	2	64	112	108	0	286	14	43	226	23	0	306	1	68	212	17	0	298	1027
5:30 PM	0	45	48	54	0	147	0	49	93	97	0	239	11	46	279	18	0	354	0	82	280	21	0	383	1123
5:45 PM	0	58	59	51	0	168	0	38	60	100	0	198	8	29	260	21	0	318	0	77	216	12	0	305	989
Hourly Total	0	169	228	176	0	573	3	198	383	408	0	992	45	152	1062	89	0	1348	2	293	913	73	0	1281	4194
Grand Total	1	355	1158	491	1	2005	4	563	1005	1497	0	3069	106	562	4028	414	0	5110	4	1373	4056	224	0	5657	15841
Approach %	0.0	17.7	57.8	24.5	-	-	0.1	18.3	32.7	48.8	-	-	2.1	11.0	78.8	8.1	-	-	0.1	24.3	71.7	4.0	-	-	-
Total %	0.0	2.2	7.3	3.1	-	12.7	0.0	3.6	6.3	9.5	-	19.4	0.7	3.5	25.4	2.6	-	32.3	0.0	8.7	25.6	1.4	-	35.7	-
Lights	1	327	1146	391	-	1865	4	548	986	1458	-	2996	106	464	3686	396	-	4652	4	1348	3713	199	-	5264	14777
% Lights	100.0	92.1	99.0	79.6	-	93.0	100.0	97.3	98.1	97.4	-	97.6	100.0	82.6	91.5	95.7	-	91.0	100.0	98.2	91.5	88.8	-	93.1	93.3
Buses	0	0	3	4	-	7	0	0	4	8	-	12	0	0	17	3	-	20	0	4	9	0	-	13	52
% Buses	0.0	0.0	0.3	0.8	-	0.3	0.0	0.0	0.4	0.5	-	0.4	0.0	0.0	0.4	0.7	-	0.4	0.0	0.3	0.2	0.0	-	0.2	0.3
Single-Unit Trucks	0	13	6	29	-	48	0	9	8	17	-	34	0	26	72	11	-	109	0	12	103	10	-	125	316
% Single-Unit Trucks	0.0	3.7	0.5	5.9	-	2.4	0.0	1.6	0.8	1.1	-	1.1	0.0	4.6	1.8	2.7	-	2.1	0.0	0.9	2.5	4.5	-	2.2	2.0
Articulated Trucks	0	15	3	67	-	85	0	6	7	14	-	27	0	72	253	4	-	329	0	9	231	15	-	255	696
% Articulated Trucks	0.0	4.2	0.3	13.6	-	4.2	0.0	1.1	0.7	0.9	-	0.9	0.0	12.8	6.3	1.0	-	6.4	0.0	0.7	5.7	6.7	-	4.5	4.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0

% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Route+59+and+Ferry+Road TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Ferry Rd Eastbound						Ferry Rd Westbound						IL 59 Northbound						IL 59 Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	22	104	22	0	148	0	13	28	91	0	132	2	23	292	26	0	343	1	110	268	15	0	394	1017
7:45 AM	0	22	131	25	0	178	0	16	29	76	0	121	3	33	288	38	0	362	0	98	309	11	0	418	1079
8:00 AM	0	22	120	29	0	171	0	21	37	90	0	148	2	30	177	36	0	245	0	97	246	11	0	354	918
8:15 AM	0	13	87	18	0	118	0	21	27	73	0	121	5	32	220	33	0	290	0	99	258	8	0	365	894
Total	0	79	442	94	0	615	0	71	121	330	0	522	12	118	977	133	0	1240	1	404	1081	45	0	1531	3908
Approach %	0.0	12.8	71.9	15.3	-	-	0.0	13.6	23.2	63.2	-	-	1.0	9.5	78.8	10.7	-	-	0.1	26.4	70.6	2.9	-	-	-
Total %	0.0	2.0	11.3	2.4	-	15.7	0.0	1.8	3.1	8.4	-	13.4	0.3	3.0	25.0	3.4	-	31.7	0.0	10.3	27.7	1.2	-	39.2	-
PHF	0.000	0.898	0.844	0.810	-	0.864	0.000	0.845	0.818	0.907	-	0.882	0.600	0.894	0.836	0.875	-	0.856	0.250	0.918	0.875	0.750	-	0.916	0.905
Lights	0	68	441	74	-	583	0	65	117	317	-	499	12	98	877	127	-	1114	1	397	954	36	-	1388	3584
% Lights	-	86.1	99.8	78.7	-	94.8	-	91.5	96.7	96.1	-	95.6	100.0	83.1	89.8	95.5	-	89.8	100.0	98.3	88.3	80.0	-	90.7	91.7
Buses	0	0	0	2	-	2	0	0	2	6	-	8	0	0	8	1	-	9	0	0	5	0	-	5	24
% Buses	-	0.0	0.0	2.1	-	0.3	-	0.0	1.7	1.8	-	1.5	0.0	0.0	0.8	0.8	-	0.7	0.0	0.0	0.5	0.0	-	0.3	0.6
Single-Unit Trucks	0	6	1	7	-	14	0	4	1	5	-	10	0	4	16	4	-	24	0	4	46	3	-	53	101
% Single-Unit Trucks	-	7.6	0.2	7.4	-	2.3	-	5.6	0.8	1.5	-	1.9	0.0	3.4	1.6	3.0	-	1.9	0.0	1.0	4.3	6.7	-	3.5	2.6
Articulated Trucks	0	5	0	11	-	16	0	2	1	2	-	5	0	16	76	1	-	93	0	3	76	6	-	85	199
% Articulated Trucks	-	6.3	0.0	11.7	-	2.6	-	2.8	0.8	0.6	-	1.0	0.0	13.6	7.8	0.8	-	7.5	0.0	0.7	7.0	13.3	-	5.6	5.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Route+59+and+Ferry+Road TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Ferry Rd Eastbound						Ferry Rd Westbound						IL 59 Northbound						IL 59 Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	15	44	47	0	106	0	51	103	111	0	265	8	49	253	13	0	323	1	64	316	19	0	400	1094
4:45 PM	0	15	58	20	0	93	1	54	126	111	0	292	8	46	244	29	0	327	0	70	218	27	0	315	1027
5:00 PM	0	19	59	43	0	121	1	47	118	103	0	269	12	34	297	27	0	370	1	66	205	23	0	295	1055
5:15 PM	0	47	62	28	0	137	2	64	112	108	0	286	14	43	226	23	0	306	1	68	212	17	0	298	1027
Total	0	96	223	138	0	457	4	216	459	433	0	1112	42	172	1020	92	0	1326	3	268	951	86	0	1308	4203
Approach %	0.0	21.0	48.8	30.2	-	-	0.4	19.4	41.3	38.9	-	-	3.2	13.0	76.9	6.9	-	-	0.2	20.5	72.7	6.6	-	-	-
Total %	0.0	2.3	5.3	3.3	-	10.9	0.1	5.1	10.9	10.3	-	26.5	1.0	4.1	24.3	2.2	-	31.5	0.1	6.4	22.6	2.0	-	31.1	-
PHF	0.000	0.511	0.899	0.734	-	0.834	0.500	0.844	0.911	0.975	-	0.952	0.750	0.878	0.859	0.793	-	0.896	0.750	0.957	0.752	0.796	-	0.818	0.960
Lights	0	91	218	117	-	426	4	213	454	421	-	1092	42	153	955	89	-	1239	3	266	903	82	-	1254	4011
% Lights	-	94.8	97.8	84.8	-	93.2	100.0	98.6	98.9	97.2	-	98.2	100.0	89.0	93.6	96.7	-	93.4	100.0	99.3	95.0	95.3	-	95.9	95.4
Buses	0	0	0	0	-	0	0	0	1	1	-	2	0	0	3	0	-	3	0	1	0	0	-	1	6
% Buses	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.2	0.2	-	0.2	0.0	0.0	0.3	0.0	-	0.2	0.0	0.4	0.0	0.0	-	0.1	0.1
Single-Unit Trucks	0	2	2	6	-	10	0	1	2	4	-	7	0	6	13	2	-	21	0	0	10	1	-	11	49
% Single-Unit Trucks	-	2.1	0.9	4.3	-	2.2	0.0	0.5	0.4	0.9	-	0.6	0.0	3.5	1.3	2.2	-	1.6	0.0	0.0	1.1	1.2	-	0.8	1.2
Articulated Trucks	0	3	3	15	-	21	0	2	2	7	-	11	0	13	49	1	-	63	0	1	38	3	-	42	137
% Articulated Trucks	-	3.1	1.3	10.9	-	4.6	0.0	0.9	0.4	1.6	-	1.0	0.0	7.6	4.8	1.1	-	4.8	0.0	0.4	4.0	3.5	-	3.2	3.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: westings ave and Building access Dr
Site Code:
Start Date: 11/18/2025

Turning Movement Data

Start Time	Westings ave Eastbound					Westings ave Westbound					access dr Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
7:00 AM	0	0	18	0	18	0	4	0	0	4	0	6	7	0	13	35
7:15 AM	0	1	21	0	22	0	6	1	1	7	0	15	4	4	19	48
7:30 AM	0	0	19	0	19	0	7	1	0	8	0	14	4	1	18	45
7:45 AM	0	0	26	1	26	0	12	0	0	12	0	13	4	1	17	55
Hourly Total	0	1	84	1	85	0	29	2	1	31	0	48	19	6	67	183
8:00 AM	0	2	25	0	27	0	9	1	0	10	0	12	2	0	14	51
8:15 AM	0	0	24	0	24	0	17	2	0	19	0	7	6	0	13	56
8:30 AM	0	0	19	0	19	0	10	0	0	10	0	7	2	0	9	38
8:45 AM	0	0	8	0	8	1	9	1	0	11	0	2	1	0	3	22
Hourly Total	0	2	76	0	78	1	45	4	0	50	0	28	11	0	39	167
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	1	27	0	28	0	3	5	1	8	0	7	2	5	9	45
4:15 PM	0	6	16	0	22	0	3	4	0	7	0	0	0	2	0	29
4:30 PM	0	2	20	0	22	0	10	9	0	19	0	1	1	3	2	43
4:45 PM	0	3	14	0	17	0	6	5	0	11	0	7	3	5	10	38
Hourly Total	0	12	77	0	89	0	22	23	1	45	0	15	6	15	21	155
5:00 PM	0	1	26	0	27	0	5	5	0	10	0	0	2	2	2	39
5:15 PM	1	6	16	0	23	0	6	6	0	12	0	3	3	0	6	41
5:30 PM	0	10	12	0	22	0	6	6	0	12	0	3	2	4	5	39
5:45 PM	0	9	9	0	18	0	2	8	0	10	0	4	1	3	5	33
Hourly Total	1	26	63	0	90	0	19	25	0	44	0	10	8	9	18	152
Grand Total	1	41	300	1	342	1	115	54	2	170	0	101	44	30	145	657
Approach %	0.3	12.0	87.7	-	-	0.6	67.6	31.8	-	-	0.0	69.7	30.3	-	-	-
Total %	0.2	6.2	45.7	-	52.1	0.2	17.5	8.2	-	25.9	0.0	15.4	6.7	-	22.1	-
Lights	1	41	300	-	342	1	114	54	-	169	0	101	44	-	145	656
% Lights	100.0	100.0	100.0	-	100.0	100.0	99.1	100.0	-	99.4	-	100.0	100.0	-	100.0	99.8
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Single-Unit Trucks	0.0	0.0	0.0	-	0.0	0.0	0.9	0.0	-	0.6	-	0.0	0.0	-	0.0	0.2
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	2	-	-	-	-	30	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: westings ave and Building access Dr
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Westings ave Eastbound					Westings ave Westbound					access dr Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:30 AM	0	0	19	0	19	0	7	1	0	8	0	14	4	1	18	45
7:45 AM	0	0	26	1	26	0	12	0	0	12	0	13	4	1	17	55
8:00 AM	0	2	25	0	27	0	9	1	0	10	0	12	2	0	14	51
8:15 AM	0	0	24	0	24	0	17	2	0	19	0	7	6	0	13	56
Total	0	2	94	1	96	0	45	4	0	49	0	46	16	2	62	207
Approach %	0.0	2.1	97.9	-	-	0.0	91.8	8.2	-	-	0.0	74.2	25.8	-	-	-
Total %	0.0	1.0	45.4	-	46.4	0.0	21.7	1.9	-	23.7	0.0	22.2	7.7	-	30.0	-
PHF	0.000	0.250	0.904	-	0.889	0.000	0.662	0.500	-	0.645	0.000	0.821	0.667	-	0.861	0.924
Lights	0	2	94	-	96	0	45	4	-	49	0	46	16	-	62	207
% Lights	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	2	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: westings ave and Building access Dr
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Westings ave Eastbound					Westings ave Westbound					access dr Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:30 PM	0	2	20	0	22	0	10	9	0	19	0	1	1	3	2	43
4:45 PM	0	3	14	0	17	0	6	5	0	11	0	7	3	5	10	38
5:00 PM	0	1	26	0	27	0	5	5	0	10	0	0	2	2	2	39
5:15 PM	1	6	16	0	23	0	6	6	0	12	0	3	3	0	6	41
Total	1	12	76	0	89	0	27	25	0	52	0	11	9	10	20	161
Approach %	1.1	13.5	85.4	-	-	0.0	51.9	48.1	-	-	0.0	55.0	45.0	-	-	-
Total %	0.6	7.5	47.2	-	55.3	0.0	16.8	15.5	-	32.3	0.0	6.8	5.6	-	12.4	-
PHF	0.250	0.500	0.731	-	0.824	0.000	0.675	0.694	-	0.684	0.000	0.393	0.750	-	0.500	0.936
Lights	1	12	76	-	89	0	27	25	-	52	0	11	9	-	20	161
% Lights	100.0	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	10	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Westings Ave and Comfort Ln
TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Data

Start Time	Westings Ave Eastbound					Westings Ave Westbound					Comfort Ln Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
7:00 AM	0	6	18	0	24	0	0	2	0	2	0	17	3	0	20	46
7:15 AM	0	18	18	0	36	0	1	3	0	4	0	9	8	0	17	57
7:30 AM	0	15	17	0	32	0	0	0	0	0	0	9	6	0	15	47
7:45 AM	0	15	27	0	42	0	0	0	0	0	0	20	12	0	32	74
Hourly Total	0	54	80	0	134	0	1	5	0	6	0	55	29	0	84	224
8:00 AM	0	16	19	0	35	0	0	3	0	3	0	13	11	0	24	62
8:15 AM	0	7	22	0	29	0	1	1	0	2	1	10	17	0	28	59
8:30 AM	0	10	16	0	26	0	0	3	0	3	0	10	11	0	21	50
8:45 AM	0	3	8	0	11	0	1	0	0	1	0	5	9	0	14	26
Hourly Total	0	36	65	0	101	0	2	7	0	9	1	38	48	0	87	197
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	1	31	2	0	34	0	2	31	0	33	0	2	4	0	6	73
4:15 PM	0	17	1	0	18	0	2	30	0	32	0	0	6	0	6	56
4:30 PM	0	18	2	0	20	0	7	21	0	28	0	2	11	0	13	61
4:45 PM	0	20	0	0	20	0	2	15	0	17	0	0	9	0	9	46
Hourly Total	1	86	5	0	92	0	13	97	0	110	0	4	30	0	34	236
5:00 PM	0	25	1	0	26	0	5	15	0	20	0	1	7	0	8	54
5:15 PM	0	20	1	0	21	0	1	15	0	16	0	1	8	0	9	46
5:30 PM	0	13	0	0	13	0	2	11	0	13	0	0	9	0	9	35
5:45 PM	1	9	2	0	12	0	0	5	0	5	0	1	6	0	7	24
Hourly Total	1	67	4	0	72	0	8	46	0	54	0	3	30	0	33	159
Grand Total	2	243	154	0	399	0	24	155	0	179	1	100	137	0	238	816
Approach %	0.5	60.9	38.6	-	-	0.0	13.4	86.6	-	-	0.4	42.0	57.6	-	-	-
Total %	0.2	29.8	18.9	-	48.9	0.0	2.9	19.0	-	21.9	0.1	12.3	16.8	-	29.2	-
Lights	2	243	154	-	399	0	23	155	-	178	1	99	137	-	237	814
% Lights	100.0	100.0	100.0	-	100.0	-	95.8	100.0	-	99.4	100.0	99.0	100.0	-	99.6	99.8
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	1	0	-	1	0	1	0	-	1	2
% Single-Unit Trucks	0.0	0.0	0.0	-	0.0	-	4.2	0.0	-	0.6	0.0	1.0	0.0	-	0.4	0.2
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Westings Ave and Comfort Ln
TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Westings Ave Eastbound					Westings Ave Westbound					Comfort Ln Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:30 AM	0	15	17	0	32	0	0	0	0	0	0	9	6	0	15	47
7:45 AM	0	15	27	0	42	0	0	0	0	0	0	20	12	0	32	74
8:00 AM	0	16	19	0	35	0	0	3	0	3	0	13	11	0	24	62
8:15 AM	0	7	22	0	29	0	1	1	0	2	1	10	17	0	28	59
Total	0	53	85	0	138	0	1	4	0	5	1	52	46	0	99	242
Approach %	0.0	38.4	61.6	-	-	0.0	20.0	80.0	-	-	1.0	52.5	46.5	-	-	-
Total %	0.0	21.9	35.1	-	57.0	0.0	0.4	1.7	-	2.1	0.4	21.5	19.0	-	40.9	-
PHF	0.000	0.828	0.787	-	0.821	0.000	0.250	0.333	-	0.417	0.250	0.650	0.676	-	0.773	0.818
Lights	0	53	85	-	138	0	1	4	-	5	1	52	46	-	99	242
% Lights	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 mmendoza@kloainc.com

Count Name: Westings Ave and Comfort Ln
TMC
Site Code:
Start Date: 11/18/2025

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Westings Ave Eastbound					Westings Ave Westbound					Comfort Ln Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:30 PM	0	18	2	0	20	0	7	21	0	28	0	2	11	0	13	61
4:45 PM	0	20	0	0	20	0	2	15	0	17	0	0	9	0	9	46
5:00 PM	0	25	1	0	26	0	5	15	0	20	0	1	7	0	8	54
5:15 PM	0	20	1	0	21	0	1	15	0	16	0	1	8	0	9	46
Total	0	83	4	0	87	0	15	66	0	81	0	4	35	0	39	207
Approach %	0.0	95.4	4.6	-	-	0.0	18.5	81.5	-	-	0.0	10.3	89.7	-	-	-
Total %	0.0	40.1	1.9	-	42.0	0.0	7.2	31.9	-	39.1	0.0	1.9	16.9	-	18.8	-
PHF	0.000	0.830	0.500	-	0.837	0.000	0.536	0.786	-	0.723	0.000	0.500	0.795	-	0.750	0.848
Lights	0	83	4	-	87	0	15	66	-	81	0	4	35	-	39	207
% Lights	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Site Plan

HEDK ARCHITECTS

CITY GATE II SITE PLAN

Naperville, IL

SCALE 1"= 30'-0"

0 30 60

24190 / 03.05.2026
Willow Bridge

CMAP 2050 Projections Letter

Chicago Metropolitan Agency for Planning

433 West Van Buren Street, Suite 450
Chicago, IL 60607
cmap.illinois.gov | 312-454-0400

December 15, 2025

Mike Mendoza
Consultant
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: Ferry Road and Coporate Lane/Comfort Drive
IDOT

Dear Mr. Mendoza:

In response to a request made on your behalf and dated December 12, 2025, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
IL 59 north of Ferry Road	34,200	40,000
IL 59 south of Ferry Road	7,950	9,300
Ferry Road West of IL 59	12,900	15,500
Ferry Road East of IL 59	12,800	15,400
Ferry Road East of Corporate Ln / Raymond Dr	22,000	26,400

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2025 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806 or email me at jrodriguez@cmap.illinois.gov

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
\2025_trafficForecasts\Naperville\du-63-25\du-62-25.docx

Event Center Trip Generation

Table A

Table A
EVENT CENTER TRIP GENERATION ESTIMATES

Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	In	Out	Total	In	Out	Total
Event Center (400 people)	100	10	110	10	100	110

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0

Unsignalized Intersections	
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 6th Edition.

Capacity Analysis Summary Sheets

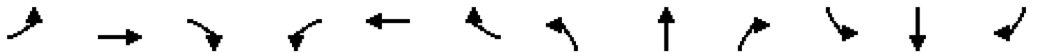
Existing Weekday Morning Peak Hour

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	71	99	3	8	52	46
Future Vol, veh/h	71	99	3	8	52	46
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	87	121	4	10	63	56
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay, s/veh	8.7	7.1	8.1
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	42%	0%	100%	0%
Vol Thru, %	58%	27%	0%	0%
Vol Right, %	0%	73%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	11	52	46
LT Vol	71	0	52	0
Through Vol	99	3	0	0
RT Vol	0	8	0	46
Lane Flow Rate	207	13	63	56
Geometry Grp	2	2	5	5
Degree of Util (X)	0.247	0.015	0.097	0.067
Departure Headway (Hd)	4.296	3.979	5.502	4.297
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	840	902	654	836
Service Time	2.304	1.991	3.214	2.009
HCM Lane V/C Ratio	0.246	0.014	0.096	0.067
HCM Control Delay, s/veh	8.7	7.1	8.8	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1	0	0.3	0.2

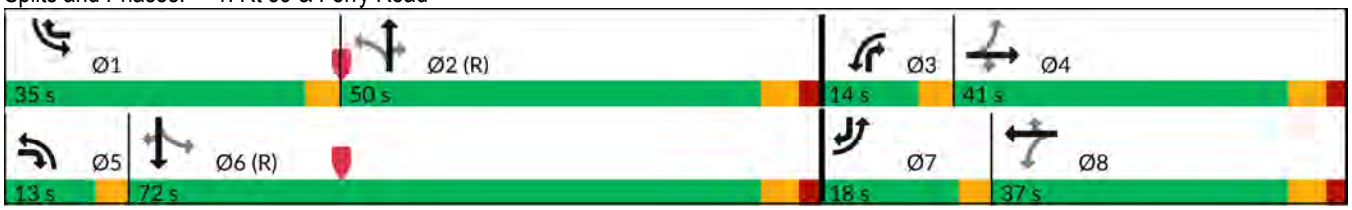


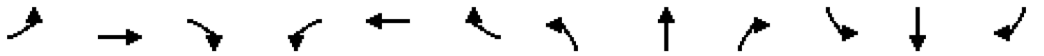
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	460	94	71	123	338	118	982	137	422	1081	45
Future Volume (vph)	79	460	94	71	123	338	118	982	137	422	1081	45
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	11	12	12	11	12	12	11	12	12	11	12	12
Storage Length (ft)	335		200	335		455	650		220	575		190
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	175			175			125			180		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1531	3800	1335	1616	3689	1553	1491	3455	1553	1711	3393	1346
Flt Permitted	0.621			0.223			0.238			0.082		
Satd. Flow (perm)	1000	3800	1335	379	3689	1553	374	3455	1553	148	3393	1346
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103			154			105			51
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		781			858			910			1388	
Travel Time (s)		11.8			13.0			13.8			21.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	14%	0%	21%	8%	3%	4%	17%	10%	4%	2%	12%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	505	103	78	135	371	130	1079	151	464	1188	49
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	9.0	41.0	8.0	8.0	37.0	8.0	8.0	49.5	8.0	8.0	51.5	9.0
Total Split (s)	18.0	41.0	13.0	14.0	37.0	35.0	13.0	50.0	14.0	35.0	72.0	18.0
Total Split (%)	12.9%	29.3%	9.3%	10.0%	26.4%	25.0%	9.3%	35.7%	10.0%	25.0%	51.4%	12.9%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	38.7	25.1	41.6	35.4	23.4	70.8	57.9	45.0	60.5	92.4	75.9	93.1
Actuated g/C Ratio	0.28	0.18	0.30	0.25	0.17	0.51	0.41	0.32	0.43	0.66	0.54	0.67
v/c Ratio	0.27	0.74	0.22	0.44	0.22	0.43	0.55	0.97	0.21	0.83	0.65	0.05
Control Delay (s/veh)	38.2	61.1	6.7	43.3	50.6	14.0	24.9	68.2	9.1	49.7	26.0	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.2	61.1	6.7	43.3	50.6	14.0	24.9	68.2	9.1	49.7	26.0	2.6
LOS	D	E	A	D	D	B	C	E	A	D	C	A
Approach Delay (s/veh)		50.2			26.4			57.5			31.8	
Approach LOS		D			C			E			C	
Queue Length 50th (ft)	59	232	0	53	56	115	42	515	24	338	392	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	99	281	40	90	86	205	79	#671	69	#585	542	15
Internal Link Dist (ft)		701			778			830			1308	
Turn Bay Length (ft)	335		200	335		455	650		220	575		190
Base Capacity (vph)	344	950	473	191	816	861	243	1109	740	560	1840	943
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.53	0.22	0.41	0.17	0.43	0.53	0.97	0.20	0.83	0.65	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 42.0		Intersection LOS: D	
Intersection Capacity Utilization 81.8%		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: 1: Rt 59 & Ferry Road



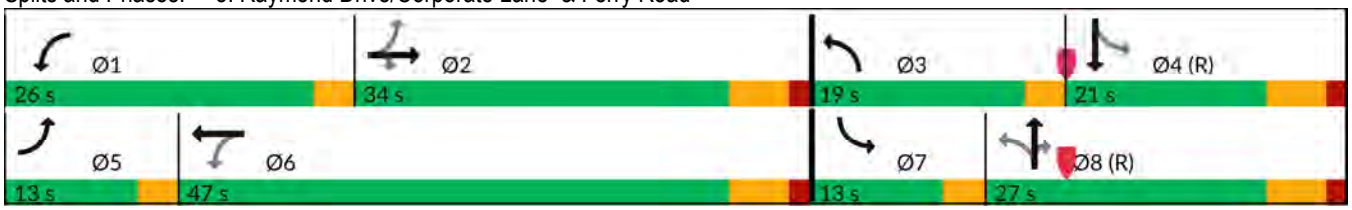


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	379	374	357	191	43	456	42	554	21	19	1
Future Volume (vph)	23	379	374	357	191	43	456	42	554	21	19	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		150	260		0	230		0	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	155			175			160			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.973				0.850		0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	3574	1583	1787	3294	0	1770	1863	1599	1399	1637	0
Flt Permitted	0.599			0.406			0.614			0.728		
Satd. Flow (perm)	1094	3574	1583	764	3294	0	1144	1863	1599	1072	1637	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			394		33				583		1	
Link Speed (mph)		45			40			45			30	
Link Distance (ft)		2731			1191			1229			599	
Travel Time (s)		41.4			20.3			18.6			13.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	1%	2%	1%	5%	14%	2%	2%	1%	29%	11%	100%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	399	394	376	246	0	480	44	583	22	21	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8		8	4		
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	8.0	22.0	22.0	8.0	22.0		8.0	22.0	22.0	8.0	21.0	
Total Split (s)	13.0	34.0	34.0	26.0	47.0		19.0	27.0	27.0	13.0	21.0	
Total Split (%)	13.0%	34.0%	34.0%	26.0%	47.0%		19.0%	27.0%	27.0%	13.0%	21.0%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5		3.0	4.5	4.5	3.0	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5	1.5	0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	35.0	25.8	25.8	50.7	43.8		43.3	36.0	36.0	25.6	16.0	
Actuated g/C Ratio	0.35	0.26	0.26	0.51	0.44		0.43	0.36	0.36	0.26	0.16	
v/c Ratio	0.06	0.43	0.56	0.65	0.17		0.76	0.07	0.61	0.07	0.08	
Control Delay (s/veh)	12.0	31.9	6.3	20.2	14.6		34.5	27.3	6.1	21.4	38.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	12.0	31.9	6.3	20.2	14.6		34.5	27.3	6.1	21.4	38.1	
LOS	B	C	A	C	B		C	C	A	C	D	
Approach Delay (s/veh)		19.0			18.0			19.3			29.6	
Approach LOS		B			B			B			C	
Queue Length 50th (ft)	7	110	0	138	37		239	17	0	8	12	
Queue Length 95th (ft)	17	152	70	183	66		#486	51	99	25	33	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		2651			1111			1149			519	
Turn Bay Length (ft)	145		150	260			230					
Base Capacity (vph)	488	1027	735	622	1490		628	670	948	343	294	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.05	0.39	0.54	0.60	0.17		0.76	0.07	0.61	0.06	0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 19.1		Intersection LOS: B	
Intersection Capacity Utilization 77.5%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Raymond Drive/Corporate Lane & Ferry Road



Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	898	82	56	491	20	33	3	26	6	1	8
Future Vol, veh/h	39	898	82	56	491	20	33	3	26	6	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	200	-	-	150	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	2	1	4	3	5	6	0	0	0	0	0
Mvmt Flow	43	987	90	62	540	22	36	3	29	7	1	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	562	0	0	1077	0	0	1511	1802	538	1254	1836	281
Stage 1	-	-	-	-	-	-	1118	1118	-	674	674	-
Stage 2	-	-	-	-	-	-	393	685	-	581	1163	-
Critical Hdwy	4.16	-	-	4.18	-	-	7.62	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.23	-	-	2.24	-	-	3.56	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	999	-	-	796	-	-	80	80	*847	*130	77	722
Stage 1	-	-	-	-	-	-	357	392	-	*415	457	-
Stage 2	-	-	-	-	-	-	592	452	-	*799	369	-
Platoon blocked, %		-	-	0	-	-			0			
Mov Cap-1 Maneuver	999	-	-	796	-	-	69	71	*847	*110	68	722
Mov Cap-2 Maneuver	-	-	-	-	-	-	215	203	-	*268	187	-
Stage 1	-	-	-	-	-	-	342	375	-	*383	421	-
Stage 2	-	-	-	-	-	-	538	417	-	*733	354	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.34	0.98	18.49	14.55
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	215	638	999	-	-	796	-	-	252	722
HCM Lane V/C Ratio	0.169	0.05	0.043	-	-	0.077	-	-	0.03	0.012
HCM Ctrl Dly (s/v)	25.1	10.9	8.8	-	-	9.9	-	-	19.7	10
HCM Lane LOS	D	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.6	0.2	0.1	-	-	0.3	-	-	0.1	0

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	821	40	58	524	1	26	0	53	2	0	17
Future Vol, veh/h	69	821	40	58	524	1	26	0	53	2	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	230	-	-	140	-	140	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	1	0	0	4	0	0	0	0	0	0	12
Mvmt Flow	77	912	44	64	582	1	29	0	59	2	0	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	583	0	0	957	0	0	1508	1800	478	1321	1822	292
Stage 1	-	-	-	-	-	-	1088	1088	-	712	712	-
Stage 2	-	-	-	-	-	-	420	712	-	609	1110	-
Critical Hdwy	4.18	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.24	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.42
Pot Cap-1 Maneuver	1138	-	-	913	-	-	85	81	*863	*117	78	*927
Stage 1	-	-	-	-	-	-	373	397	-	*530	532	-
Stage 2	-	-	-	-	-	-	826	532	-	*813	386	-
Platoon blocked, %	0	-	-	0	-	-			0			0
Mov Cap-1 Maneuver	1138	-	-	913	-	-	72	70	*863	*94	68	*927
Mov Cap-2 Maneuver	-	-	-	-	-	-	238	211	-	*297	197	-
Stage 1	-	-	-	-	-	-	348	371	-	*493	495	-
Stage 2	-	-	-	-	-	-	752	494	-	*707	360	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.62	0.92	13.66	9.84
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	238	-	863	1138	-	-	913	-	-	297	927
HCM Lane V/C Ratio	0.121	-	0.068	0.067	-	-	0.071	-	-	0.007	0.02
HCM Ctrl Dly (s/v)	22.2	0	9.5	8.4	-	-	9.2	-	-	17.2	9
HCM Lane LOS	C	A	A	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.4	-	0.2	0.2	-	-	0.2	-	-	0	0.1

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	25	1212	274	0	1246
Future Vol, veh/h	0	25	1212	274	0	1246
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	155	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	11	1	0	12
Mvmt Flow	0	26	1249	282	0	1285

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	625	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	371	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	371	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.44	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	371	-
HCM Lane V/C Ratio	-	0.07	-
HCM Ctrl Dly (s/v)	-	15.4	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.2	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	117	59	40	20	1	2	2	1	8	23	3
Future Vol, veh/h	98	117	59	40	20	1	2	2	1	8	23	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	120	143	72	49	24	1	2	2	1	10	28	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	26	0	0	215	0	0	554	541	179	505	576	25
Stage 1	-	-	-	-	-	-	418	418	-	123	123	-
Stage 2	-	-	-	-	-	-	136	123	-	383	454	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1589	-	-	1367	-	-	446	451	869	480	431	1057
Stage 1	-	-	-	-	-	-	617	594	-	886	798	-
Stage 2	-	-	-	-	-	-	872	798	-	644	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1589	-	-	1367	-	-	366	397	869	420	379	1057
Mov Cap-2 Maneuver	-	-	-	-	-	-	366	397	-	420	379	-
Stage 1	-	-	-	-	-	-	564	543	-	854	769	-
Stage 2	-	-	-	-	-	-	807	769	-	585	524	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	2.66	5.07	13.46	14.65
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	376	545	603	-	-	1169	-	-	389	1057
HCM Lane V/C Ratio	0.01	0.004	0.075	-	-	0.036	-	-	0.097	0.003
HCM Ctrl Dly (s/v)	14.7	11.6	7.5	0	-	7.7	0	-	15.2	8.4
HCM Lane LOS	B	B	A	A	-	A	A	-	C	A
HCM 95th %tile Q(veh)	0	0	0.2	-	-	0.1	-	-	0.3	0

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	124	45	4	46	16
Future Vol, veh/h	2	124	45	4	46	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	135	49	4	50	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	53	0	-	0	190	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	139	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1565	-	-	-	803	1023
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	893	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1565	-	-	-	802	1023
Mov Cap-2 Maneuver	-	-	-	-	802	-
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	893	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.12	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	29	-	-	-	849
HCM Lane V/C Ratio	0.001	-	-	-	0.079
HCM Ctrl Dly (s/v)	7.3	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Capacity Analysis Summary Sheets

Existing Weekday Evening Peak Hour

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	83	4	34	70	4	35
Future Vol, veh/h	83	4	34	70	4	35
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	98	5	40	82	5	41
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay, s/veh	7.9	7.2	7.3
HCM LOS	A	A	A

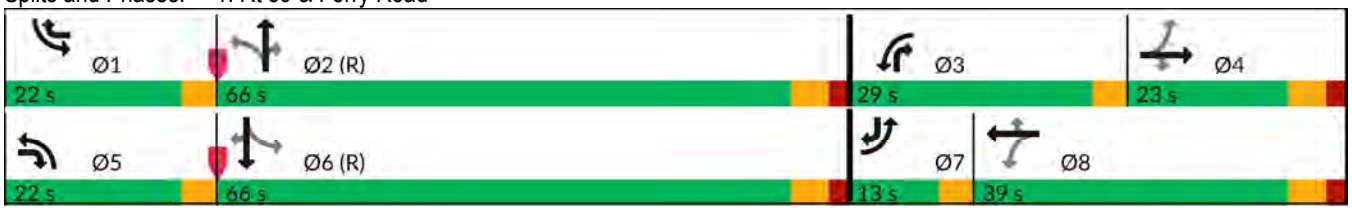
Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	95%	0%	100%	0%
Vol Thru, %	5%	33%	0%	0%
Vol Right, %	0%	67%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	87	104	4	35
LT Vol	83	0	4	0
Through Vol	4	34	0	0
RT Vol	0	70	0	35
Lane Flow Rate	102	122	5	41
Geometry Grp	2	2	5	5
Degree of Util (X)	0.121	0.124	0.007	0.048
Departure Headway (Hd)	4.263	3.653	5.387	4.184
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	838	973	658	844
Service Time	2.304	1.706	3.172	1.968
HCM Lane V/C Ratio	0.122	0.125	0.008	0.049
HCM Control Delay, s/veh	7.9	7.2	8.2	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	223	145	216	469	443	172	1095	92	268	971	86
Future Volume (vph)	96	223	145	216	469	443	172	1095	92	268	971	86
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	11	12	12	11	12	12	11	12	12	11	12	12
Storage Length (ft)	335		200	335		455	650		220	575		190
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	175			175			125			180		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1662	3725	1404	1728	3762	1568	1572	3585	1568	1728	3619	1538
Flt Permitted	0.402			0.395			0.220			0.125		
Satd. Flow (perm)	703	3725	1404	718	3762	1568	364	3585	1568	227	3619	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			125			79			96			81
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		781			858			910			1388	
Travel Time (s)		11.8			13.0			13.8			21.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	2%	15%	1%	1%	3%	11%	6%	3%	1%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	100	232	151	225	489	461	179	1141	96	279	1011	90
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	9.0	23.0	8.0	8.0	37.0	8.0	8.0	49.5	8.0	8.0	51.5	9.0
Total Split (s)	13.0	23.0	22.0	29.0	39.0	22.0	22.0	66.0	29.0	22.0	66.0	13.0
Total Split (%)	9.3%	16.4%	15.7%	20.7%	27.9%	15.7%	15.7%	47.1%	20.7%	15.7%	47.1%	9.3%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	27.1	15.3	33.7	41.3	26.0	51.8	80.9	65.9	91.9	91.0	73.3	88.6
Actuated g/C Ratio	0.19	0.11	0.24	0.30	0.19	0.37	0.58	0.47	0.66	0.65	0.52	0.63
v/c Ratio	0.50	0.57	0.35	0.63	0.70	0.73	0.56	0.68	0.09	0.78	0.53	0.09
Control Delay (s/veh)	46.0	65.0	12.1	47.6	58.6	38.0	18.4	32.5	1.9	37.1	24.9	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.0	65.0	12.1	47.6	58.6	38.0	18.4	32.5	1.9	37.1	24.9	3.7
LOS	D	E	B	D	E	D	B	C	A	D	C	A
Approach Delay (s/veh)		44.5			48.4			28.6			26.0	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	69	107	19	166	222	292	59	437	0	127	307	3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	109	151	74	229	266	413	108	538	20	#302	454	30
Internal Link Dist (ft)		701			778			830			1308	
Turn Bay Length (ft)	335		200	335		455	650		220	575		190
Base Capacity (vph)	203	452	488	395	886	636	385	1688	1120	366	1894	1006
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.51	0.31	0.57	0.55	0.72	0.46	0.68	0.09	0.76	0.53	0.09

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 10 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 34.8	Intersection LOS: C
Intersection Capacity Utilization 78.9%	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: 1: Rt 59 & Ferry Road

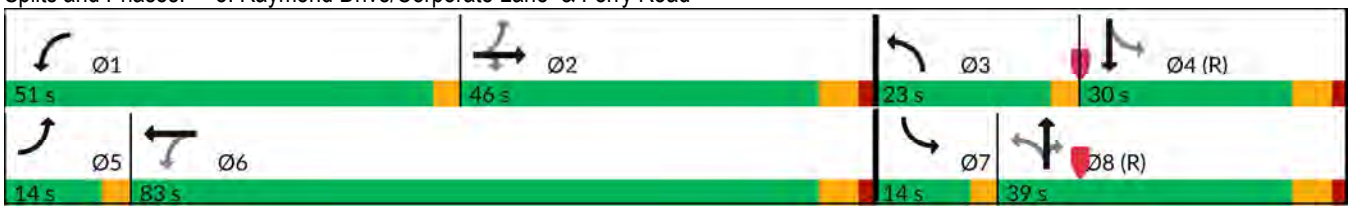


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	353	455	592	505	30	365	36	376	67	70	28
Future Volume (vph)	15	353	455	592	505	30	365	36	376	67	70	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		150	260		0	230		0	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	155			175			160			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.991				0.850		0.956	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3539	1599	1805	3544	0	1770	1759	1615	1641	1679	0
Flt Permitted	0.448			0.389			0.594			0.733		
Satd. Flow (perm)	851	3539	1599	739	3544	0	1106	1759	1615	1266	1679	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			464		6				384		12	
Link Speed (mph)		45			40			45			30	
Link Distance (ft)		2731			1191			1229			599	
Travel Time (s)		41.4			20.3			18.6			13.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	1%	0%	1%	0%	2%	8%	0%	10%	7%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	360	464	604	546	0	372	37	384	68	100	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8		8	4		
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	8.0	22.0	22.0	8.0	22.0		8.0	22.0	22.0	8.0	21.0	
Total Split (s)	14.0	46.0	46.0	51.0	83.0		23.0	39.0	39.0	14.0	30.0	
Total Split (%)	9.3%	30.7%	30.7%	34.0%	55.3%		15.3%	26.0%	26.0%	9.3%	20.0%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5		3.0	4.5	4.5	3.0	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5	1.5	0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	42.3	33.3	33.3	84.1	77.3		59.9	46.5	46.5	41.0	28.7	
Actuated g/C Ratio	0.28	0.22	0.22	0.56	0.52		0.40	0.31	0.31	0.27	0.19	
v/c Ratio	0.05	0.46	0.65	0.83	0.30		0.67	0.07	0.50	0.18	0.30	
Control Delay (s/veh)	18.3	51.4	8.0	31.6	20.6		44.0	44.8	7.0	34.6	53.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	18.3	51.4	8.0	31.6	20.6		44.0	44.8	7.0	34.6	53.0	
LOS	B	D	A	C	C		D	D	A	C	D	
Approach Delay (s/veh)		26.8			26.3			26.1			45.6	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	6	163	0	371	144		278	26	0	42	79	
Queue Length 95th (ft)	14	192	88	395	176		#480	64	96	88	143	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		2651			1111			1149			519	
Turn Bay Length (ft)	145		150	260			230					
Base Capacity (vph)	338	967	774	755	1889		554	553	771	389	359	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.04	0.37	0.60	0.80	0.29		0.67	0.07	0.50	0.17	0.28	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 54 (36%), Referenced to phase 4:SBTL and 8:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 27.5		Intersection LOS: C	
Intersection Capacity Utilization 85.5%		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: 8: Raymond Drive/Corporate Lane & Ferry Road



Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	552	23	22	1018	8	85	1	90	15	0	25
Future Vol, veh/h	8	552	23	22	1018	8	85	1	90	15	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	200	-	-	150	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	2	0	4	2	0	0	0	2	7	0	0
Mvmt Flow	9	594	25	24	1095	9	91	1	97	16	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1103	0	0	618	0	0	1218	1774	309	1461	1782	552
Stage 1	-	-	-	-	-	-	623	623	-	1146	1146	-
Stage 2	-	-	-	-	-	-	595	1151	-	315	635	-
Critical Hdwy	4.1	-	-	4.18	-	-	7.5	6.5	6.94	7.64	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.64	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.64	5.5	-
Follow-up Hdwy	2.2	-	-	2.24	-	-	3.5	4	3.32	3.57	4	3.3
Pot Cap-1 Maneuver	640	-	-	1136	-	-	139	84	*932	*86	83	483
Stage 1	-	-	-	-	-	-	647	614	-	*204	276	-
Stage 2	-	-	-	-	-	-	463	275	-	*867	605	-
Platoon blocked, %		-	-	0	-	-			0			
Mov Cap-1 Maneuver	640	-	-	1136	-	-	127	81	*932	*74	80	483
Mov Cap-2 Maneuver	-	-	-	-	-	-	286	196	-	*164	198	-
Stage 1	-	-	-	-	-	-	639	606	-	*200	270	-
Stage 2	-	-	-	-	-	-	428	269	-	*765	597	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.15	0.17	16.23	19.06
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	286	895	640	-	-	1136	-	-	164	483
HCM Lane V/C Ratio	0.32	0.109	0.013	-	-	0.021	-	-	0.098	0.056
HCM Ctrl Dly (s/v)	23.4	9.5	10.7	-	-	8.2	-	-	29.3	12.9
HCM Lane LOS	C	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	1.3	0.4	0	-	-	0.1	-	-	0.3	0.2

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	621	16	23	944	5	43	2	108	2	0	61
Future Vol, veh/h	20	621	16	23	944	5	43	2	108	2	0	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	230	-	-	140	-	140	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	15	2	0	0	2	20	0	0	0	50	0	7
Mvmt Flow	22	675	17	25	1026	5	47	2	117	2	0	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1032	0	0	692	0	0	1290	1809	346	1461	1815	516
Stage 1	-	-	-	-	-	-	727	727	-	1079	1079	-
Stage 2	-	-	-	-	-	-	563	1082	-	382	736	-
Critical Hdwy	4.4	-	-	4.1	-	-	7.5	6.5	6.9	8.5	6.5	7.04
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	7.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	7.5	5.5	-
Follow-up Hdwy	2.35	-	-	2.2	-	-	3.5	4	3.3	4	4	3.37
Pot Cap-1 Maneuver	814	-	-	1102	-	-	*123	80	*923	*58	79	*805
Stage 1	-	-	-	-	-	-	*574	559	-	*338	433	-
Stage 2	-	-	-	-	-	-	*775	432	-	*761	553	-
Platoon blocked, %	0	-	-	0	-	-			0			0
Mov Cap-1 Maneuver	814	-	-	1102	-	-	*107	76	*923	*48	75	*805
Mov Cap-2 Maneuver	-	-	-	-	-	-	*327	244	-	*216	246	-
Stage 1	-	-	-	-	-	-	*558	544	-	*330	424	-
Stage 2	-	-	-	-	-	-	*695	422	-	*644	538	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.29	0.2	11.96	10.26
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	327	244	923	814	-	-	1102	-	-	216	805
HCM Lane V/C Ratio	0.143	0.009	0.127	0.027	-	-	0.023	-	-	0.01	0.082
HCM Ctrl Dly (s/v)	17.8	19.9	9.5	9.5	-	-	8.3	-	-	21.8	9.9
HCM Lane LOS	C	C	A	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.5	0	0.4	0.1	-	-	0.1	-	-	0	0.3

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	98	1261	60	0	1332
Future Vol, veh/h	0	98	1261	60	0	1332
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	155	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	8	2	0	6
Mvmt Flow	0	102	1314	63	0	1388

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	657	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	353	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	353	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	19.28	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	353	-
HCM Lane V/C Ratio	-	0.289	-
HCM Ctrl Dly (s/v)	-	19.3	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	1.2	-

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	19	19	8	39	6	44	15	61	8	6	15
Future Vol, veh/h	22	19	19	8	39	6	44	15	61	8	6	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	4	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	28	24	24	10	49	8	55	19	76	10	8	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	56	0	0	48	0	0	163	167	36	161	175	53
Stage 1	-	-	-	-	-	-	91	91	-	73	73	-
Stage 2	-	-	-	-	-	-	73	76	-	88	103	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1536	-	-	1573	-	-	806	730	1043	809	722	1021
Stage 1	-	-	-	-	-	-	922	824	-	942	839	-
Stage 2	-	-	-	-	-	-	942	835	-	924	814	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1536	-	-	1573	-	-	764	711	1043	713	704	1021
Mov Cap-2 Maneuver	-	-	-	-	-	-	764	711	-	713	704	-
Stage 1	-	-	-	-	-	-	905	809	-	936	833	-
Stage 2	-	-	-	-	-	-	910	830	-	821	799	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	2.71	1.1	9.5	9.37
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	756	992	600	-	-	265	-	-	709	1021
HCM Lane V/C Ratio	0.085	0.086	0.018	-	-	0.006	-	-	0.025	0.018
HCM Ctrl Dly (s/v)	10.2	9	7.4	0	-	7.3	0	-	10.2	8.6
HCM Lane LOS	B	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.3	0.3	0.1	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	76	44	25	11	9
Future Vol, veh/h	12	76	44	25	11	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	81	47	27	12	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	73	0	-	0	166	60
Stage 1	-	-	-	-	60	-
Stage 2	-	-	-	-	106	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1539	-	-	-	829	1011
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	923	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1539	-	-	-	821	1011
Mov Cap-2 Maneuver	-	-	-	-	821	-
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	923	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1	0	9.11
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	245	-	-	-	897
HCM Lane V/C Ratio	0.008	-	-	-	0.024
HCM Ctrl Dly (s/v)	7.4	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Capacity Analysis Summary Sheets

Year 2031 No-Build Weekday Morning Peak Hour

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	74	103	3	8	54	48
Future Vol, veh/h	74	103	3	8	54	48
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	90	126	4	10	66	59
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay, s/veh	8.8	7.1	8.2
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	42%	0%	100%	0%
Vol Thru, %	58%	27%	0%	0%
Vol Right, %	0%	73%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	177	11	54	48
LT Vol	74	0	54	0
Through Vol	103	3	0	0
RT Vol	0	8	0	48
Lane Flow Rate	216	13	66	59
Geometry Grp	2	2	5	5
Degree of Util (X)	0.258	0.015	0.101	0.07
Departure Headway (Hd)	4.309	4.002	5.522	4.317
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	838	897	651	832
Service Time	2.317	2.015	3.235	2.03
HCM Lane V/C Ratio	0.258	0.014	0.101	0.071
HCM Control Delay, s/veh	8.8	7.1	8.9	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1	0	0.3	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	484	98	86	131	361	123	1023	144	462	1124	47
Future Volume (vph)	82	484	98	86	131	361	123	1023	144	462	1124	47
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	11	12	12	11	12	12	11	12	12	11	12	12
Storage Length (ft)	335		200	335		455	650		220	575		190
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	175			175			125			180		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1531	3800	1335	1616	3689	1553	1491	3455	1553	1711	3393	1346
Flt Permitted	0.623			0.204			0.221			0.084		
Satd. Flow (perm)	1004	3800	1335	347	3689	1553	347	3455	1553	151	3393	1346
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86			150			105			51
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		781			858			910			1388	
Travel Time (s)		11.8			13.0			13.8			21.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	14%	0%	21%	8%	3%	4%	17%	10%	4%	2%	12%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	90	532	108	95	144	397	135	1124	158	508	1235	52
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	9.0	41.0	8.0	8.0	37.0	8.0	8.0	49.5	8.0	8.0	51.5	9.0
Total Split (s)	18.0	41.0	13.0	14.0	37.0	35.0	13.0	50.0	14.0	35.0	72.0	18.0
Total Split (%)	12.9%	29.3%	9.3%	10.0%	26.4%	25.0%	9.3%	35.7%	10.0%	25.0%	51.4%	12.9%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	39.7	26.0	43.1	36.9	24.5	71.7	57.5	44.0	59.8	91.2	74.1	91.4
Actuated g/C Ratio	0.28	0.19	0.31	0.26	0.18	0.51	0.41	0.31	0.43	0.65	0.53	0.65
v/c Ratio	0.28	0.75	0.23	0.53	0.22	0.46	0.58	1.04	0.22	0.91	0.69	0.06
Control Delay (s/veh)	37.4	60.8	10.6	46.2	49.8	15.1	26.8	83.5	9.7	60.2	28.1	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.4	60.8	10.6	46.2	49.8	15.1	26.8	83.5	9.7	60.2	28.1	2.9
LOS	D	E	B	D	D	B	C	F	A	E	C	A
Approach Delay (s/veh)		50.5			27.6			69.9			36.5	
Approach LOS		D			C			E			D	
Queue Length 50th (ft)	61	244	14	64	60	136	45	~577	28	393	428	0

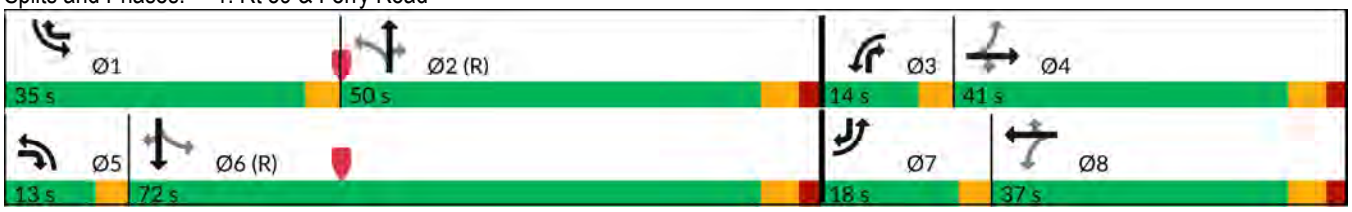
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	100	294	56	104	91	232	83	#717	74	#683	574	17
Internal Link Dist (ft)		701			778			830			1308	
Turn Bay Length (ft)	335		200	335		455	650		220	575		190
Base Capacity (vph)	354	950	472	188	816	868	236	1085	730	557	1796	926
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.56	0.23	0.51	0.18	0.46	0.57	1.04	0.22	0.91	0.69	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay (s/veh): 47.8		Intersection LOS: D	
Intersection Capacity Utilization 86.6%		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: 1: Rt 59 & Ferry Road

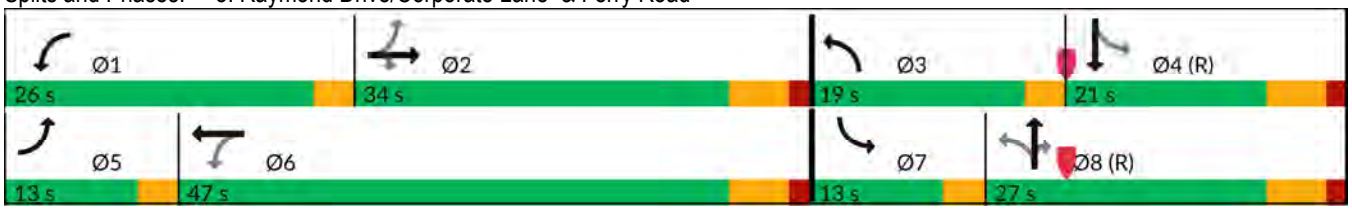


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	402	396	371	217	45	499	46	576	37	36	1
Future Volume (vph)	24	402	396	371	217	45	499	46	576	37	36	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		150	260		0	230		0	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	155			175			160			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.974				0.850		0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	3574	1583	1787	3300	0	1770	1863	1599	1399	1671	0
Flt Permitted	0.583			0.394			0.573			0.726		
Satd. Flow (perm)	1065	3574	1583	741	3300	0	1067	1863	1599	1069	1671	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			417		29				601		1	
Link Speed (mph)		45			40			45			30	
Link Distance (ft)		2731			1191			1229			599	
Travel Time (s)		41.4			20.3			18.6			13.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	1%	2%	1%	5%	14%	2%	2%	1%	29%	11%	100%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	423	417	391	275	0	525	48	606	39	39	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8		8	4		
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	8.0	22.0	22.0	8.0	22.0		8.0	22.0	22.0	8.0	21.0	
Total Split (s)	13.0	34.0	34.0	26.0	47.0		19.0	27.0	27.0	13.0	21.0	
Total Split (%)	13.0%	34.0%	34.0%	26.0%	47.0%		19.0%	27.0%	27.0%	13.0%	21.0%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5		3.0	4.5	4.5	3.0	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5	1.5	0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	36.2	27.1	27.1	52.0	45.1		42.0	32.2	32.2	22.9	12.6	
Actuated g/C Ratio	0.36	0.27	0.27	0.52	0.45		0.42	0.32	0.32	0.23	0.13	
v/c Ratio	0.06	0.44	0.57	0.67	0.18		0.86	0.08	0.66	0.14	0.18	
Control Delay (s/veh)	11.5	31.2	6.2	20.2	14.7		43.2	30.3	7.1	22.6	40.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	11.5	31.2	6.2	20.2	14.7		43.2	30.3	7.1	22.6	40.7	
LOS	B	C	A	C	B		D	C	A	C	D	
Approach Delay (s/veh)		18.5			17.9			24.1			31.7	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)	7	113	0	138	41		281	23	2	15	23	
Queue Length 95th (ft)	18	161	73	192	75		#563	56	110	39	52	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		2651			1111			1149			519	
Turn Bay Length (ft)	145		150	260			230					
Base Capacity (vph)	493	1050	759	625	1526		612	600	922	306	258	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.05	0.40	0.55	0.63	0.18		0.86	0.08	0.66	0.13	0.15	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay (s/veh): 21.1		Intersection LOS: C	
Intersection Capacity Utilization 80.7%		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: 8: Raymond Drive/Corporate Lane & Ferry Road



Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	940	110	88	530	21	39	3	30	6	1	8
Future Vol, veh/h	41	940	110	88	530	21	39	3	30	6	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	200	-	-	150	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	2	1	4	3	5	6	0	0	0	0	0
Mvmt Flow	45	1033	121	97	582	23	43	3	33	7	1	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	605	0	0	1154	0	0	1669	1982	577	1396	2031	303
Stage 1	-	-	-	-	-	-	1184	1184	-	787	787	-
Stage 2	-	-	-	-	-	-	485	799	-	608	1244	-
Critical Hdwy	4.16	-	-	4.18	-	-	7.62	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.23	-	-	2.24	-	-	3.56	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	962	-	-	745	-	-	60	62	*832	*103	58	699
Stage 1	-	-	-	-	-	-	330	369	-	*355	406	-
Stage 2	-	-	-	-	-	-	522	401	-	*785	340	-
Platoon blocked, %		-	-	0	-	-			0			
Mov Cap-1 Maneuver	962	-	-	745	-	-	49	52	*832	*80	48	699
Mov Cap-2 Maneuver	-	-	-	-	-	-	183	172	-	*220	147	-
Stage 1	-	-	-	-	-	-	315	351	-	*309	353	-
Stage 2	-	-	-	-	-	-	447	349	-	*712	324	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.34	1.45	21.68	16.29
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	183	617	962	-	-	745	-	-	205	699
HCM Lane V/C Ratio	0.234	0.059	0.047	-	-	0.13	-	-	0.038	0.013
HCM Ctrl Dly (s/v)	30.6	11.2	8.9	-	-	10.6	-	-	23.2	10.2
HCM Lane LOS	D	B	A	-	-	B	-	-	C	B
HCM 95th %tile Q(veh)	0.9	0.2	0.1	-	-	0.4	-	-	0.1	0

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	78	857	42	60	575	14	27	0	55	14	0	37
Future Vol, veh/h	78	857	42	60	575	14	27	0	55	14	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	230	-	-	140	-	140	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	1	0	0	4	0	0	0	0	0	0	12
Mvmt Flow	87	952	47	67	639	16	30	0	61	16	0	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	654	0	0	999	0	0	1602	1937	499	1429	1952	327
Stage 1	-	-	-	-	-	-	1149	1149	-	780	780	-
Stage 2	-	-	-	-	-	-	453	788	-	649	1172	-
Critical Hdwy	4.18	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.24	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.42
Pot Cap-1 Maneuver	1093	-	-	890	-	-	72	66	*847	*97	65	*907
Stage 1	-	-	-	-	-	-	349	376	-	*504	509	-
Stage 2	-	-	-	-	-	-	838	505	-	*799	365	-
Platoon blocked, %	0	-	-	0	-	-			0			0
Mov Cap-1 Maneuver	1093	-	-	890	-	-	59	57	*847	*77	55	*907
Mov Cap-2 Maneuver	-	-	-	-	-	-	220	191	-	*276	179	-
Stage 1	-	-	-	-	-	-	321	346	-	*466	471	-
Stage 2	-	-	-	-	-	-	740	467	-	*683	336	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.68	0.87	14.31	11.81
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	220	-	847	1093	-	-	890	-	-	276	907
HCM Lane V/C Ratio	0.137	-	0.072	0.079	-	-	0.075	-	-	0.056	0.045
HCM Ctrl Dly (s/v)	24	0	9.6	8.6	-	-	9.4	-	-	18.8	9.2
HCM Lane LOS	C	A	A	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.5	-	0.2	0.3	-	-	0.2	-	-	0.2	0.1

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	28	1262	330	0	1308
Future Vol, veh/h	0	28	1262	330	0	1308
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	155	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	11	1	0	12
Mvmt Flow	0	29	1301	340	0	1348

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	651	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	357	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	357	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.98	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	357	-
HCM Lane V/C Ratio	-	0.081	-
HCM Ctrl Dly (s/v)	-	16	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.3	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	147	122	61	42	21	1	2	2	1	8	24	5
Future Vol, veh/h	147	122	61	42	21	1	2	2	1	8	24	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	179	149	74	51	26	1	2	2	1	10	29	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	27	0	0	223	0	0	687	674	186	637	710	26
Stage 1	-	-	-	-	-	-	545	545	-	129	129	-
Stage 2	-	-	-	-	-	-	143	129	-	509	582	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1587	-	-	1358	-	-	364	379	861	393	361	1055
Stage 1	-	-	-	-	-	-	527	522	-	880	794	-
Stage 2	-	-	-	-	-	-	865	793	-	551	502	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1587	-	-	1358	-	-	278	317	861	326	302	1055
Mov Cap-2 Maneuver	-	-	-	-	-	-	278	317	-	326	302	-
Stage 1	-	-	-	-	-	-	458	454	-	846	763	-
Stage 2	-	-	-	-	-	-	795	763	-	476	437	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	3.37	5.09	15.68	17.05
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	289	463	752	-	-	1171	-	-	308	1055
HCM Lane V/C Ratio	0.013	0.005	0.113	-	-	0.038	-	-	0.127	0.006
HCM Ctrl Dly (s/v)	17.6	12.8	7.6	0	-	7.8	0	-	18.4	8.4
HCM Lane LOS	C	B	A	A	-	A	A	-	C	A
HCM 95th %tile Q(veh)	0	0	0.4	-	-	0.1	-	-	0.4	0

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	129	47	4	48	17
Future Vol, veh/h	2	129	47	4	48	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	140	51	4	52	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	55	0	-	0	198	53
Stage 1	-	-	-	-	53	-
Stage 2	-	-	-	-	145	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1562	-	-	-	795	1020
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	888	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1562	-	-	-	794	1020
Mov Cap-2 Maneuver	-	-	-	-	794	-
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	888	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.11	0	9.66
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	27	-	-	-	843
HCM Lane V/C Ratio	0.001	-	-	-	0.084
HCM Ctrl Dly (s/v)	7.3	0	-	-	9.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Capacity Analysis Summary Sheets

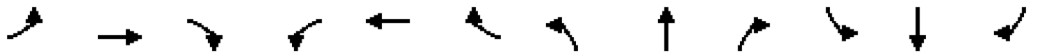
Year 2031 No-Build Weekday Evening Peak Hour

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	86	4	35	73	4	36
Future Vol, veh/h	86	4	35	73	4	36
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	101	5	41	86	5	42
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay, s/veh	7.9	7.3	7.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	96%	0%	100%	0%
Vol Thru, %	4%	32%	0%	0%
Vol Right, %	0%	68%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	108	4	36
LT Vol	86	0	4	0
Through Vol	4	35	0	0
RT Vol	0	73	0	36
Lane Flow Rate	106	127	5	42
Geometry Grp	2	2	5	5
Degree of Util (X)	0.126	0.129	0.007	0.049
Departure Headway (Hd)	4.269	3.655	5.401	4.197
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	836	972	656	840
Service Time	2.311	1.71	3.191	1.987
HCM Lane V/C Ratio	0.127	0.131	0.008	0.05
HCM Control Delay, s/veh	7.9	7.3	8.2	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0	0.2

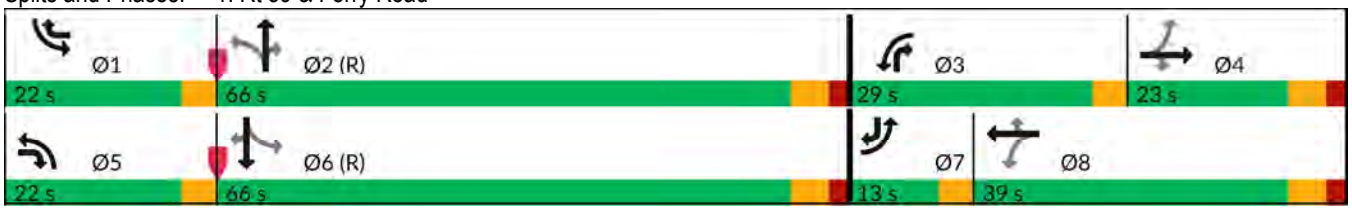


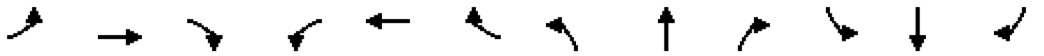
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	235	151	275	495	467	179	1159	102	288	1010	89
Future Volume (vph)	100	235	151	275	495	467	179	1159	102	288	1010	89
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	11	12	12	11	12	12	11	12	12	11	12	12
Storage Length (ft)	335		200	335		455	650		220	575		190
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	175			175			125			180		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1662	3725	1404	1728	3762	1568	1572	3585	1568	1728	3619	1538
Flt Permitted	0.455			0.368			0.200			0.088		
Satd. Flow (perm)	796	3725	1404	669	3762	1568	331	3585	1568	160	3619	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			93			75			93			81
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		781			858			910			1388	
Travel Time (s)		11.8			13.0			13.8			21.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	2%	15%	1%	1%	3%	11%	6%	3%	1%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	245	157	286	516	486	186	1207	106	300	1052	93
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	9.0	23.0	8.0	8.0	37.0	8.0	8.0	49.5	8.0	8.0	51.5	9.0
Total Split (s)	13.0	23.0	22.0	29.0	39.0	22.0	22.0	66.0	29.0	22.0	66.0	13.0
Total Split (%)	9.3%	16.4%	15.7%	20.7%	27.9%	15.7%	15.7%	47.1%	20.7%	15.7%	47.1%	9.3%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	26.7	15.0	34.1	43.8	28.6	56.5	77.0	61.3	90.2	88.3	70.0	85.2
Actuated g/C Ratio	0.19	0.11	0.24	0.31	0.20	0.40	0.55	0.44	0.64	0.63	0.50	0.61
v/c Ratio	0.50	0.62	0.38	0.75	0.67	0.72	0.62	0.77	0.10	0.87	0.58	0.10
Control Delay (s/veh)	44.4	66.5	19.9	51.8	55.5	36.1	21.9	37.7	2.4	58.6	27.8	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.4	66.5	19.9	51.8	55.5	36.1	21.9	37.7	2.4	58.6	27.8	4.2
LOS	D	E	B	D	E	D	C	D	A	E	C	A
Approach Delay (s/veh)		47.5			47.3			33.3			32.7	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	68	113	47	210	226	312	68	492	4	196	354	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	112	158	106	294	282	451	112	583	25	#406	480	32
Internal Link Dist (ft)		701			778			830			1308	
Turn Bay Length (ft)	335		200	335		455	650		220	575		190
Base Capacity (vph)	212	452	462	402	886	677	358	1570	1071	345	1810	971
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.54	0.34	0.71	0.58	0.72	0.52	0.77	0.10	0.87	0.58	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 10 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 38.4		Intersection LOS: D	
Intersection Capacity Utilization 85.0%		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: 1: Rt 59 & Ferry Road



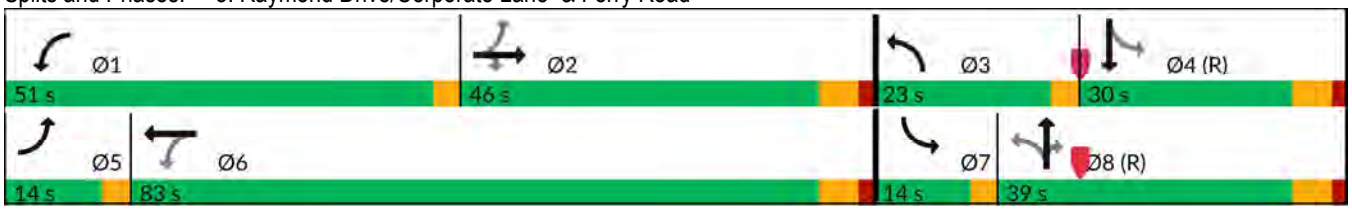


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	384	494	616	548	314	397	43	391	80	83	29
Future Volume (vph)	16	384	494	616	548	314	397	43	391	80	83	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		150	260		0	230		0	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	155			175			160			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.945				0.850		0.961	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3539	1599	1805	3390	0	1770	1759	1615	1641	1690	0
Flt Permitted	0.323			0.365			0.534			0.728		
Satd. Flow (perm)	614	3539	1599	694	3390	0	995	1759	1615	1257	1690	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			456		110				399		10	
Link Speed (mph)		45			40			45			30	
Link Distance (ft)		2731			1191			1229			599	
Travel Time (s)		41.4			20.3			18.6			13.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	1%	0%	1%	0%	2%	8%	0%	10%	7%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	392	504	629	879	0	405	44	399	82	115	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8		8	4		
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	8.0	22.0	22.0	8.0	22.0		8.0	22.0	22.0	8.0	21.0	
Total Split (s)	14.0	46.0	46.0	51.0	83.0		23.0	39.0	39.0	14.0	30.0	
Total Split (%)	9.3%	30.7%	30.7%	34.0%	55.3%		15.3%	26.0%	26.0%	9.3%	20.0%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5		3.0	4.5	4.5	3.0	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5	1.5	0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	43.6	34.6	34.6	86.2	79.4		57.8	42.0	42.0	37.6	24.8	
Actuated g/C Ratio	0.29	0.23	0.23	0.57	0.53		0.39	0.28	0.28	0.25	0.17	
v/c Ratio	0.07	0.48	0.70	0.85	0.48		0.78	0.09	0.54	0.24	0.40	
Control Delay (s/veh)	18.6	51.2	11.9	33.4	19.6		50.9	46.0	7.3	36.2	58.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	18.6	51.2	11.9	33.4	19.6		50.9	46.0	7.3	36.2	58.3	
LOS	B	D	B	C	B		D	D	A	D	E	
Approach Delay (s/veh)		28.9			25.4			30.1			49.1	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	6	174	37	372	218		323	33	0	53	100	
Queue Length 95th (ft)	15	219	159	458	280		#605	72	96	102	161	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		2651			1111			1149			519	
Turn Bay Length (ft)	145		150	260			230					
Base Capacity (vph)	286	949	762	756	1884		522	498	743	355	321	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.06	0.41	0.66	0.83	0.47		0.78	0.09	0.54	0.23	0.36	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 54 (36%), Referenced to phase 4:SBTL and 8:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 28.8		Intersection LOS: C	
Intersection Capacity Utilization 88.6%		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: 8: Raymond Drive/Corporate Lane & Ferry Road



Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	591	25	28	1072	8	138	1	124	16	0	26
Future Vol, veh/h	8	591	25	28	1072	8	138	1	124	16	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	200	-	-	150	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	2	0	4	2	0	0	0	2	7	0	0
Mvmt Flow	9	635	27	30	1153	9	148	1	133	17	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1161	0	0	662	0	0	1303	1888	331	1553	1897	581
Stage 1	-	-	-	-	-	-	666	666	-	1217	1217	-
Stage 2	-	-	-	-	-	-	637	1222	-	335	680	-
Critical Hdwy	4.1	-	-	4.18	-	-	7.5	6.5	6.94	7.64	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.64	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.64	5.5	-
Follow-up Hdwy	2.2	-	-	2.24	-	-	3.5	4	3.32	3.57	4	3.3
Pot Cap-1 Maneuver	609	-	-	1087	-	-	~ 120	71	*932	*73	70	462
Stage 1	-	-	-	-	-	-	605	584	-	*184	256	-
Stage 2	-	-	-	-	-	-	437	254	-	*867	575	-
Platoon blocked, %		-	-	0	-	-			0			
Mov Cap-1 Maneuver	609	-	-	1087	-	-	~ 108	68	*932	*60	67	462
Mov Cap-2 Maneuver	-	-	-	-	-	-	262	179	-	*146	181	-
Stage 1	-	-	-	-	-	-	597	576	-	*179	249	-
Stage 2	-	-	-	-	-	-	399	247	-	*731	567	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.14	0.21	23.1	20.75
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	262	902	609	-	-	1087	-	-	146	462
HCM Lane V/C Ratio	0.566	0.149	0.014	-	-	0.028	-	-	0.118	0.06
HCM Ctrl Dly (s/v)	35.2	9.7	11	-	-	8.4	-	-	32.9	13.3
HCM Lane LOS	E	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	3.2	0.5	0	-	-	0.1	-	-	0.4	0.2

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	676	17	24	987	40	45	2	112	10	0	76
Future Vol, veh/h	38	676	17	24	987	40	45	2	112	10	0	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	230	-	-	140	-	140	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	15	2	0	0	2	20	0	0	0	50	0	7
Mvmt Flow	41	735	18	26	1073	43	49	2	122	11	0	83

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1116	0	0	753	0	0	1415	1995	377	1598	1983	558
Stage 1	-	-	-	-	-	-	827	827	-	1147	1147	-
Stage 2	-	-	-	-	-	-	589	1168	-	451	836	-
Critical Hdwy	4.4	-	-	4.1	-	-	7.5	6.5	6.9	8.5	6.5	7.04
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	7.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	7.5	5.5	-
Follow-up Hdwy	2.35	-	-	2.2	-	-	3.5	4	3.3	4	4	3.37
Pot Cap-1 Maneuver	751	-	-	1059	-	-	*99	61	*908	*44	62	*791
Stage 1	-	-	-	-	-	-	*510	510	-	*308	406	-
Stage 2	-	-	-	-	-	-	*761	394	-	*749	504	-
Platoon blocked, %	0	-	-	0	-	-			0			0
Mov Cap-1 Maneuver	751	-	-	1059	-	-	*82	56	*908	*35	57	*791
Mov Cap-2 Maneuver	-	-	-	-	-	-	*285	208	-	*195	218	-
Stage 1	-	-	-	-	-	-	*482	482	-	*300	396	-
Stage 2	-	-	-	-	-	-	*665	384	-	*610	476	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.52	0.19	12.76	11.76
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	285	208	908	751	-	-	1059	-	-	195	791
HCM Lane V/C Ratio	0.172	0.01	0.134	0.055	-	-	0.025	-	-	0.056	0.104
HCM Ctrl Dly (s/v)	20.2	22.5	9.6	10.1	-	-	8.5	-	-	24.5	10.1
HCM Lane LOS	C	C	A	B	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.6	0	0.5	0.2	-	-	0.1	-	-	0.2	0.3

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	122	1317	66	0	1435
Future Vol, veh/h	0	122	1317	66	0	1435
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	155	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	8	2	0	6
Mvmt Flow	0	127	1372	69	0	1495

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	686	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	338	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	338	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	21.91	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	338	-
HCM Lane V/C Ratio	-	0.376	-
HCM Ctrl Dly (s/v)	-	21.9	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	1.7	-

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	20	20	8	41	6	46	16	63	8	6	36
Future Vol, veh/h	27	20	20	8	41	6	46	16	63	8	6	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	4	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	34	25	25	10	51	8	58	20	79	10	8	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	59	0	0	50	0	0	180	184	38	178	193	55
Stage 1	-	-	-	-	-	-	105	105	-	75	75	-
Stage 2	-	-	-	-	-	-	75	79	-	103	118	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1532	-	-	1570	-	-	786	714	1040	789	706	1018
Stage 1	-	-	-	-	-	-	906	812	-	939	836	-
Stage 2	-	-	-	-	-	-	939	833	-	908	802	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1532	-	-	1570	-	-	722	693	1040	688	686	1018
Mov Cap-2 Maneuver	-	-	-	-	-	-	722	693	-	688	686	-
Stage 1	-	-	-	-	-	-	885	794	-	933	831	-
Stage 2	-	-	-	-	-	-	884	828	-	800	784	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	2.98	1.06	9.67	9.17
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	717	985	659	-	-	255	-	-	687	1018
HCM Lane V/C Ratio	0.094	0.09	0.022	-	-	0.006	-	-	0.025	0.044
HCM Ctrl Dly (s/v)	10.5	9	7.4	0	-	7.3	0	-	10.4	8.7
HCM Lane LOS	B	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.3	0.3	0.1	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	79	46	26	11	9
Future Vol, veh/h	12	79	46	26	11	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	84	49	28	12	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	77	0	-	0	172	63
Stage 1	-	-	-	-	63	-
Stage 2	-	-	-	-	110	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1535	-	-	-	822	1008
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	920	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1535	-	-	-	815	1008
Mov Cap-2 Maneuver	-	-	-	-	815	-
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	920	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.97	0	9.14
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	237	-	-	-	892
HCM Lane V/C Ratio	0.008	-	-	-	0.024
HCM Ctrl Dly (s/v)	7.4	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Capacity Analysis Summary Sheets

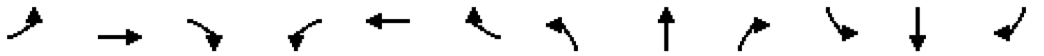
Year 2031 Total Projected Weekday Morning Peak Hour

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	79	103	3	8	54	64
Future Vol, veh/h	79	103	3	8	54	64
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	96	126	4	10	66	78
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay, s/veh	9	7.1	8.1
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	43%	0%	100%	0%
Vol Thru, %	57%	27%	0%	0%
Vol Right, %	0%	73%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	182	11	54	64
LT Vol	79	0	54	0
Through Vol	103	3	0	0
RT Vol	0	8	0	64
Lane Flow Rate	222	13	66	78
Geometry Grp	2	2	5	5
Degree of Util (X)	0.268	0.015	0.101	0.094
Departure Headway (Hd)	4.352	4.052	5.539	4.334
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	828	885	649	829
Service Time	2.362	2.068	3.255	2.05
HCM Lane V/C Ratio	0.268	0.015	0.102	0.094
HCM Control Delay, s/veh	9	7.1	8.9	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.1	0	0.3	0.3

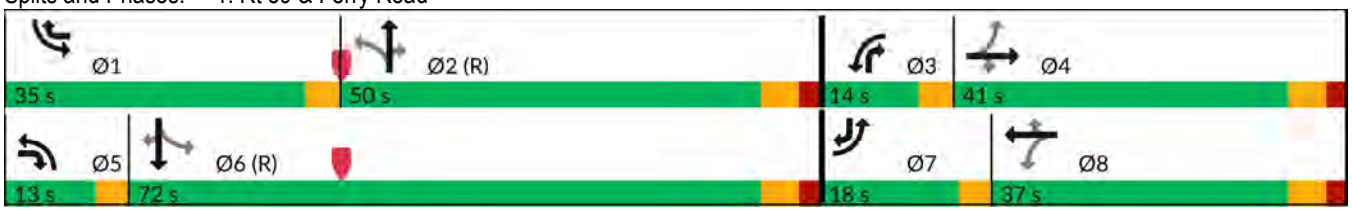


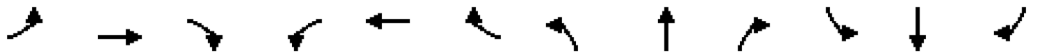
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	487	98	107	136	374	127	1035	145	469	1124	47
Future Volume (vph)	82	487	98	107	136	374	127	1035	145	469	1124	47
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	11	12	12	11	12	12	11	12	12	11	12	12
Storage Length (ft)	335		200	335		455	650		220	575		190
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	175			175			125			180		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1531	3800	1335	1616	3689	1553	1491	3455	1553	1711	3393	1346
Flt Permitted	0.627			0.201			0.214			0.084		
Satd. Flow (perm)	1010	3800	1335	342	3689	1553	336	3455	1553	151	3393	1346
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			78			150			105			51
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		781			858			910			1388	
Travel Time (s)		11.8			13.0			13.8			21.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	14%	0%	21%	8%	3%	4%	17%	10%	4%	2%	12%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	90	535	108	118	149	411	140	1137	159	515	1235	52
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	9.0	41.0	8.0	8.0	37.0	8.0	8.0	49.5	8.0	8.0	51.5	9.0
Total Split (s)	18.0	41.0	13.0	14.0	37.0	35.0	13.0	50.0	14.0	35.0	72.0	18.0
Total Split (%)	12.9%	29.3%	9.3%	10.0%	26.4%	25.0%	9.3%	35.7%	10.0%	25.0%	51.4%	12.9%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	39.8	26.1	43.5	37.6	25.0	71.7	57.9	44.0	60.1	90.7	73.4	90.6
Actuated g/C Ratio	0.28	0.19	0.31	0.27	0.18	0.51	0.41	0.31	0.43	0.65	0.52	0.65
v/c Ratio	0.27	0.75	0.23	0.64	0.23	0.47	0.60	1.05	0.22	0.93	0.69	0.06
Control Delay (s/veh)	37.2	60.8	12.1	52.7	49.6	15.7	28.1	86.9	9.8	64.0	28.7	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.2	60.8	12.1	52.7	49.6	15.7	28.1	86.9	9.8	64.0	28.7	2.9
LOS	D	E	B	D	D	B	C	F	A	E	C	A
Approach Delay (s/veh)		50.7			29.6			72.6			38.1	
Approach LOS		D			C			E			D	
Queue Length 50th (ft)	61	245	19	81	62	146	47	~591	29	403	433	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	100	295	62	126	93	245	86	#728	75	#699	574	17
Internal Link Dist (ft)		701			778			830			1308	
Turn Bay Length (ft)	335		200	335		455	650		220	575		190
Base Capacity (vph)	359	950	470	188	816	868	235	1085	730	551	1778	919
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.56	0.23	0.63	0.18	0.47	0.60	1.05	0.22	0.93	0.69	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay (s/veh): 49.5		Intersection LOS: D	
Intersection Capacity Utilization 88.5%		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: 1: Rt 59 & Ferry Road



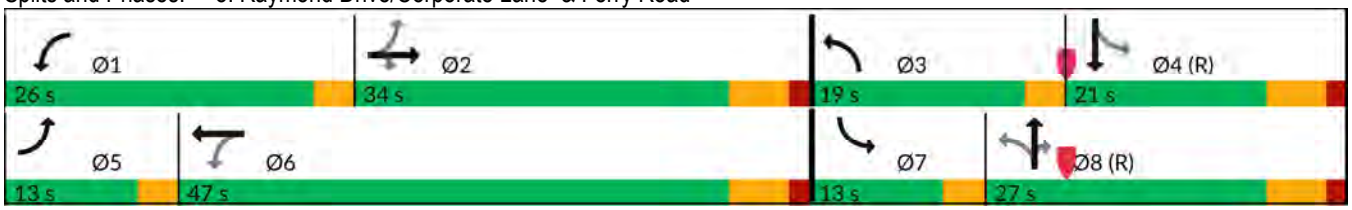


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	415	413	371	221	45	504	46	576	37	36	1
Future Volume (vph)	24	415	413	371	221	45	504	46	576	37	36	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		150	260		0	230		0	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	155			175			160			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.975				0.850		0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	3574	1583	1787	3305	0	1770	1863	1599	1399	1671	0
Flt Permitted	0.580			0.385			0.565			0.726		
Satd. Flow (perm)	1060	3574	1583	724	3305	0	1052	1863	1599	1069	1671	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			435		29				596		1	
Link Speed (mph)		45			40			45			30	
Link Distance (ft)		2731			1191			1229			599	
Travel Time (s)		41.4			20.3			18.6			13.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	1%	2%	1%	5%	14%	2%	2%	1%	29%	11%	100%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	437	435	391	280	0	531	48	606	39	39	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8		8	4		
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	8.0	22.0	22.0	8.0	22.0		8.0	22.0	22.0	8.0	21.0	
Total Split (s)	13.0	34.0	34.0	26.0	47.0		19.0	27.0	27.0	13.0	21.0	
Total Split (%)	13.0%	34.0%	34.0%	26.0%	47.0%		19.0%	27.0%	27.0%	13.0%	21.0%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5		3.0	4.5	4.5	3.0	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5	1.5	0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	36.6	27.5	27.5	52.3	45.4		41.7	31.9	31.9	22.4	12.0	
Actuated g/C Ratio	0.37	0.28	0.28	0.52	0.45		0.42	0.32	0.32	0.22	0.12	
v/c Ratio	0.06	0.45	0.58	0.68	0.18		0.87	0.08	0.66	0.15	0.19	
Control Delay (s/veh)	11.5	31.1	6.2	20.2	14.6		45.0	30.3	7.4	22.7	40.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	11.5	31.1	6.2	20.2	14.6		45.0	30.3	7.4	22.7	40.8	
LOS	B	C	A	C	B		D	C	A	C	D	
Approach Delay (s/veh)		18.5			17.9			25.2			31.7	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)	7	115	0	136	41		290	23	5	15	23	
Queue Length 95th (ft)	18	166	74	192	76		#574	56	115	39	52	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		2651			1111			1149			519	
Turn Bay Length (ft)	145		150	260			230					
Base Capacity (vph)	496	1054	773	623	1532		608	593	915	300	251	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.05	0.41	0.56	0.63	0.18		0.87	0.08	0.66	0.13	0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 21.5		Intersection LOS: C	
Intersection Capacity Utilization 81.0%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Raymond Drive/Corporate Lane & Ferry Road



Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	951	110	88	569	21	39	3	30	6	1	8
Future Vol, veh/h	41	951	110	88	569	21	39	3	30	6	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	200	-	-	150	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	2	1	4	3	5	6	0	0	0	0	0
Mvmt Flow	45	1045	121	97	625	23	43	3	33	7	1	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	648	0	0	1166	0	0	1702	2037	583	1445	2086	324
Stage 1	-	-	-	-	-	-	1196	1196	-	830	830	-
Stage 2	-	-	-	-	-	-	507	842	-	614	1256	-
Critical Hdwy	4.16	-	-	4.18	-	-	7.62	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.23	-	-	2.24	-	-	3.56	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	927	-	-	734	-	-	57	57	*832	*94	54	677
Stage 1	-	-	-	-	-	-	323	363	-	*335	388	-
Stage 2	-	-	-	-	-	-	506	383	-	*785	334	-
Platoon blocked, %		-	-	0	-	-			0			
Mov Cap-1 Maneuver	927	-	-	734	-	-	46	47	*832	*74	44	677
Mov Cap-2 Maneuver	-	-	-	-	-	-	177	165	-	*209	141	-
Stage 1	-	-	-	-	-	-	307	345	-	*291	337	-
Stage 2	-	-	-	-	-	-	433	333	-	*710	318	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.34	1.38	22.34	16.83
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	177	608	927	-	-	734	-	-	195	677
HCM Lane V/C Ratio	0.242	0.06	0.049	-	-	0.132	-	-	0.039	0.013
HCM Ctrl Dly (s/v)	31.7	11.3	9.1	-	-	10.6	-	-	24.2	10.4
HCM Lane LOS	D	B	A	-	-	B	-	-	C	B
HCM 95th %tile Q(veh)	0.9	0.2	0.2	-	-	0.5	-	-	0.1	0

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	78	857	53	69	575	14	66	0	85	14	0	37
Future Vol, veh/h	78	857	53	69	575	14	66	0	85	14	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	230	-	-	140	-	140	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	1	0	0	4	0	0	0	0	0	0	12
Mvmt Flow	87	952	59	77	639	16	73	0	94	16	0	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	654	0	0	1011	0	0	1628	1963	506	1449	1984	327
Stage 1	-	-	-	-	-	-	1155	1155	-	800	800	-
Stage 2	-	-	-	-	-	-	473	808	-	649	1184	-
Critical Hdwy	4.18	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.24	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.42
Pot Cap-1 Maneuver	1093	-	-	878	-	-	~ 69	64	*847	*94	62	*907
Stage 1	-	-	-	-	-	-	345	373	-	*488	498	-
Stage 2	-	-	-	-	-	-	812	493	-	*799	359	-
Platoon blocked, %	0	-	-	0	-	-			0			0
Mov Cap-1 Maneuver	1093	-	-	878	-	-	~ 55	54	*847	*70	52	*907
Mov Cap-2 Maneuver	-	-	-	-	-	-	214	186	-	*261	170	-
Stage 1	-	-	-	-	-	-	318	344	-	*446	454	-
Stage 2	-	-	-	-	-	-	708	450	-	*654	330	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.68	1	18.76	12.05
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	214	-	847	1093	-	-	878	-	-	261	907
HCM Lane V/C Ratio	0.343	-	0.111	0.079	-	-	0.087	-	-	0.06	0.045
HCM Ctrl Dly (s/v)	30.3	0	9.8	8.6	-	-	9.5	-	-	19.7	9.2
HCM Lane LOS	D	A	A	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	1.4	-	0.4	0.3	-	-	0.3	-	-	0.2	0.1

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	44	1263	335	0	1329
Future Vol, veh/h	0	44	1263	335	0	1329
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	155	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	11	1	0	12
Mvmt Flow	0	45	1302	345	0	1370

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	651	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	356	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	356	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.57	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	356	-
HCM Lane V/C Ratio	-	0.127	-
HCM Ctrl Dly (s/v)	-	16.6	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.4	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	147	127	61	42	37	1	2	2	1	8	24	5
Future Vol, veh/h	147	127	61	42	37	1	2	2	1	8	24	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	179	155	74	51	45	1	2	2	1	10	29	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	46	0	0	229	0	0	713	699	192	663	736	46
Stage 1	-	-	-	-	-	-	551	551	-	148	148	-
Stage 2	-	-	-	-	-	-	162	149	-	515	588	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1561	-	-	1351	-	-	350	366	855	378	349	1030
Stage 1	-	-	-	-	-	-	523	519	-	859	778	-
Stage 2	-	-	-	-	-	-	845	778	-	547	499	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1561	-	-	1351	-	-	265	305	855	312	291	1030
Mov Cap-2 Maneuver	-	-	-	-	-	-	265	305	-	312	291	-
Stage 1	-	-	-	-	-	-	453	450	-	826	748	-
Stage 2	-	-	-	-	-	-	775	748	-	471	433	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	3.34	4.08	16.12	17.59
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	277	450	742	-	-	940	-	-	296	1030
HCM Lane V/C Ratio	0.013	0.005	0.115	-	-	0.038	-	-	0.132	0.006
HCM Ctrl Dly (s/v)	18.2	13	7.6	0	-	7.8	0	-	19	8.5
HCM Lane LOS	C	B	A	A	-	A	A	-	C	A
HCM 95th %tile Q(veh)	0	0	0.4	-	-	0.1	-	-	0.4	0

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	134	63	4	48	17
Future Vol, veh/h	2	134	63	4	48	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	146	68	4	52	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	73	0	-	0	221	71
Stage 1	-	-	-	-	71	-
Stage 2	-	-	-	-	150	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1540	-	-	-	772	998
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	883	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1540	-	-	-	771	998
Mov Cap-2 Maneuver	-	-	-	-	771	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	883	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.11	0	9.81
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	26	-	-	-	820
HCM Lane V/C Ratio	0.001	-	-	-	0.086
HCM Ctrl Dly (s/v)	7.3	0	-	-	9.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	69	16	5	82	102	20
Future Vol, veh/h	69	16	5	82	102	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	73	17	5	86	107	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	215	118	128	0	-	0
Stage 1	118	-	-	-	-	-
Stage 2	97	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	778	939	1470	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	775	939	1470	-	-	-
Mov Cap-2 Maneuver	775	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.06	0.43	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	103	-	801	-	-
HCM Lane V/C Ratio	0.004	-	0.112	-	-
HCM Ctrl Dly (s/v)	7.5	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Capacity Analysis Summary Sheets

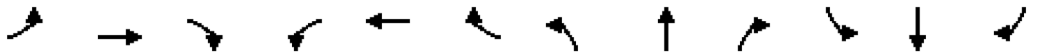
Year 2031 Total Projected Weekday Evening Peak Hour

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	101	4	35	73	4	44
Future Vol, veh/h	101	4	35	73	4	44
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	119	5	41	86	5	52
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay, s/veh	8.1	7.3	7.4
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	96%	0%	100%	0%
Vol Thru, %	4%	32%	0%	0%
Vol Right, %	0%	68%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	105	108	4	44
LT Vol	101	0	4	0
Through Vol	4	35	0	0
RT Vol	0	73	0	44
Lane Flow Rate	124	127	5	52
Geometry Grp	2	2	5	5
Degree of Util (X)	0.147	0.13	0.007	0.062
Departure Headway (Hd)	4.286	3.685	5.533	4.328
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	831	961	651	832
Service Time	2.339	1.754	3.233	2.028
HCM Lane V/C Ratio	0.149	0.132	0.008	0.063
HCM Control Delay, s/veh	8.1	7.3	8.3	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.4	0	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	242	151	285	497	472	181	1165	104	307	1010	89
Future Volume (vph)	100	242	151	285	497	472	181	1165	104	307	1010	89
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	11	12	12	11	12	12	11	12	12	11	12	12
Storage Length (ft)	335		200	335		455	650		220	575		190
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	175			175			125			180		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1662	3725	1404	1728	3762	1568	1572	3585	1568	1728	3619	1538
Flt Permitted	0.461			0.359			0.200			0.078		
Satd. Flow (perm)	806	3725	1404	653	3762	1568	331	3585	1568	142	3619	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89			75			78			81
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		781			858			910			1388	
Travel Time (s)		11.8			13.0			13.8			21.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	2%	15%	1%	1%	3%	11%	6%	3%	1%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	252	157	297	518	492	189	1214	108	320	1052	93
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	9.0	23.0	8.0	8.0	37.0	8.0	8.0	49.5	8.0	8.0	51.5	9.0
Total Split (s)	13.0	23.0	22.0	29.0	39.0	22.0	22.0	66.0	29.0	22.0	66.0	13.0
Total Split (%)	9.3%	16.4%	15.7%	20.7%	27.9%	15.7%	15.7%	47.1%	20.7%	15.7%	47.1%	9.3%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	26.8	15.1	34.5	44.5	29.3	58.3	75.3	59.5	88.8	87.6	69.2	84.4
Actuated g/C Ratio	0.19	0.11	0.25	0.32	0.21	0.42	0.54	0.43	0.63	0.63	0.49	0.60
v/c Ratio	0.50	0.63	0.38	0.77	0.66	0.71	0.64	0.80	0.11	0.92	0.59	0.10
Control Delay (s/veh)	43.9	66.7	20.7	52.8	54.7	35.1	22.9	39.7	3.3	69.2	28.3	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.9	66.7	20.7	52.8	54.7	35.1	22.9	39.7	3.3	69.2	28.3	4.2
LOS	D	E	C	D	D	D	C	D	A	E	C	A
Approach Delay (s/veh)		48.0			46.9			35.0			35.7	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	67	116	49	218	225	318	71	496	9	~233	361	4

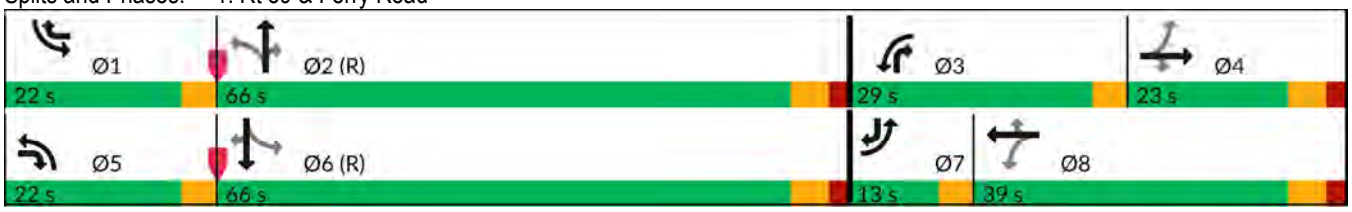
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	112	163	109	306	283	459	114	589	31	#464	480	32
Internal Link Dist (ft)		701			778			830			1308	
Turn Bay Length (ft)	335		200	335		455	650		220	575		190
Base Capacity (vph)	214	452	461	403	886	697	354	1536	1046	349	1789	962
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.56	0.34	0.74	0.58	0.71	0.53	0.79	0.10	0.92	0.59	0.10

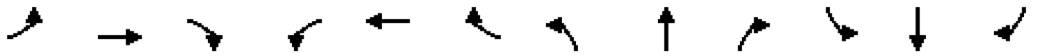
Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 10 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 39.9	Intersection LOS: D
Intersection Capacity Utilization 86.7%	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: 1: Rt 59 & Ferry Road



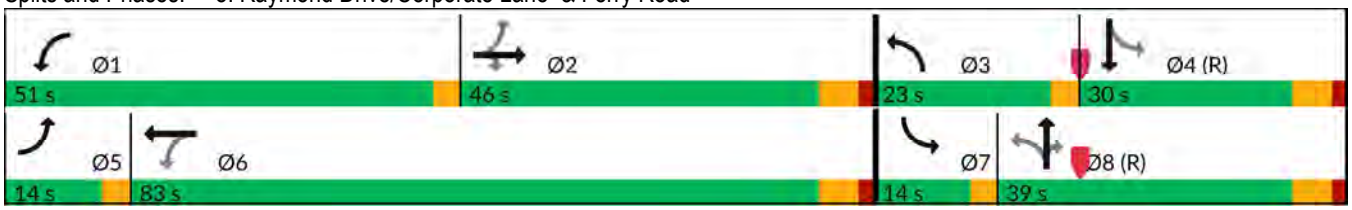


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	390	501	616	558	31	410	43	391	80	83	29
Future Volume (vph)	16	390	501	616	558	31	410	43	391	80	83	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		150	260		0	230		0	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	155			175			160			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.992				0.850		0.961	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3539	1599	1805	3548	0	1770	1759	1615	1641	1690	0
Flt Permitted	0.425			0.361			0.524			0.728		
Satd. Flow (perm)	808	3539	1599	686	3548	0	976	1759	1615	1257	1690	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			455		6				399		10	
Link Speed (mph)		45			40			45			30	
Link Distance (ft)		2731			1191			1229			599	
Travel Time (s)		41.4			20.3			18.6			13.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	1%	0%	1%	0%	2%	8%	0%	10%	7%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	398	511	629	601	0	418	44	399	82	115	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8		8	4		
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	8.0	22.0	22.0	8.0	22.0		8.0	22.0	22.0	8.0	21.0	
Total Split (s)	14.0	46.0	46.0	51.0	83.0		23.0	39.0	39.0	14.0	30.0	
Total Split (%)	9.3%	30.7%	30.7%	34.0%	55.3%		15.3%	26.0%	26.0%	9.3%	20.0%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5		3.0	4.5	4.5	3.0	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5	1.5	0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	43.9	34.9	34.9	86.3	79.5		57.7	41.8	41.8	36.3	23.4	
Actuated g/C Ratio	0.29	0.23	0.23	0.58	0.53		0.38	0.28	0.28	0.24	0.16	
v/c Ratio	0.06	0.48	0.71	0.86	0.32		0.80	0.09	0.54	0.25	0.42	
Control Delay (s/veh)	18.3	51.1	12.6	33.8	19.9		52.4	46.1	7.4	36.5	59.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	18.3	51.1	12.6	33.8	19.9		52.4	46.1	7.4	36.5	59.6	
LOS	B	D	B	C	B		D	D	A	D	E	
Approach Delay (s/veh)		29.3			27.0			31.2			49.9	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	6	176	44	372	153		337	33	0	53	100	
Queue Length 95th (ft)	15	223	170	465	200		#635	72	96	101	161	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		2651			1111			1149			519	
Turn Bay Length (ft)	145		150	260			230					
Base Capacity (vph)	336	950	762	755	1924		524	497	742	345	313	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.05	0.42	0.67	0.83	0.31		0.80	0.09	0.54	0.24	0.37	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 54 (36%), Referenced to phase 4:SBTL and 8:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay (s/veh): 30.2		Intersection LOS: C	
Intersection Capacity Utilization 89.3%		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: 8: Raymond Drive/Corporate Lane & Ferry Road



Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	619	25	28	1089	8	138	1	124	16	0	26
Future Vol, veh/h	8	619	25	28	1089	8	138	1	124	16	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	200	-	-	150	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	2	0	4	2	0	0	0	2	7	0	0
Mvmt Flow	9	666	27	30	1171	9	148	1	133	17	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1180	0	0	692	0	0	1342	1936	346	1586	1945	590
Stage 1	-	-	-	-	-	-	696	696	-	1235	1235	-
Stage 2	-	-	-	-	-	-	646	1240	-	351	710	-
Critical Hdwy	4.1	-	-	4.18	-	-	7.5	6.5	6.94	7.64	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.64	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.64	5.5	-
Follow-up Hdwy	2.2	-	-	2.24	-	-	3.5	4	3.32	3.57	4	3.3
Pot Cap-1 Maneuver	599	-	-	1078	-	-	~ 112	66	*917	*69	66	456
Stage 1	-	-	-	-	-	-	603	580	-	*179	251	-
Stage 2	-	-	-	-	-	-	432	249	-	*853	571	-
Platoon blocked, %		-	-	0	-	-			0			
Mov Cap-1 Maneuver	599	-	-	1078	-	-	~ 101	64	*917	*56	63	456
Mov Cap-2 Maneuver	-	-	-	-	-	-	257	174	-	*142	176	-
Stage 1	-	-	-	-	-	-	594	571	-	*174	244	-
Stage 2	-	-	-	-	-	-	394	242	-	*717	562	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.14	0.21	23.84	21.18
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	257	887	599	-	-	1078	-	-	142	456
HCM Lane V/C Ratio	0.578	0.152	0.014	-	-	0.028	-	-	0.121	0.061
HCM Ctrl Dly (s/v)	36.6	9.8	11.1	-	-	8.4	-	-	33.8	13.4
HCM Lane LOS	E	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	3.3	0.5	0	-	-	0.1	-	-	0.4	0.2

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	676	45	47	987	40	62	2	125	10	0	76
Future Vol, veh/h	38	676	45	47	987	40	62	2	125	10	0	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	230	-	-	140	-	140	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	15	2	0	0	2	20	0	0	0	50	0	7
Mvmt Flow	41	735	49	51	1073	43	67	2	136	11	0	83

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1116	0	0	784	0	0	1480	2060	392	1648	2063	558
Stage 1	-	-	-	-	-	-	842	842	-	1197	1197	-
Stage 2	-	-	-	-	-	-	639	1218	-	451	866	-
Critical Hdwy	4.4	-	-	4.1	-	-	7.5	6.5	6.9	8.5	6.5	7.04
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	7.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	7.5	5.5	-
Follow-up Hdwy	2.35	-	-	2.2	-	-	3.5	4	3.3	4	4	3.37
Pot Cap-1 Maneuver	751	-	-	1027	-	-	*89	56	*908	*40	55	*791
Stage 1	-	-	-	-	-	-	*498	500	-	*277	379	-
Stage 2	-	-	-	-	-	-	*761	367	-	*749	486	-
Platoon blocked, %	0	-	-	0	-	-			0			0
Mov Cap-1 Maneuver	751	-	-	1027	-	-	*71	50	*908	*30	50	*791
Mov Cap-2 Maneuver	-	-	-	-	-	-	*274	192	-	*174	197	-
Stage 1	-	-	-	-	-	-	*470	473	-	*263	360	-
Stage 2	-	-	-	-	-	-	*648	349	-	*599	459	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.5	0.38	13.99	12.05
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	274	192	908	751	-	-	1027	-	-	174	791
HCM Lane V/C Ratio	0.246	0.011	0.15	0.055	-	-	0.05	-	-	0.062	0.104
HCM Ctrl Dly (s/v)	22.4	24	9.7	10.1	-	-	8.7	-	-	27	10.1
HCM Lane LOS	C	C	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.9	0	0.5	0.2	-	-	0.2	-	-	0.2	0.3

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	130	1319	81	0	1445
Future Vol, veh/h	0	130	1319	81	0	1445
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	155	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	8	2	0	6
Mvmt Flow	0	135	1374	84	0	1505

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	687	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	338	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	338	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	22.62	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	338	-
HCM Lane V/C Ratio	-	0.401	-
HCM Ctrl Dly (s/v)	-	22.6	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	1.9	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	35	20	8	49	6	46	16	63	8	6	36
Future Vol, veh/h	27	35	20	8	49	6	46	16	63	8	6	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	4	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	34	44	25	10	61	8	58	20	79	10	8	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	69	0	0	69	0	0	209	213	56	206	221	65
Stage 1	-	-	-	-	-	-	124	124	-	85	85	-
Stage 2	-	-	-	-	-	-	85	89	-	121	136	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1520	-	-	1545	-	-	753	688	1016	756	681	1005
Stage 1	-	-	-	-	-	-	885	797	-	928	828	-
Stage 2	-	-	-	-	-	-	928	825	-	888	788	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1520	-	-	1545	-	-	690	668	1016	657	661	1005
Mov Cap-2 Maneuver	-	-	-	-	-	-	690	668	-	657	661	-
Stage 1	-	-	-	-	-	-	865	779	-	922	823	-
Stage 2	-	-	-	-	-	-	872	820	-	780	769	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	2.44	0.93	9.86	9.27
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	687	960	553	-	-	224	-	-	658	1005
HCM Lane V/C Ratio	0.098	0.092	0.022	-	-	0.006	-	-	0.027	0.045
HCM Ctrl Dly (s/v)	10.8	9.1	7.4	0	-	7.3	0	-	10.6	8.8
HCM Lane LOS	B	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.3	0.3	0.1	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	94	54	26	11	9
Future Vol, veh/h	12	94	54	26	11	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	100	57	28	12	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	85	0	-	0	197	71
Stage 1	-	-	-	-	71	-
Stage 2	-	-	-	-	126	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1524	-	-	-	796	997
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	905	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1524	-	-	-	789	997
Mov Cap-2 Maneuver	-	-	-	-	789	-
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	905	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.84	0	9.24
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	204	-	-	-	871
HCM Lane V/C Ratio	0.008	-	-	-	0.024
HCM Ctrl Dly (s/v)	7.4	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	8	15	159	41	51
Future Vol, veh/h	30	8	15	159	41	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	32	8	16	167	43	54

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	269	70	97	0	-	0
Stage 1	70	-	-	-	-	-
Stage 2	199	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	725	998	1509	-	-	-
Stage 1	958	-	-	-	-	-
Stage 2	839	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	716	998	1509	-	-	-
Mov Cap-2 Maneuver	716	-	-	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	839	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.99	0.64	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	155	-	762	-	-
HCM Lane V/C Ratio	0.01	-	0.053	-	-
HCM Ctrl Dly (s/v)	7.4	0	10	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Parking Ratio Table

Table B
PARKING RATIOS AT SIMILAR DEVELOPMENTS IN NAPERVILLE

Development	Year Built	Units	Bedrooms	Parking Spaces	Parking Ratios	
					Per Unit	Per Bedroom
Domain CityGate	2022	285	359	465	1.63	1.30
The Belvidere	2024	212	488	480	2.26	0.98
1200 E. Diehl Road	Under Construction	306	428	506	1.65	1.18