jmillan@kloainc.com>
Sent: Friday, May 1, 2020 12:13 PM
To: david.furey@dupageco.org
Cc: Anthony DeAngelis <adeangelis@icred.com>
Subject: Proposed City Gate West - Naperville

Dear Mr. Furey,

Intercontinental Real Estate & Development Corporation is planning to develop the southwest quadrant of the intersection of IL 59 with Ferry Road with a mixed-use development. The City of Naperville has reviewed the traffic study and is requesting to see the County's review comments on the development and proposed improvements. As such, attached is a PDF of the traffic impact study for your review. Given the size of the documents, I will send the preliminary engineering plans as a separate e-mail.

If you have any questions or need anything else, please let me know.

Thanks you for your help.

Javier Millan
Principal

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

9575 West Higgins Road, Suite 400
Rosemont, IL. 60018
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jmillan@kloainc.com>
Sent: Friday, May 1, 2020 12:16 PM
To: david.furey@dupageco.org
Cc: Anthony DeAngelis <adeangelis@icred.com>
Subject: City Gate West - Naperville (Preliminary Engineering Plans)

Dear Mr. Furey,

As discussed in my previous e-mail, attached is a PDF of the preliminary engineering plans.

If you need anything else, please let me know.

Javier Millan
Principal

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Traffic and Parking Impact Study
Proposed
Mixed-Use Development

Naperville, Illinois

Prepared For:

INTER CONTINENTAL REAL ESTATE & DEVELOPMENT CORPORATION

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

May 1, 2020

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 City Gate West, a proposed mixed-use development to be located in the southwest quadrant of the intersection of IL Route 59 with Ferry Road in Naperville, Illinois. As proposed the site will be developed with two multi-family buildings with a total of approximately 410 apartment units, two hotels with a total of 208 rooms, a medical office building, general retail stores, a drive-through coffee shop and seven high turnover/quality restaurants. In addition, the currently under construction Whirly Ball establishment was included as part of the development. It should be noted that the two multi-family buildings will also provide office/retail/restaurant space and will each provide a parking garage. Based on the proposed plans, the northern parking garage will provide a total of 450 parking spaces of which 340 will be dedicated to residents of the building with the remaining 110 spaces to be utilized by the retail/office/restaurant component of the northern building. The southern parking garage will provide a total of 479 parking spaces of which 342 will be dedicated to residents of the building with the remaining 137 spaces to be utilized by the retail/office/restaurant component of the southern building. In addition, approximately 1,534 surface parking spaces will be provided throughout the site serving the various land uses. Access to the proposed development will be provided off IL Route 59 and Ferry Road via Odyssey Avenue and Celebration 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 apartment development and mixed-use 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:

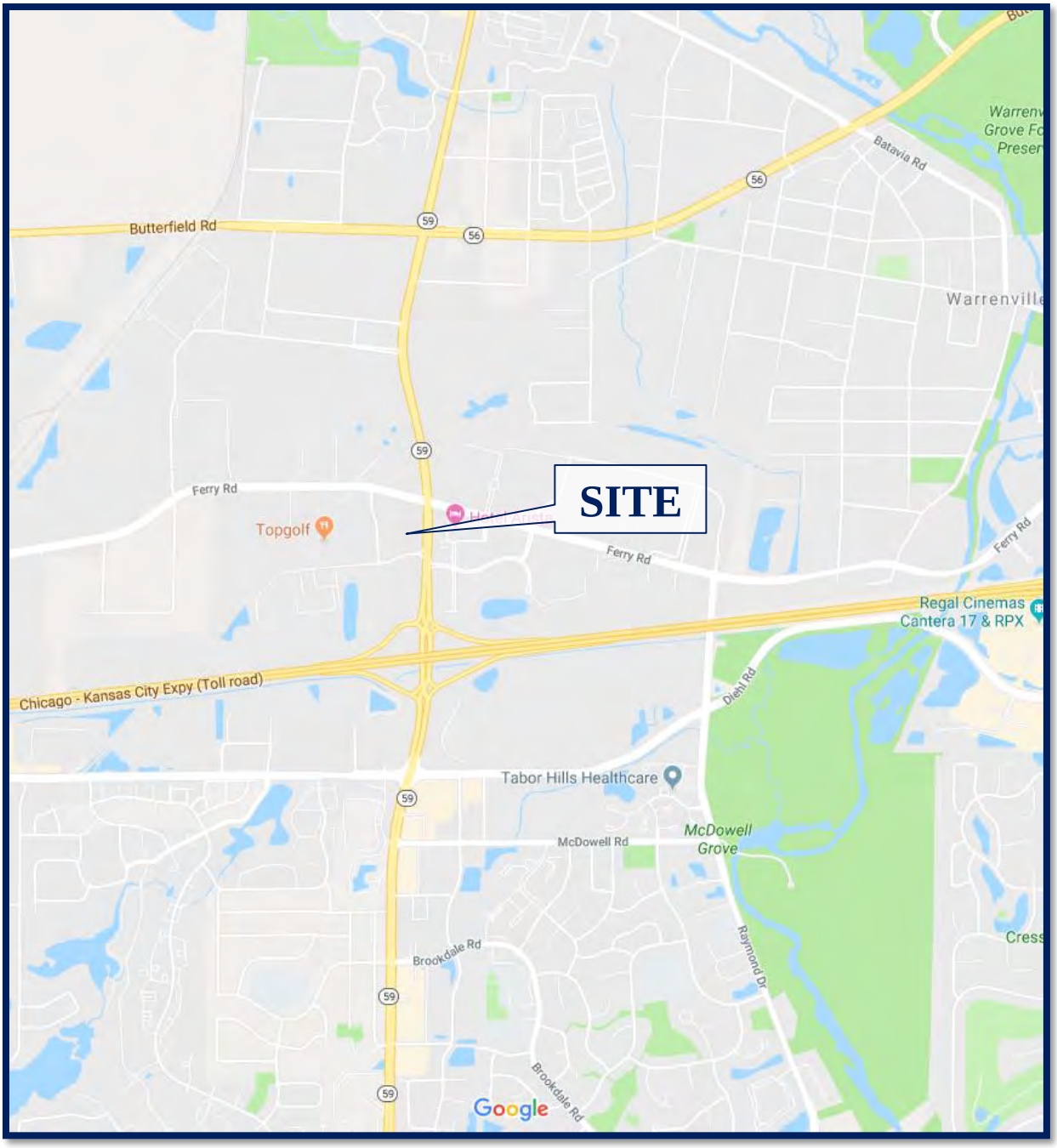
- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning, weekday evening, and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

Traffic capacity analyses were conducted for the weekday morning, weekday evening, and Saturday midday peak hours 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 2026 No-Build Conditions – Analyzes future conditions in the area without the traffic to be generated by the proposed development. The projected no-build traffic volumes include the existing traffic volumes increased by an ambient area growth factor and the traffic to be generated by other planned/approved developments in the area.

3. Future Conditions - The future projected traffic volumes include the existing traffic volumes increased by an ambient area growth factor (growth not attributable to any particular development) and the traffic estimated to be generated by the proposed subject development. Furthermore, the future traffic volumes were analyzed including the traffic projected to be generated by various approved developments in the nearby area.



Site Location **Figure 1**

Aerial View of Site **Figure 2**

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits 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

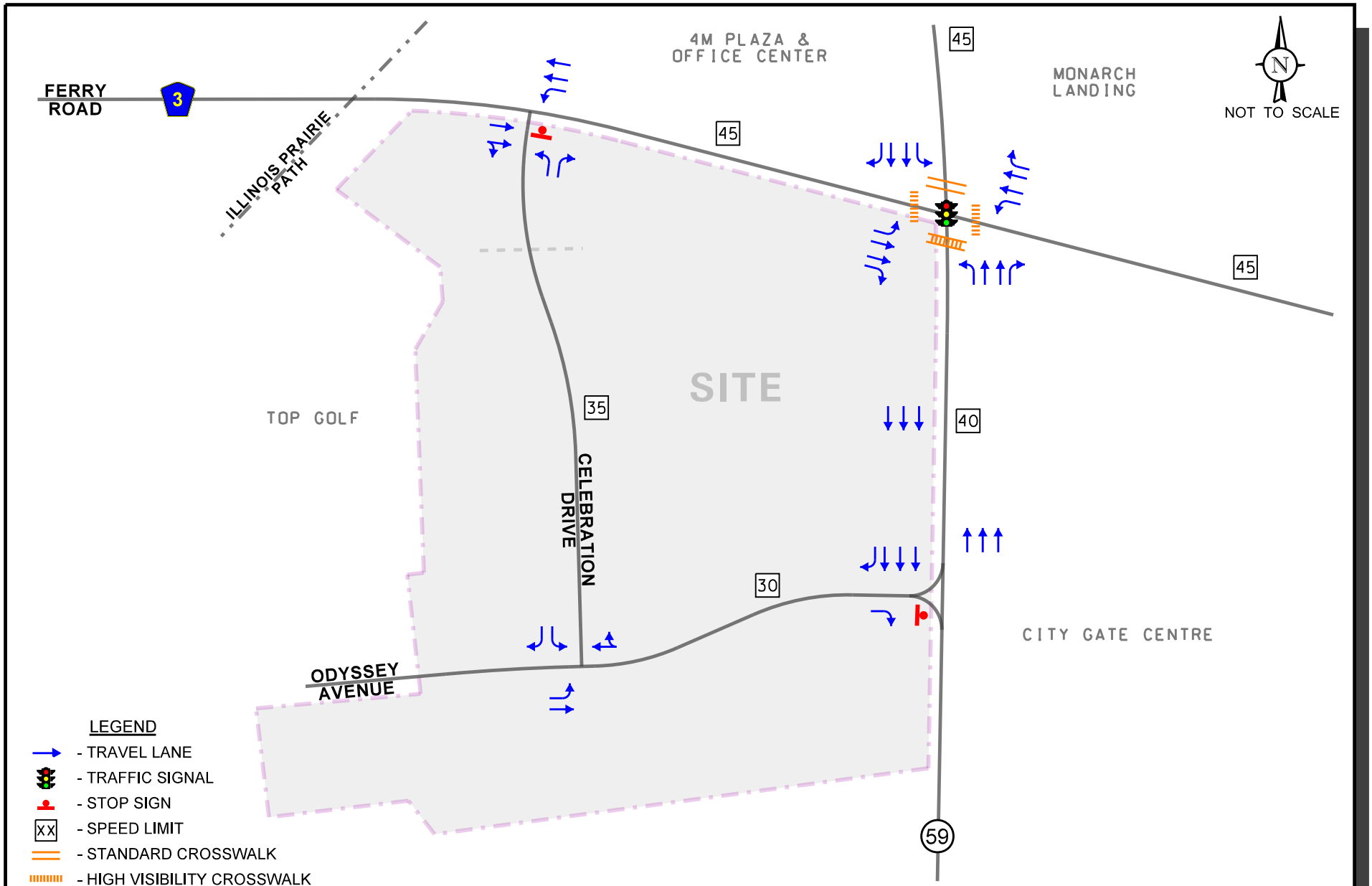
The site, which is mostly vacant, is located in the southwest quadrant of the intersection of IL Route 59 with Ferry Road within City Gate West. Land uses in the vicinity of the site include the 4M Plaza and Office Center to the north, the City Gate East office complex to the east, and the Top Golf facility and a Car Max dealer to the southwest.

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 Strategic Regional Arterial (SRA) that carries approximately 37,100 vehicles per day (IDOT 2017) and provides access to the Ronald Reagan Memorial Tollway (Interstate 88) immediately south of the site. IL 59 is under the jurisdiction of the Illinois Department of Transportation (IDOT) and is a posted Class II truck route. At its signalized intersection with Ferry Road, IL 59 provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on both approaches. South of Ferry Road, IL 59 is a six-lane roadway with three lanes in each direction, a center median, and an exclusive right-turn lane at its unsignalized intersection with Odyssey Avenue. The posted speed limit on IL 59 is 45 miles per hour (mph) north of Ferry Road and 40 mph south of Ferry Road.

Ferry Road (County Highway 3) is an east-west major arterial roadway that is under the jurisdiction of the DuPage County Division of Transportation. In the vicinity of the site, Ferry Road carries approximately 15,100 vehicles per day (IDOT 2016) and is a four-lane roadway with two lanes in each direction, a center median, and left-turn lanes at roadway intersections. At its signalized intersection with IL 59, Ferry Road provides an exclusive left-turn lane, two through lanes and an exclusive right-turn lane on both approaches. Crosswalks and pedestrian signals are provided on all four approaches. The traffic signal is part of the six-signal system that extends from Ferry Road south to North Aurora Road. There is a continuous sidewalk along the south side of Ferry Road and a continuous multi-use path along the north side of the roadway, both of which connect with the Illinois Prairie Path approximately 1,000 feet to the west of IL 59. At its unsignalized intersection with Celebration Drive, Ferry Road provides an exclusive left-turn lane and two through lanes on the westbound approach. The eastbound approach provides a through lane and a shared through/right-turn lane. The posted speed limit on Ferry Road is 45 mph and parking is not permitted on the roadway.



City Gate West
Naperville, Illinois

Existing Roadway Characteristics

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Job No: 19-230

Figure: 3

Odyssey Avenue is an east-west road that extends from IL 59 west to its terminus at the Odyssey Fun World establishment. The street is under the jurisdiction of the City of Naperville and has a two-lane cross section. At its unsignalized intersection with IL 59, Odyssey Avenue is restricted right-turn movements only with the outbound right-turn movement under stop sign control. At its unsignalized intersection with Celebration Drive, Odyssey Avenue provides an exclusive left-turn lane and a through lane in the eastbound direction. The westbound direction provides a shared through/right-turn lane. The posted speed limit on Odyssey Avenue is 30 mph.

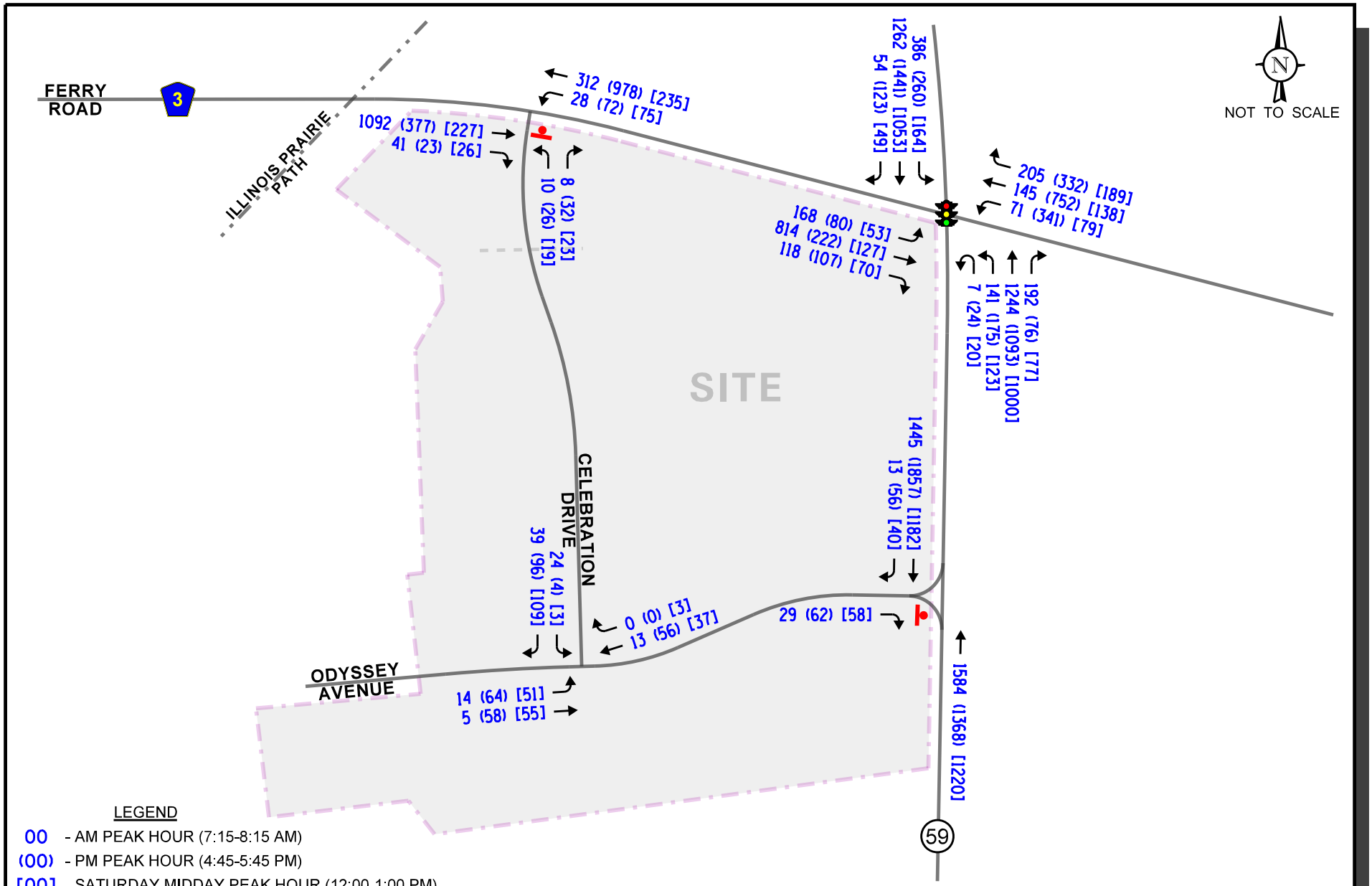
Celebration Drive is a collector street that extends from Ferry Road south to its terminus at Odyssey Avenue. Celebration Drive provides an exclusive left-turn lane and an exclusive right-turn lane at its unsignalized intersections with Ferry Road and Odyssey Avenue with the outbound movements under stop sign control. Celebration Drive has a posted speed limit of 35 mph.

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, September 24, 2019 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 and on Saturday, September 21, 2019 during the midday peak period (12:00 to 2:00 P.M.) at the following intersections:

- IL 59 with Ferry Road
- IL 59 with Odyssey Avenue
- Ferry Road with Celebration Drive
- Celebration Drive with Odyssey Avenue

The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 7:15 A.M. to 8:15 A.M., the weekday evening peak hour of traffic occurs from 4:45 P.M. to 5:45 P.M., and the Saturday midday peak hour of traffic occurs from 12:00 P.M. to 1:00 P.M. **Figure 4** illustrates the existing peak hour traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.



LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:45-5:45 PM)

[00] - SATURDAY MIDDAY PEAK HOUR (12:00-1:00 PM)

City Gate West
Naperville, Illinois

Existing Traffic Volumes

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Job No: 19-230

Figure: 4

Accident Data Analysis

KLOA, Inc. obtained currently available crash data[1] from IDOT for a five-year period (Years 2013 through 2017) for the study area intersections, noted above. The crash data incidents are summarized by year and intersection in **Table 1**. Further, based on information provided by IDOT, the intersection of IL 59 and Ferry Road is not considered a 5% Accident location.

Table 1
ACCIDENT DATA SUMMARY

Year	Intersection			
	IL 59/Ferry Road	IL 59/Odyssey Avenue	Ferry Road/Celebration Drive	Odyssey Avenue/Celebration Drive
2013	21	1	0	0
2014	22	0	0	0
2015	30	1	0	0
2016	15	0	0	0
2017	13	2	0	0
Total	**101**	**4**	**0**	**0**
Average/ Year	**20**	**<1**	**0**	**0**

[1] IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. The author is responsible for any data analyses and conclusions drawn.

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 development, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

The plan calls for developing the vacant land on the west side of IL 59 between Ferry Road and Odyssey Avenue with a mixed-use development of retail/commercial, office and residential land uses. The overall plan calls for seven restaurant pads on the north and east side of the site fronting Ferry Road and IL 59, retail stores, a hotel and a medical office building to be located on the south side of Odyssey Avenue just north of I-88 and the two apartment buildings within the center of the site. In addition, another hotel is proposed to be developed within the parcel currently occupied by the vacant Odyssey Fun World. Furthermore, the currently under construction Whirly Ball establishment is located on the west side of Celebration Drive. Overall, the entire development proposes the following land uses and densities:

- Multi-Family Residential (two apartment buildings) – 410 units
- Business Hotel (two hotels) – 208 rooms
- Medical Office Building – 21,024 square feet
- General Retail – 32,393 square feet
- Quality Restaurants (5) – 29,266 square feet
- High Turnover Restaurants (5) – 19,590 square feet
- Coffee Shop with Drive-Through – 2,578 square feet
- Fast Food Restaurant with Drive-Through – 2,807 square feet
- Whirly Ball – 25,415 square feet

Development Access

Access to the development is proposed to be provided off IL Route 59 and Ferry Road via Odyssey Avenue and Celebration Drive. Multiple connections are proposed including the northernmost access drive off Celebration Drive which will be located approximately 200 feet south of Ferry Road and will serve two restaurant pads to the west and the northern apartment building as well as various restaurants to the east. Continuing south on Celebration Drive there will be two additional access drives to the west and one boulevard type drive between the northern and southern apartment buildings. The easternmost access drive off Odyssey Avenue will be located approximately 200 feet west of IL 59. The north and south approaches will be under stop sign control. This access drive will provide accessibility to the north to the apartment buildings and the various restaurant pads and to the retail and coffee shop uses to the south. All of the access drives off Celebration Drive and Odyssey Avenue should be under stop sign control.

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

Directional Distribution

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

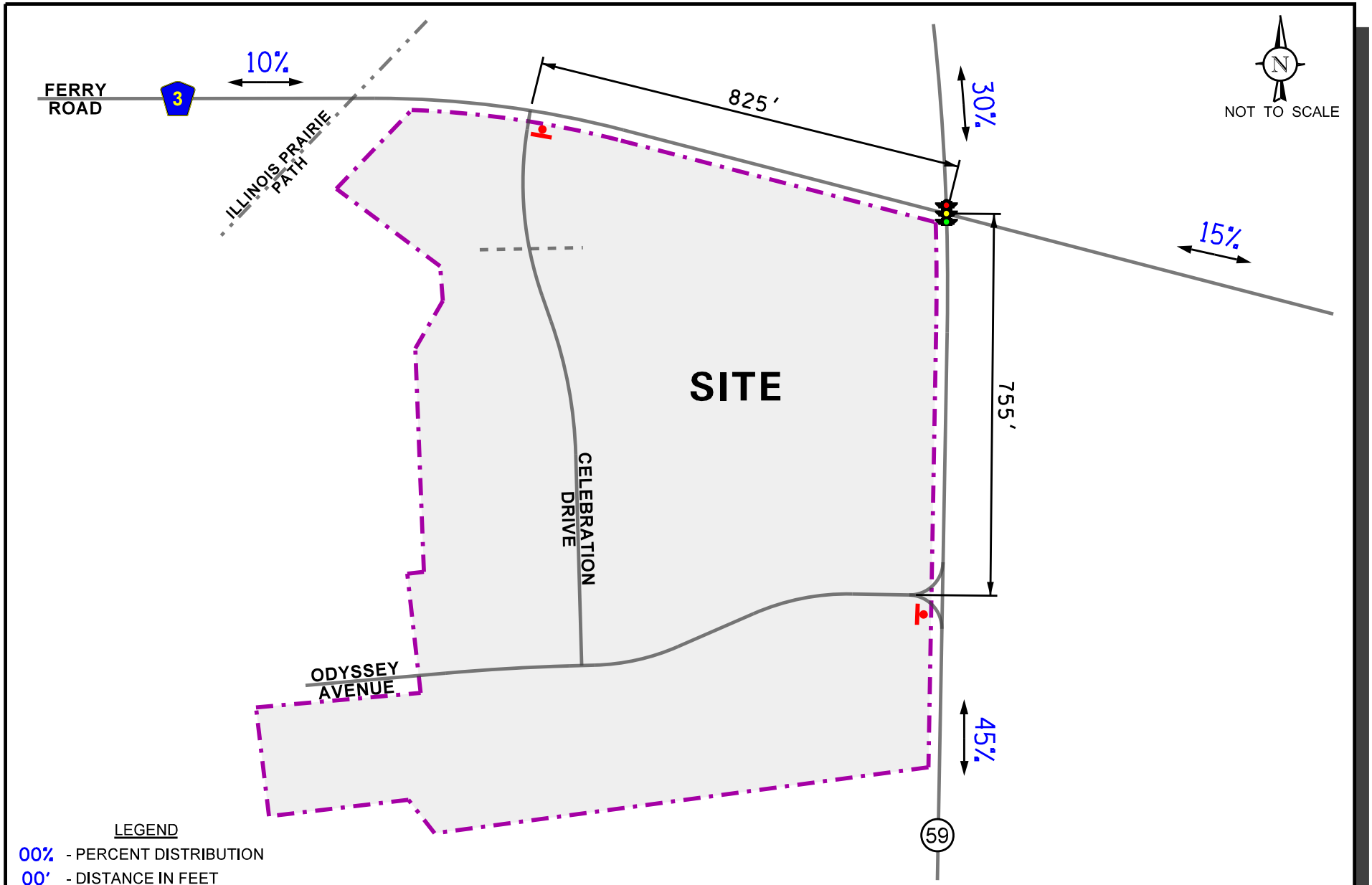
Estimated Site Traffic Generation

The estimate of vehicle traffic to be generated by the proposed development is based upon the proposed land use types and sizes. The vehicle trip generation for the overall development was calculated using data published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition.

Based on ITE data, the mixture of retail/commercial and residential land uses results in internal, or captured, vehicles trips, for vehicles that may visit or patronize one or more of the proposed land uses within the same visit without the use of a vehicle or relying on the surrounding roadway network to access the multiple land uses. While it is anticipated that this reduction will be high due to the mixed-use nature of the development including the residential component, a 10 percent internal vehicle trip reduction was applied to the overall development.

Further and based on ITE, a pass-by trip reduction of 30 to 40 percent may be applied to the restaurant and retail uses to account for vehicles already en route to another destination (i.e. work or home) that may patron the retail center. However, for the purposes of this study, only a 20 percent pass-by vehicle trip reduction was applied to all of the proposed commercial/retail land uses with the exception of the business hotels and the medical office building for which no pass-by reduction was applied.

Table 2 shows the estimated vehicle trip generation for the weekday morning, weekday evening, and Saturday midday peak hours as well as the weekday daily two-way traffic volumes for the overall development.



City Gate West
Naperville, Illinois

Estimated Directional Distribution

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Job No: 19-230

Figure: 5

Table 2
CITY GATE WEST ESTIMATED VEHICLE TRIP GENERATION FOR PROPOSED DEVELOPMENT

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour			Weekday Daily (two-way)
		In	Out	Total	In	Out	Total	In	Out	Total	
312	Business Hotel – 208 rooms	32	45	77	37	30	67	44	47	91	754
710	General Office – 10380 s.f.	31	5	36	2	14	16	3	3	6	118
720	Medical Office – 21,024 s.f.	44	12	56	20	53	73	30	23	53	720
820	General Retail – 32,393 s.f.	104	64	168	113	123	236	132	122	254	2,794
931	Quality Restaurant – 5,634 s.f.	2	2	4	29	15	44	35	25	60	472
931	Quality Restaurant – 7,861 s.f.	3	3	6	41	20	61	50	34	84	660
931	Quality Restaurant – 5,000 s.f.	2	2	4	26	13	39	31	22	53	420
931	Quality Restaurant – 5,000 s.f.	2	2	4	26	13	39	31	22	53	420
931	Quality Restaurant – 5,771 s.f.	2	2	4	30	15	45	37	25	62	484
932	High Turnover Rest – 4,093 s.f.	23	18	41	25	15	40	23	23	46	460
932	High-Turnover Rest – 4,569 s.f.	25	20	45	28	17	45	26	25	51	512
932	High Turnover Rest – 4,569 s.f.	25	20	45	28	17	45	26	25	51	512
932	High Turnover Rest – 3,919 s.f.	21	18	39	24	14	38	22	22	44	440
932	High Turnover Rest – 2,440 s.f.	13	11	24	15	9	24	14	13	27	274
935	Fast Food w/ D/T – 2,807 s.f.	58	55	113	48	44	92	78	76	154	1,322
937	Coffee Shop w/ D/T– 2,578 s.f.	117	112	229	56	56	112	113	113	226	2,114
	Whirly Ball – 25,415 s.f.	--[1]	--[1]	--[1]	10	3	13	12	5	17	--
	Gross Retail/Commercial Trips:	504	391	895	558	471	1,029	707	625	1,332	12,476
	Less Internal Trips (10%):	*-50*	*-40*	*-90*	*-56*	*-47*	*-103*	*-71*	*-62*	*-133*	*-1,248*
	Total Retail/Commercial Trips:	454	351	805	502	424	926	636	563	1,199	11,228
	Less Pass-By Trips (20%)[2]:	*-73*	*-73*	*-146*	*-87*	*-87*	*-174*	*-118*	*-118*	*-236*	*-2,176*
Total Net New Retail/Commercial Trips:		**381**	**278**	**659**	**415**	**337**	**752**	**518**	**445**	**963**	**9,052**
Residential											
221	Multi-Family – 410 units	35	101	136	105	67	172	88	91	179	2,232
	Less Internal Trips (10%):	*-4*	*-10*	*-14*	*-10*	*-7*	*-17*	*-9*	*-9*	*-18*	*-223*
	Total Residential Vehicle Trips:	**31**	**91**	**122**	**95**	**60**	**155**	**79**	**82**	**161**	**2,009**

[1]Whirly Ball does not open until 11:00 A.M. Trip generation based on survey of an existing facility in Lombard, Illinois
[2]Pass-by reduction not applied to LUC 312, 710 or 720.

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, weekday evening, and Saturday midday 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). The new traffic assignment for the proposed commercial/retail/office and residential uses are illustrated in **Figures 6** and **7,** respectively. **Figure 8** shows the assignment of the pass-by traffic volumes for the retail/commercial uses while **Figure 9** shows the total site traffic assignment.

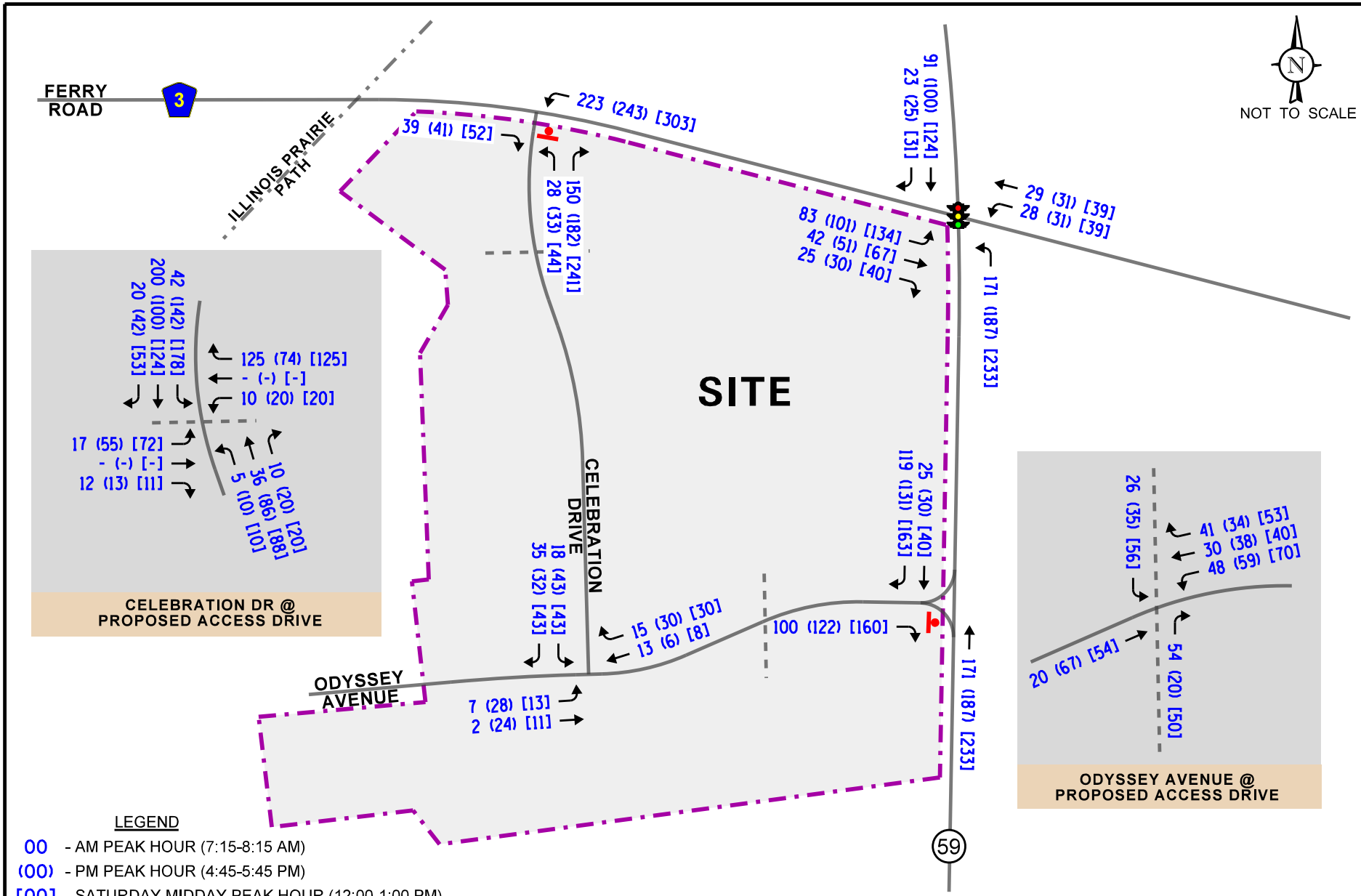
Background Traffic Conditions

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 ADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated October 7, 2019, the existing traffic volumes are projected to increase by a compound annual growth rate of 0.7 percent per year. As such, traffic volumes were increased by four percent total over six years (buildout year plus five years) to project Year 2026 conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

In addition to the regional background growth, the traffic to be generated by the following planned and/or approved/currently under construction developments was included:

- City Gate East – A residential development with 285 apartment units and a 34,000 square foot Event Center to be located in the southeast quadrant of the intersection of IL Route 59 with Ferry Road.
- Everton Development – A mixed-use development with 259 apartment units, 92 single-family homes, and 34,000 square feet of retail space to be located on the east side of IL Route 59 just north of the Illinois Prairie Path.
- Thorntons Gas Station – A 20 passenger vehicle fueling station with five truck fueling positions, a convenience store, and a fast-food restaurant with drive-through to be located in the southwest quadrant of the intersection of IL Route 59 with Duke Parkway.
- Lexington Trace – A residential development with 106 townhomes (currently under construction) located between Butterfield Road and Estes Street just west of IL Route 59.
- Redevelopment of the currently vacant Odyssey World with a 107-room hotel providing a conference/banquet space.

The Year 2026 no-build traffic volumes are illustrated in **Figure 10**.



LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)
(00) - PM PEAK HOUR (4:45-5:45 PM)
[00] - SATURDAY MIDDAY PEAK HOUR (12:00-1:00 PM)

City Gate West
Naperville, Illinois

Estimated Site-Generated Traffic Volumes
(Commercial)

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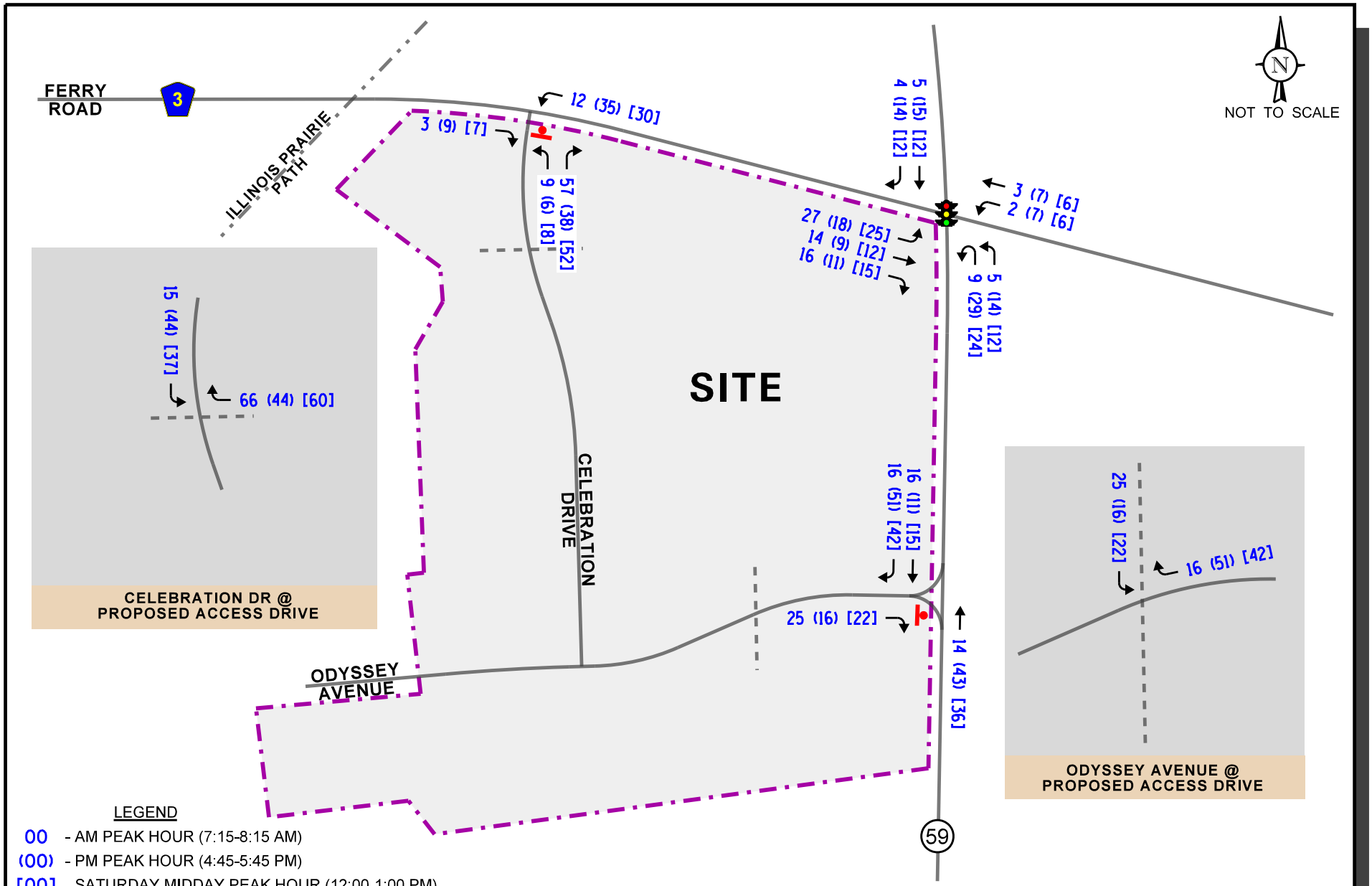
Job No: 19-230

Figure: 6



City Gate West
Naperville, Illinois

Estimated Site-Generated Traffic Volumes
(Residential)

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Job No: 19-230

Figure: 7

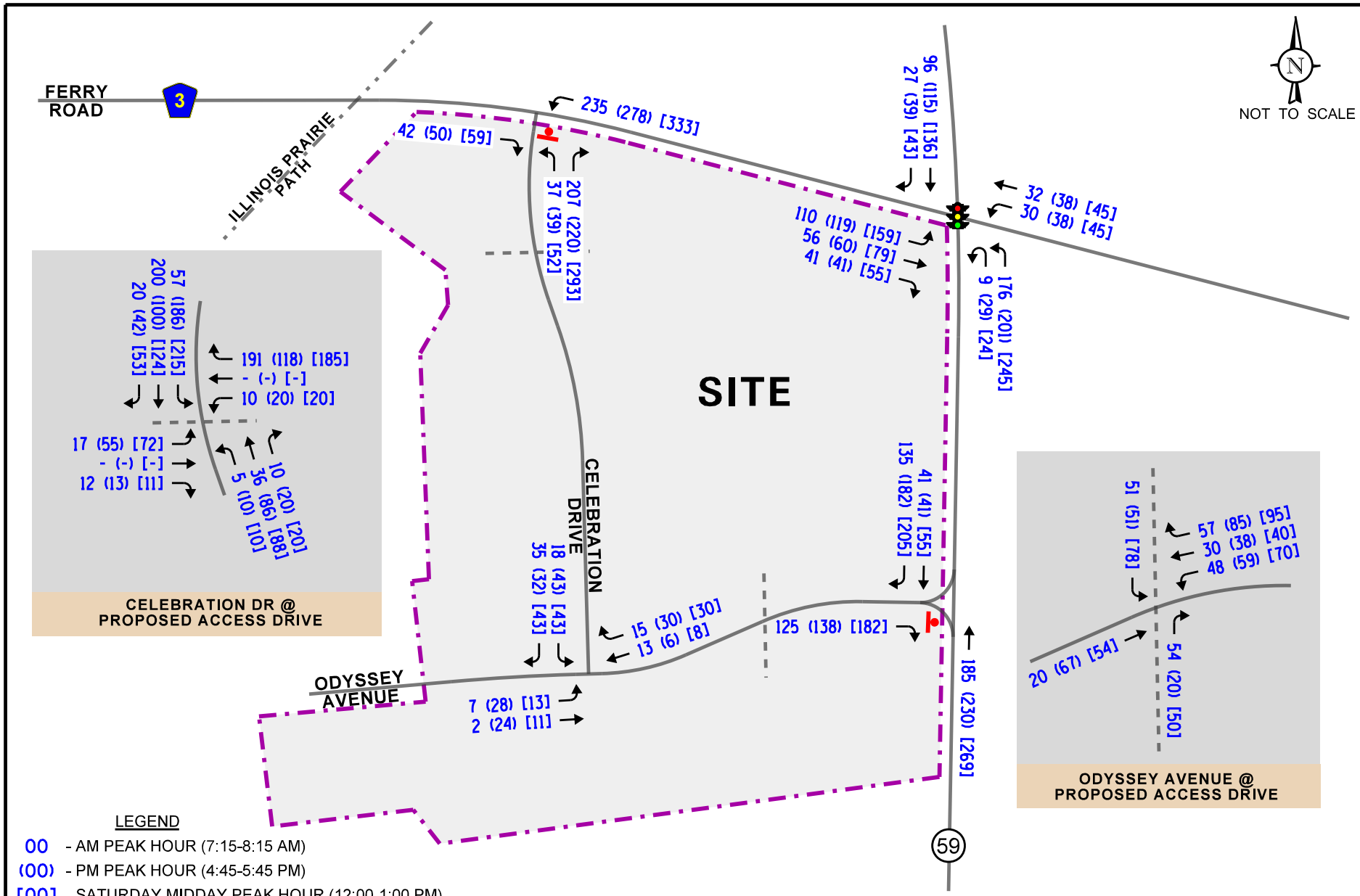
City Gate West
Naperville, Illinois

Pass-By Traffic Volumes

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

Job No: 19-230

Figure: 8



City Gate West
Naperville, Illinois

Estimated Total Site-Generated Traffic Volumes

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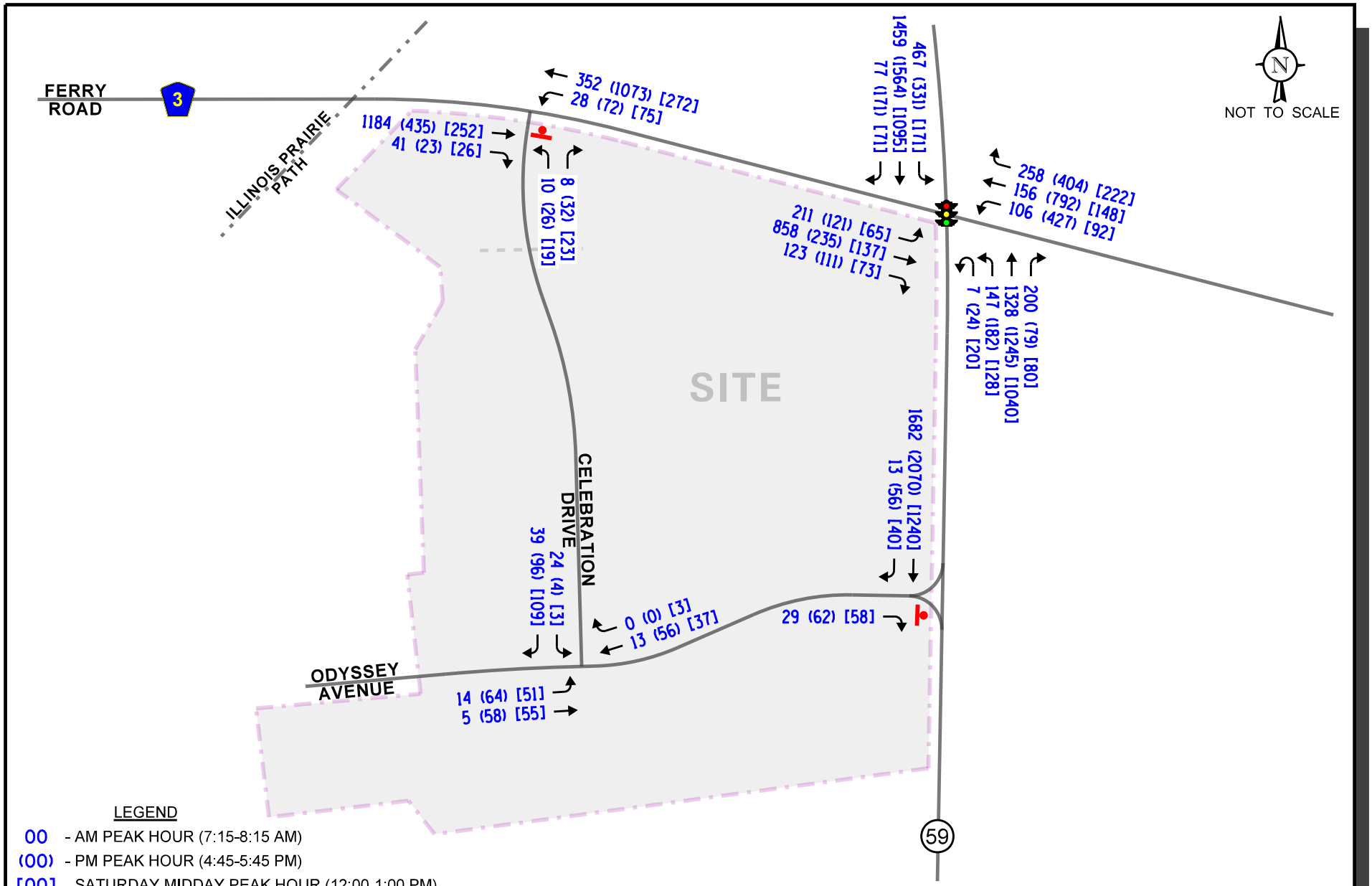
Job No: 19-230 Figure: 9



City Gate West
Naperville, Illinois

Year 2026 No-Build Traffic Volumes

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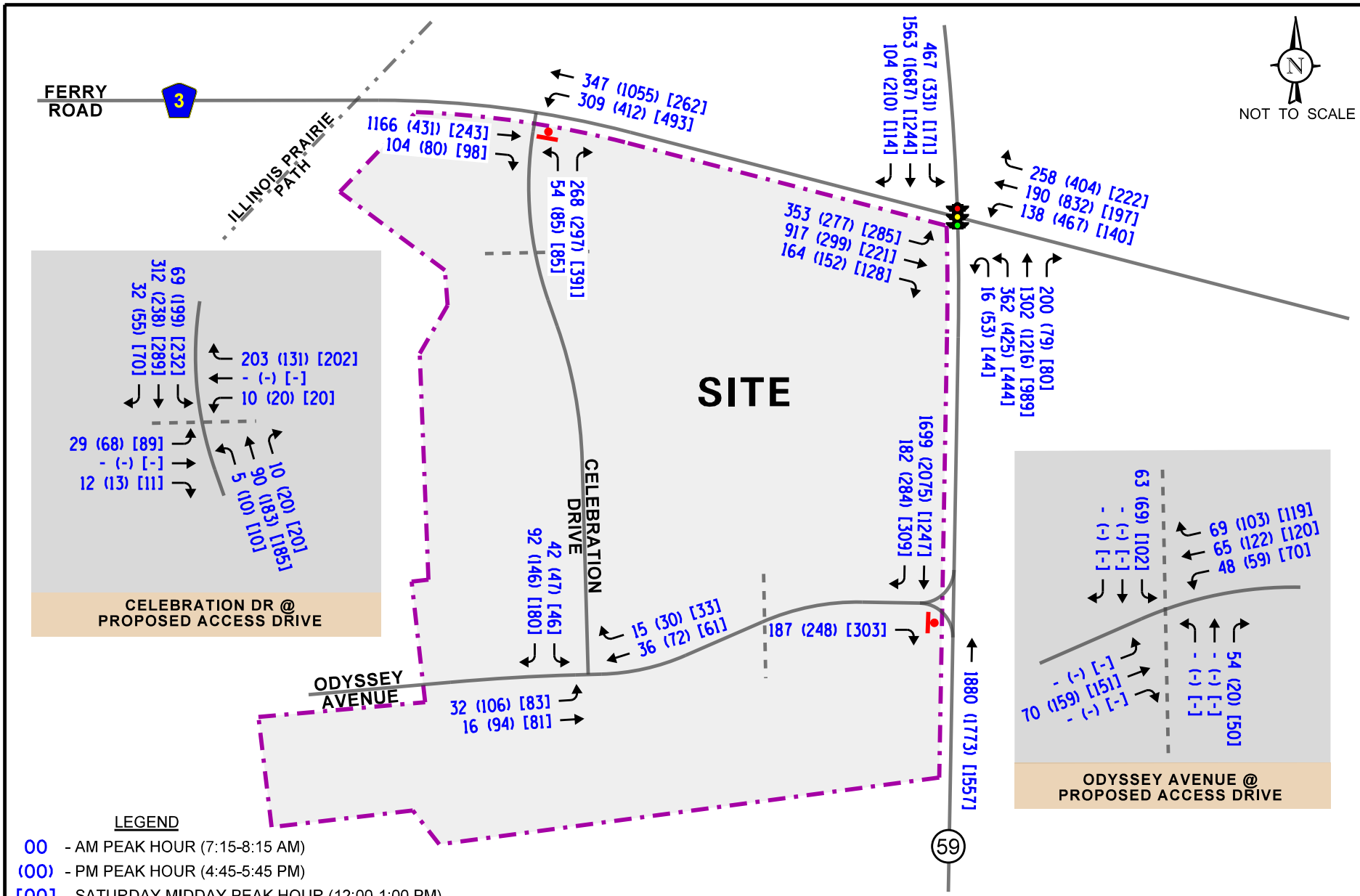
Job No: 19-230 Figure: 10

Total Projected Traffic Volumes

The development-generated traffic was added to the existing traffic volumes accounting for background growth and other planned and/or approved developments to determine the Year 2026 total projected traffic volumes, as illustrated in **Figure 11.**



LEGEND

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(00) - PM PEAK HOUR (4:45-5:45 PM)
[00] - SATURDAY MIDDAY PEAK HOUR (12:00-1:00 PM)

City Gate West
Naperville, Illinois

Year 2026 Total Projected Traffic Volumes

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

Job No: 19-230 Figure: 11

5. Traffic Analysis and Recommendations

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

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday evening, and Saturday midday peak hours for the existing (Year 2019), no-build (Year 2026), and total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM), 6th Edition* and analyzed using the Synchro/SimTraffic 10 computer software. Synchro/SimTraffic 10 was utilized due to the proximity of the access roadways serving the proposed development to the signalized intersection of IL Route 59 with Ferry Road.

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.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing, no-build, and Year 2026 total projected conditions are presented in **Tables 3** through **6**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 3
CAPACITY ANALYSIS RESULTS – IL 59/FERRY ROAD

Peak Hour	Condition	Operating Conditions by Approach												Overall
		Eastbound			Westbound			Northbound			Southbound			
		L	T	R	L	T	R	L	T	R	L	T	R	
Weekday Morning	Existing (Year 2019)	D 38.0	E 67.1	B 11.9	D 42.2	D 43.4	B 12.8	D 45.3	E 77.0	B 15.2	E 69.5	C 33.1	A 3.7	D 51.7
		E – 56.7			C – 28.3			E – 66.6			D – 40.4			
	Year 2026 Base (No-Build)	D 42.0	E 77.2	B 13.3	E 55.5	D 43.5	B 16.2	F 97.0	F 99+	B 16.0	F 93.0	D 41.8	A 5.0	E 71.6
		E – 64.3			C – 32.5			E – 99+			D – 52.3			
	Projected (Year 2026)	E 58.4	F 82.7	A 8.3	F 90.3	D 39.8	B 14.0	F 99+	F 99+	B 16.0	F 93.0	D 49.1	A 5.4	F 99+
		E – 68.2			D – 40.3			E – 99+			D – 56.5			
Weekday Evening	Existing (Year 2019)	D 44.0	E 63.1	B 15.1	E 55.8	E 65.7	C 26.9	E 68.9	D 36.7	A 1.9	E 64.3	D 51.4	A 7.2	D 48.2
		D – 46.8			E – 54.3			D – 39.5			D – 50.3			
	Year 2026 Base (No-Build)	E 63.0	E 65.1	B 15.8	F 95.7	E 73.5	C 33.4	E 75.6	D 43.3	A 3.4	F 99+	F 80.1	A 9.2	E 69.1
		D – 53.1			E – 69.4			D – 45.9			F – 90.0			
	Projected (Year 2026)	F 99+	E 72.9	B 17.1	F 99+	E 69.0	C 27.6	F 99+	D 41.5	A 3.9	F 99+	F 99+	B 11.6	F 99+
		F – 99+			E – 78.9			F – 99+			F – 110.4			
Saturday Midday	Existing (Year 2019)	D 47.5	E 65.5	A 9.1	D 49.5	E 61.0	B 12.3	A 8.9	B 14.2	A 1.3	A 8.7	B 14.1	A 1.6	B 18.5
		D – 46.0			D – 36.1			B – 12.8			B – 12.9			
	Year 2026 Base (No-Build)	D 48.5	E 65.5	A 9.4	D 49.4	E 63.0	C 21.7	B 11.3	B 15.7	A 1.4	A 9.8	B 15.8	A 1.6	C 20.7
		D – 47.1			D – 40.7			B – 14.2			B – 14.3			
	Projected (Year 2026)	F 99+	E 79.7	A 8.6	D 41.2	D 49.3	C 28.9	F 187.1	B 18.0	A 1.6	B 12.8	C 30.0	A 2.9	D 52.9
		F – 87.4			D – 39.1			E – 70.1			C – 26.1			

Table 4
CAPACITY ANALYSIS RESULTS
UNSIGNALIZED – EXISTING CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Ferry Road with Celebration Drive						
• Northbound Left Turn	C	25.2	C	19.2	B	12.1
• Northbound Right Turn	B	14.2	A	9.8	A	9.2
• Westbound Left Turn	B	11.9	A	8.5	A	8.0
Odyssey Avenue with Celebration Drive						
• Southbound Left Turn	A	8.9	B	10.5	A	9.9
• Southbound Right Turn	A	8.5	A	9.2	A	9.0
• Eastbound Left Turn	A	7.2	A	7.5	A	7.4
Odyssey Avenue with IL 59						
• Eastbound Right Turn	C	18.3	D	28.9	C	16.6

LOS = Level of Service
Delay is measured in seconds.

Table 5
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED – PROJECTED CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Ferry Road with Celebration Drive						
• Northbound Left Turn	F	99+	A	7.3	A	5.8
• Northbound Right Turn	F	52.4	B	14.3	B	13.9
• Westbound Left Turn	D	29.3	B	11.8	A	10.5
Odyssey Avenue with Celebration Drive						
• Southbound Left Turn	A	9.9	B	13.0	B	11.7
• Southbound Right Turn	A	9.0	A	9.7	A	9.7
• Eastbound Left Turn	A	7.4	A	7.7	A	7.6
Odyssey Avenue with IL 59						
• Eastbound Right Turn	F	59.4	F	99+	F	61.4
Odyssey Avenue with East Access Drive						
• Northbound Left/Through/Right Turn	A	9.0	A	9.6	A	9.5
• Southbound Left/Through/Right Turn	B	11.9	B	14.2	C	16.6
• Eastbound Left-Turn	A	7.5	A	7.7	A	7.7
• Westbound Left Turn	A	7.4	A	7.6	A	7.7
Celebration Drive with North Access Drive						
• Eastbound Left/Through/Right Turn	B	14.3	C	22.5	E	39.7
• Westbound Left/Through/Right Turn	B	10.3	B	12.1	B	12.9
• Northbound Left-Turn	A	8.0	A	7.9	A	8.0
• Southbound Left-Turn	A	7.5	A	8.1	A	8.2

LOS = Level of Service
Delay is measured in seconds.

Table 6
CAPACITY ANALYSIS RESULTS – FERRY ROAD WITH CELEBRATION DRIVE – SIGNALIZED

	Peak Hour	Eastbound	Westbound		Northbound		Overall
		TR	L	T	L	R	
Year 2026 Projected Conditions	**Weekday Morning Peak Hour**	B 18.4	C 26.5	A 1.9	E 66.9	B 9.7	B 18.3
			B - 13.5		C - 27.6		
	Weekday Evening Peak Hour	B 10.2	B 10.1	A 1.1	E – 71.0	B – 16.1	A 9.1
			A – 1.8		C – 28.3		
	Saturday Midday Peak Hour	D 36.1	D 41.3	C 20.8	D 33.3	A 6.2	C 27.6
			C – 34.2		B – 11.0		

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

Discussion and Recommendations

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

IL Route 59 with Ferry Road

The results of the capacity analyses indicate that while this intersection is operating at overall acceptable levels of service (LOS), various through and turning movements are operating at LOS E. Based on field observations and the results of the capacity analyses, the following are the critical movements that are experiencing significant delays and queues:

Weekday Morning Peak Hour

- Eastbound through traffic backs up very often to and beyond Celebration Drive.

- Southbound left-turn movements from IL Route 59 to Ferry Road sometimes did not clear the intersection. This is due to the lack of dual left-turn lanes and the fact that there are almost 400 left-turning vehicles in a single left-turn lane during the peak hour being opposed by over 1,200 vehicles.

Weekday Evening Peak Hour

- Westbound left-turn turn movements from Ferry Road to IL Route 59 very often did not clear the intersection. This is due to the lack of dual left-turn lanes and the fact that there are almost 350 left-turning vehicles in a single left-turn lane.

- Southbound left-turn movements from IL Route 59 to Ferry Road sometimes did not clear the intersection. This is due to the lack of dual left-turn lanes and the fact that there are over 250 left-turning vehicles in a single left-turn lane during the peak hour being opposed by almost 1,100 vehicles.

- Westbound through traffic very often backed up to and beyond City Gate Lane/Monarch Drive and sometimes did not clear the intersection.

While some of these existing deficiencies could be mitigated by the provision of dual left-turn lanes, a preliminary review of the DuPage County GIS indicates that there is not adequate right-of-way available to accommodate such widening.

Under Year 2026 no-build conditions, some additional movements will operate below acceptable LOS due to the anticipated increase in traffic volumes from the background growth and the other planned/approved developments in the area coupled with the lack of right-of-way available to provide additional capacity improvements.

Under Year 2026 projected conditions and taking into consideration the provision of a recently approved traffic signal to the east at the intersection of Ferry Road with Comfort Drive/Corporate Lane and the future provision of a traffic signal to the west at the intersection of Ferry Road with Celebration Drive (to be discussed in the next section), the westbound traffic movements will experience a reduction in delay. Given the right-of-way constraints at the intersection, consideration should be given to extending the eastbound right-turn lane storage west to Celebration Drive in order to allow vehicles desiring to travel south on IL 59 to do so without being impeded by the eastbound through queues. No other improvements are recommended in conjunction with the proposed development. An estimate of the cost associated with this recommended improvement is included in the Appendix.

Ferry Road with Celebration Drive

The results of the capacity analysis indicate that all turning movements at this intersection are currently operating at an acceptable LOS during all three peak hours.

Under Year 2026 projected conditions, the northbound left-turn and right-turn movements will operate at a LOS F during the morning peak hour. As discussed in the following section, when the projected traffic volumes are compared to the peak hour traffic signal warrant (Warrant 3) criteria published in the *Manual on Uniform Traffic Control Devices* (MUTCD), a traffic signal is warranted at this intersection during the weekday evening peak hour. When the intersection is analyzed as a signalized intersection, the results of the capacity analyses indicate that the intersection will operate at an overall LOS B or better. While the northbound left-turn movements will operate at a LOS E during the morning and evening peak hour, the 95th percentile queues will be less than 150 feet and will not extend to or beyond the proposed northerly access drive of Celebration Drive. Furthermore, based on a review of the traffic simulations, the provision of a traffic signal at this location will ensure the projected inbound left-turning traffic operates efficiently and reduce the potential for this movement to back in into the through lanes. No other improvements are recommended in conjunction with the proposed development. An estimate of the cost associated with the recommended traffic signal is included in the Appendix.

Odyssey Avenue with Celebration Drive

The results of the capacity analysis indicate that all of the turning movements at this intersection are operating at acceptable LOS under existing conditions.

Under Year 2026 projected conditions, all of the turning movements will continue to operate at acceptable LOS with queues of less than 50 feet. As such, no geometric or traffic control improvements are recommended or necessary in conjunction with the proposed development.

Odyssey Avenue with IL Route 59

The results of the capacity analysis indicate that the eastbound approach currently operates at LOS D or better during all three peak hours. Under Year 2026 projected conditions, the eastbound approach is projected to operate at LOS F during all three peak hours. Although the eastbound right-turn movement will operate below acceptable LOS during these peak hours, a review of the traffic simulations indicates that westbound traffic will be able to clear the intersection and that the outbound queues will not extend to the proposed east access drive. As such, no roadway or traffic control improvements will be required in conjunction with the proposed development.

Odyssey Avenue with Proposed East Access Drive

The results of the capacity analysis indicate that the northbound and southbound approaches will operate at a LOS B or better during all three peak hours and that the left-turning movements from the east and west approaches will operate at a LOS A. Furthermore and as previously indicated, outbound queues from Odyssey Avenue at its intersection with IL Route 59 will not extend to the proposed east access drive. As such, the traffic projected to be generated by the proposed development will have a limited impact on the operations of this intersection and no roadway or traffic control improvements will be required.

Celebration Drive with Proposed North Access Drive

The results of the capacity analysis indicate that the eastbound and westbound approaches will operate at an acceptable LOS during all three peak hours except for the eastbound approach during the Saturday midday peak hour which will operate at a LOS E. The left-turning movements from the north and south approaches will operate at a LOS A. Furthermore and as previously indicated, outbound queues from Celebration Drive, assuming the provision of a traffic signal at its intersection with Ferry Road, will not extend to the proposed north access drive. As such, the traffic projected to be generated by the proposed development will have a limited impact on the operations of this intersection and no roadway or traffic control improvements will be required.

Traffic Signal Warrant Evaluation

The existing and projected weekday morning, weekday evening, and Saturday midday peak hours 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 at the intersection of Ferry Road with Celebration Drive 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-turning movements were reduced based on Pagones Theorem to account for right-turn on red maneuvers. **Table 7** summarizes the traffic signal warrant evaluation for existing and projected conditions.

As can be seen from Table 7, when the existing traffic 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-turning movements based on Pagones Theorem, a traffic signal is warranted at this intersection during all three peak hours.

Table 7
PEAK HOUR TRAFFIC SIGNAL WARRANT – FERRY ROAD WITH COMFORT DRIVE

	Time Period	Major Approach Total Volume	Minor Approach Volume Northbound	Peak Hour Warrant Met?
Existing Conditions	**Weekday Morning Peak Hour**	1,473	12	No
	Weekday Evening Peak Hour	1,450	34	No
	Saturday Midday Peak Hour	563	25	No
Projected Conditions	**Weekday Morning Peak Hour**	1,926	121	Yes
	Weekday Evening Peak Hour	1,978	159	Yes
	Saturday Midday Peak Hour	1,096	183	Yes

Note: Northbound right turns reduced by 75 percent

6. Parking Evaluation

The following provides an evaluation of the proposed parking supply for the residential component and for the commercial/retail/office parking spaces serving City Gate Center in accommodating the parking projected to be generated by the proposed development.

Evaluation of the Residential Parking Supply

For multiple family dwelling uses, the City of Naperville requires two parking spaces per dwelling unit and 0.25 parking guest parking spaces per unit, thereby requiring 923 parking spaces.

As previously indicated, each apartment building will provide a parking garage containing 340 spaces for the northern building and 342 spaces for the southern building for a total of 682 parking spaces. This translates into a parking ratio of 1.66 spaces per unit. With a total of 514 bedrooms proposed, the resulting parking ratio will be 1.32 parking spaces per bedroom. The total 682 parking spaces, when compared to the City code of 923 parking spaces, results in a deficit of 241 parking spaces.

However, the proposed parking ratio of 1.66 parking spaces per unit will be adequate based on parking occupancy surveys of an existing, similar residential development in Vernon Hills, published parking demand data by the Institute of Transportation Engineers (ITE), census tract information, and similar developments in the area that have been approved and are operating with similar parking ratios as the proposed CityGate Apartment development. A description of each of the supporting methodologies follows.

Parking Occupancy of AMLI – Vernon Hills Development

A parking occupancy survey was conducted at the existing AMLI Museum Gardens luxury apartment development located at 1175 Museum Boulevard in Vernon Hills, Illinois. The apartment development, which was constructed in 2004, contains 294-units (576 bedrooms) and provides a total of approximately 599 parking spaces (mixture of 189 parking garage spaces, 56 parking spaces in detached garages throughout the campus, and 354 surface parking spaces around the perimeter. The results of the parking occupancy survey indicated that the apartment development experienced a peak parking occupancy of 397 spaces at 10:00 P.M. which is a parking ratio of 1.45 spaces per occupied unit and 0.74 parking spaces per occupied bedroom. This parking ratio is inclusive of all resident and guest parking. It should be noted that at the time the parking occupancy surveys were conducted that the apartment units were 93 percent occupied (273 occupied units and approximately 536 occupied bedrooms).

Parking Based on ITE Parking Demand Data

In reviewing the survey data published in the ITE *Parking Generation Manual*, 5th Edition for Land Use Code 221 (Mid-Rise Apartments), the following was determined:

- The average peak parking demand ratio is 1.31 spaces per dwelling unit
- The 85th percentile peak parking demand ratio is 1.47 spaces per dwelling unit
- The average peak parking demand ratio is 0.75 spaces per bedroom
- The 85th percentile peak parking demand ratio is 0.87 spaces per bedroom

As can be seen, the average and 85th percentile parking supply ratios, which account for both resident and guest parking, provided by the proposed apartment building are greater than the average and 85th percentile parking demands per dwelling unit and bedroom based on information published in the ITE *Parking Generation Manual*, 5th Edition.

Parking Based on U.S. Census Bureau Information

U.S. Census Bureau information reported between 2013 and 2017 of renter occupied households in the vicinity of the subject development showed that approximately 70 percent of renter occupied residences have zero or one vehicle available, 28 percent of renter occupied residences have two (2) vehicles available and two percent of renter occupied residences have three (3) vehicles available. This survey includes multi-family developments with one to several bedrooms in each unit.

It should be noted that these percentages are consistent with the characteristics of the proposed development which will provide 308 studio/one-bedroom units (approximately 75 percent of the total) and 102 two-bedroom units (approximately 25 percent of the total). Applying these percentage to the proposed 410-unit development assumes approximately 541 parking spaces will be required. With 682 parking spaces provided, there will be a surplus of 141 parking spaces to be utilized by residents and guests. Therefore, based on census data of the immediate area, the proposed 682 parking spaces are adequate to accommodate the residential peak parking demand.

Comparison of Parking Ratios of Similar Apartment Developments

A comparison of parking ratios of similar apartment developments in the Chicagoland area is summarized in **Table 8**. Table 8 shows the number of units, bedrooms and parking spaces as well as the parking space per unit ratio, as well as the parking space per bedroom ratio. It should be noted that these apartments do have access to nearby bus routes but are not within walking distance of railway stations. As shown in Table 2, the proposed apartment development parking ratio is similar to the average of the other similar developments. The proposed development is providing 1.66 parking spaces per unit and 1.33 spaces per bedroom. The ten other similar developments are providing parking at an average ratio of 1.65 spaces per unit and 1.14 spaces per bedroom. Based on the above, the proposed 682 parking spaces are adequate to accommodate residential peak parking demands.

Table 8
COMPARISON OF PARKING RATIOS AT SIMILAR DEVELOPMENTS

Development Name	Number of Units	Number of Bedrooms	Number of Parking Spaces	Spaces/Unit	Spaces/ Bedroom
AMLI – Deerfield	240	329	396	1.65	1.2
8700 Waukegan - Morton Grove	184	258	276	1.50	1.1
Tapestry – Glenview	290	403	490	1.69	1.2
Northshore 770 - Northbrook	347	545	571	1.65	1.0
Woodview - Deerfield	248	369	412	1.49	1.1
Mellody Farms – Vernon Hills	260	388	485	1.76	1.2
IL 62/Plum Grove Road - Schaumburg	372	--	635	1.71	--
Cedarlake – Plainfield	284	--	443	1.56	--
404 Social - Lincolnshire	302	458	534	1.77	1.2
The Elaine – Northbrook	338	--	580	1.72	--
			Average:	**1.65**	**1.14**
Proposed Apartment Development	410	512	682	1.66	1.33

Evaluation of Guest Parking Supply

It should be noted that all of the above parking demand comparison methodologies include the parking demand for both resident and guest parking. However, information regarding the separate parking demands for resident versus guest parking is not available. As can be seen from the above methodologies, the proposed development will have a projected peak parking demand of 603 spaces (85th percentile parking demand based on information published by ITE).

This peak parking demand can be accommodated by the proposed 682 parking spaces within the parking garage with a surplus of 79 parking spaces. This surplus of 79 parking spaces can be designated for guest parking and this number of parking spaces should be adequate to accommodate guest parking demand.

7. Conclusion

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

- A traffic signal is warranted at the intersection of Ferry Road with Celebration Drive under Year 2026 projected conditions.

- The traffic that will be generated by the proposed development can be accommodated by the area roadway system with the provision of a traffic signal at the intersection of Ferry Road with Celebration Drive.

- While various movements during the weekday morning and evening peak hours experience long delays and queues, these deficiencies cannot be mitigated due to the lack of right-of-way to accommodate certain capacity improvements.

- Based on the observed queues on Ferry Road at its intersection with IL Route 59, consideration should be given to extending the existing eastbound to southbound right-turn lane all the way west to the intersection of Ferry Road with Celebration Drive

- The proposed numerous internal connections with Odyssey Avenue and Celebration Drive will disperse traffic in an efficient manner without overloading any specific intersection.

- The proposed residential parking ratio of 1.66 parking spaces per apartment unit will be adequate based on the following:

    - Parking occupancy surveys of an existing, similar residential development in Vernon Hills.

    - Published parking demand data by the Institute of Transportation Engineers (ITE) in the *Parking Generation Manual,* 5th Edition.

    - Census tract information regarding the number of vehicles available per renter occupied household within the vicinity of the site.

    - The parking supplies provided at similar developments in the area that have been approved and are operating with similar parking ratios as the proposed City Gate Apartment development.

Appendix

Traffic Count Summary Sheets
Site Plan
CMAP 2050 Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets
Queue Tables
Cost Estimate of Proposed Improvements

Traffic Count Summary Sheets

IL 59 with Ferry Road - TMC
Sat Sep 21, 2019
Full Length (12 PM-2 PM, 7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699278, Location: 41.80986, -88.203617

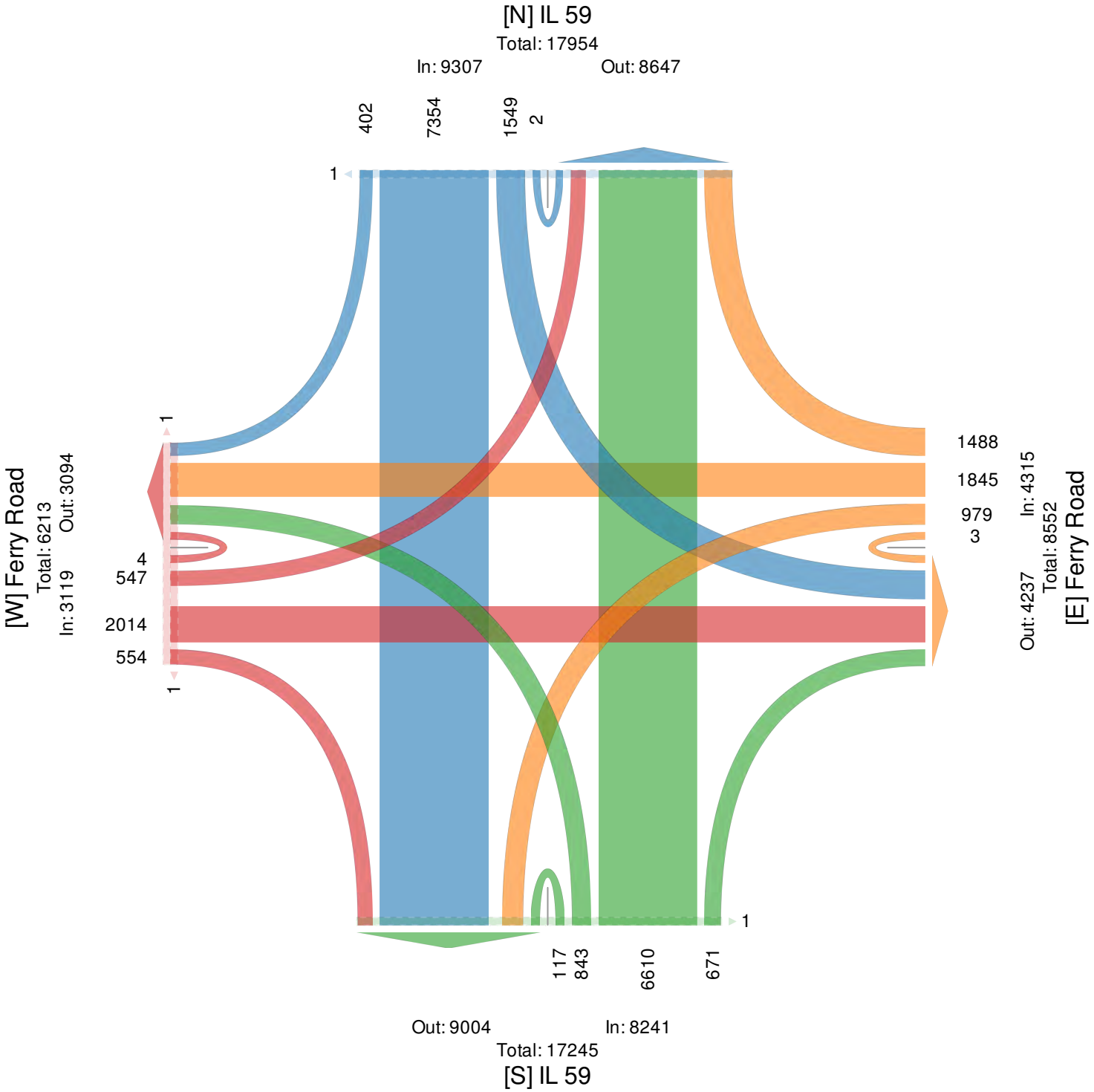
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400, Rosemont, IL, 60018, US

Leg	IL 59						Ferry Road						IL 59						Ferry Road						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2019-09-21 12:00PM	15	266	31	0	**312**	0	43	40	17	0	**100**	0	22	258	26	5	**311**	0	18	29	20	0	**67**	0	**790**
12:15PM	10	273	45	0	**328**	0	43	39	27	0	**109**	0	19	236	33	3	**291**	0	16	36	12	1	**65**	1	**793**
12:30PM	12	256	46	0	**314**	0	56	25	10	1	**92**	0	15	243	27	3	**288**	0	20	33	10	0	**63**	0	**757**
12:45PM	12	258	42	1	**313**	0	47	34	25	0	**106**	0	21	263	37	9	**330**	0	16	29	11	1	**57**	0	**806**
Hourly Total	49	1053	164	1	**1267**	0	189	138	79	1	**407**	0	77	1000	123	20	**1220**	0	70	127	53	2	**252**	1	**3146**
1:00PM	7	269	35	0	**311**	0	57	44	25	0	**126**	0	17	225	28	7	**277**	0	10	25	10	0	**45**	0	**759**
1:15PM	12	254	40	0	**306**	0	39	44	17	0	**100**	0	22	237	24	6	**289**	0	18	22	5	0	**45**	0	**740**
1:30PM	14	262	41	0	**317**	0	42	40	33	1	**116**	0	24	237	32	6	**299**	0	17	22	14	0	**53**	0	**785**
1:45PM	11	255	41	0	**307**	0	54	28	30	1	**113**	0	23	300	39	10	**372**	0	22	29	11	0	**62**	0	**854**
Hourly Total	44	1040	157	0	**1241**	0	192	156	105	2	**455**	0	86	999	123	29	**1237**	0	67	98	40	0	**205**	0	**3138**
2019-09-24 7:00AM	12	229	93	0	**334**	0	81	21	20	0	**122**	0	43	262	28	0	**333**	0	35	113	39	0	**187**	0	**976**
7:15AM	11	319	88	0	**418**	0	62	33	12	0	**107**	0	33	358	37	1	**429**	1	35	144	40	0	**219**	0	**1173**
7:30AM	15	299	85	0	**399**	0	51	42	19	0	**112**	0	41	299	28	0	**368**	0	41	229	62	0	**332**	0	**1211**
7:45AM	15	326	126	1	**468**	0	38	32	16	0	**86**	0	56	305	42	2	**405**	0	28	186	39	0	**253**	0	**1212**
Hourly Total	53	1173	392	1	**1619**	0	232	128	67	0	**427**	0	173	1224	135	3	**1535**	1	139	672	180	0	**991**	0	**4572**
8:00AM	13	318	87	0	**418**	0	54	38	24	0	**116**	0	62	282	34	4	**382**	0	14	255	27	0	**296**	0	**1212**
8:15AM	12	290	96	0	**398**	0	60	30	17	0	**107**	0	53	269	23	2	**347**	0	31	225	31	0	**287**	1	**1139**
8:30AM	14	322	82	0	**418**	0	60	43	28	0	**131**	0	47	324	29	3	**403**	0	21	126	39	0	**186**	0	**1138**
8:45AM	16	289	78	0	**383**	0	41	33	20	0	**94**	0	40	285	28	5	**358**	0	17	106	16	0	**139**	0	**974**
Hourly Total	55	1219	343	0	**1617**	0	215	144	89	0	**448**	0	202	1160	114	14	**1490**	0	83	712	113	0	**908**	1	**4463**
4:00PM	10	373	56	0	**439**	0	68	103	77	0	**248**	0	21	319	50	7	**397**	0	32	39	31	0	**102**	0	**1186**
4:15PM	17	311	56	0	**384**	0	88	147	79	0	**314**	0	16	270	37	8	**331**	0	22	52	25	1	**100**	0	**1129**
4:30PM	23	331	60	0	**414**	0	88	179	93	0	**360**	0	8	270	42	6	**326**	0	18	62	12	0	**92**	0	**1192**
4:45PM	31	341	56	0	**428**	0	81	177	84	0	**342**	0	16	257	37	7	**317**	0	18	59	17	0	**94**	0	**1181**
Hourly Total	81	1356	228	0	**1665**	0	325	606	333	0	**1264**	0	61	1116	166	28	**1371**	0	90	212	85	1	**388**	0	**4688**
5:00PM	24	321	69	0	**414**	0	89	182	89	0	**360**	0	20	281	47	8	**356**	0	32	61	25	0	**118**	0	**1248**
5:15PM	27	399	67	0	**493**	0	99	195	82	0	**376**	0	21	312	45	2	**380**	0	22	44	19	1	**86**	0	**1335**
5:30PM	41	380	68	0	**489**	0	63	198	86	0	**347**	0	19	243	46	7	**315**	0	35	58	19	0	**112**	0	**1263**
5:45PM	28	413	61	0	**502**	1	84	98	49	0	**231**	0	12	275	44	6	**337**	0	16	30	13	0	**59**	0	**1129**
Hourly Total	120	1513	265	0	**1898**	1	335	673	306	0	**1314**	0	72	1111	182	23	**1388**	0	105	193	76	1	**375**	0	**4975**
Total	402	7354	1549	2	**9307**	1	1488	1845	979	3	**4315**	0	671	6610	843	117	**8241**	1	554	2014	547	4	**3119**	2	**24982**
% Approach	4.3%	79.0%	16.6%	0%	-	-	34.5%	42.8%	22.7%	0.1%	-	-	8.1%	80.2%	10.2%	1.4%	-	-	17.8%	64.6%	17.5%	0.1%	-	-	-
% Total	1.6%	29.4%	6.2%	0%	**37.3%**	-	6.0%	7.4%	3.9%	0%	**17.3%**	-	2.7%	26.5%	3.4%	0.5%	**33.0%**	-	2.2%	8.1%	2.2%	0%	**12.5%**	-	-
Lights	379	6862	1525	2	**8768**	-	1458	1825	956	3	**4242**	-	646	6136	754	116	**7652**	-	481	1996	524	4	**3005**	-	23667
% Lights	94.3%	93.3%	98.5%	100%	**94.2%**	-	98.0%	98.9%	97.7%	100%	**98.3%**	-	96.3%	92.8%	89.4%	99.1%	**92.9%**	-	86.8%	99.1%	95.8%	100%	**96.3%**	-	94.7%
Single-Unit Trucks	10	149	9	0	**168**	-	16	12	5	0	**33**	-	5	138	17	1	**161**	-	26	6	13	0	**45**	-	407
% Single-Unit Trucks	2.5%	2.0%	0.6%	0%	**1.8%**	-	1.1%	0.7%	0.5%	0%	**0.8%**	-	0.7%	2.1%	2.0%	0.9%	**2.0%**	-	4.7%	0.3%	2.4%	0%	**1.4%**	-	1.6%
Articulated Trucks	13	336	14	0	**363**	-	11	7	17	0	**35**	-	11	323	70	0	**404**	-	46	6	10	0	**62**	-	864
% Articulated Trucks	3.2%	4.6%	0.9%	0%	**3.9%**	-	0.7%	0.4%	1.7%	0%	**0.8%**	-	1.6%	4.9%	8.3%	0%	**4.9%**	-	8.3%	0.3%	1.8%	0%	**2.0%**	-	3.5%
Buses	0	7	1	0	**8**	-	3	0	1	0	**4**	-	9	13	2	0	**24**	-	1	6	0	0	**7**	-	43
% Buses	0%	0.1%	0.1%	0%	**0.1%**	-	0.2%	0%	0.1%	0%	**0.1%**	-	1.3%	0.2%	0.2%	0%	**0.3%**	-	0.2%	0.3%	0%	0%	**0.2%**	-	0.2%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

IL 59 with Ferry Road - TMC
Sat Sep 21, 2019
Full Length (12 PM-2 PM, 7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699278, Location: 41.80986, -88.203617

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



IL 59 with Ferry Road - TMC
Sat Sep 21, 2019
Midday Peak (WKND) (Sep 21 2019 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699278, Location: 41.80986, -88.203617

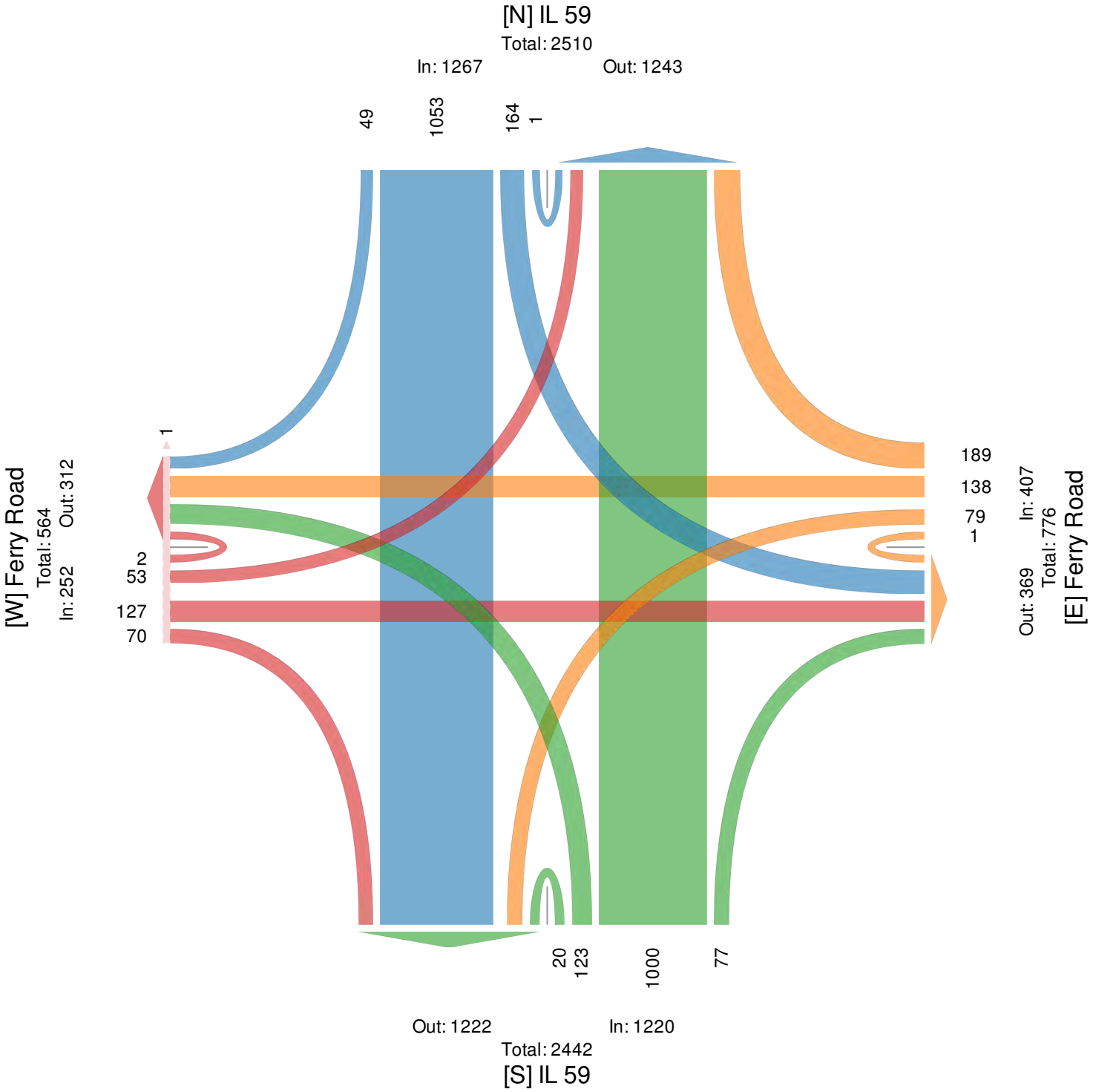
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	IL 59						Ferry Road						IL 59						Ferry Road						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2019-09-21 12:00PM	15	266	31	0	**312**	0	43	40	17	0	**100**	0	22	258	26	5	**311**	0	18	29	20	0	**67**	0	**790**
12:15PM	10	273	45	0	**328**	0	43	39	27	0	**109**	0	19	236	33	3	**291**	0	16	36	12	1	**65**	1	**793**
12:30PM	12	256	46	0	**314**	0	56	25	10	1	**92**	0	15	243	27	3	**288**	0	20	33	10	0	**63**	0	**757**
12:45PM	12	258	42	1	**313**	0	47	34	25	0	**106**	0	21	263	37	9	**330**	0	16	29	11	1	**57**	0	**806**
Total	49	1053	164	1	**1267**	0	189	138	79	1	**407**	0	77	1000	123	20	**1220**	0	70	127	53	2	**252**	1	**3146**
% Approach	3.9%	83.1%	12.9%	0.1%	**-**	-	46.4%	33.9%	19.4%	0.2%	**-**	-	6.3%	82.0%	10.1%	1.6%	**-**	-	27.8%	50.4%	21.0%	0.8%	**-**	-	-
% Total	1.6%	33.5%	5.2%	0%	**40.3%**	-	6.0%	4.4%	2.5%	0%	**12.9%**	-	2.4%	31.8%	3.9%	0.6%	**38.8%**	-	2.2%	4.0%	1.7%	0.1%	**8.0%**	-	-
PHF	0.817	0.964	0.891	0.250	**0.966**	-	0.844	0.863	0.731	0.250	**0.933**	-	0.875	0.951	0.831	0.556	**0.924**	-	0.875	0.882	0.663	0.500	**0.940**	-	0.976
Lights	48	1020	164	1	**1233**	-	187	137	77	1	**402**	-	74	962	118	20	**1174**	-	66	127	50	2	**245**	-	3054
% Lights	98.0%	96.9%	100%	100%	**97.3%**	-	98.9%	99.3%	97.5%	100%	**98.8%**	-	96.1%	96.2%	95.9%	100%	**96.2%**	-	94.3%	100%	94.3%	100%	**97.2%**	-	97.1%
Single-Unit Trucks	0	10	0	0	**10**	-	2	0	0	0	**2**	-	0	14	2	0	**16**	-	0	0	2	0	**2**	-	30
% Single-Unit Trucks	0%	0.9%	0%	0%	**0.8%**	-	1.1%	0%	0%	0%	**0.5%**	-	0%	1.4%	1.6%	0%	**1.3%**	-	0%	0%	3.8%	0%	**0.8%**	-	1.0%
Articulated Trucks	1	21	0	0	**22**	-	0	1	2	0	**3**	-	2	24	3	0	**29**	-	4	0	1	0	**5**	-	59
% Articulated Trucks	2.0%	2.0%	0%	0%	**1.7%**	-	0%	0.7%	2.5%	0%	**0.7%**	-	2.6%	2.4%	2.4%	0%	**2.4%**	-	5.7%	0%	1.9%	0%	**2.0%**	-	1.9%
Buses	0	2	0	0	**2**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	3
% Buses	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	1.3%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 100%		-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

IL 59 with Ferry Road - TMC
Sat Sep 21, 2019
Midday Peak (WKND) (Sep 21 2019 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699278, Location: 41.80986, -88.203617

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



IL 59 with Ferry Road - TMC
Sat Sep 21, 2019
PM Peak (WKND) (Sep 21 2019 1PM - 2 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699278, Location: 41.80986, -88.203617

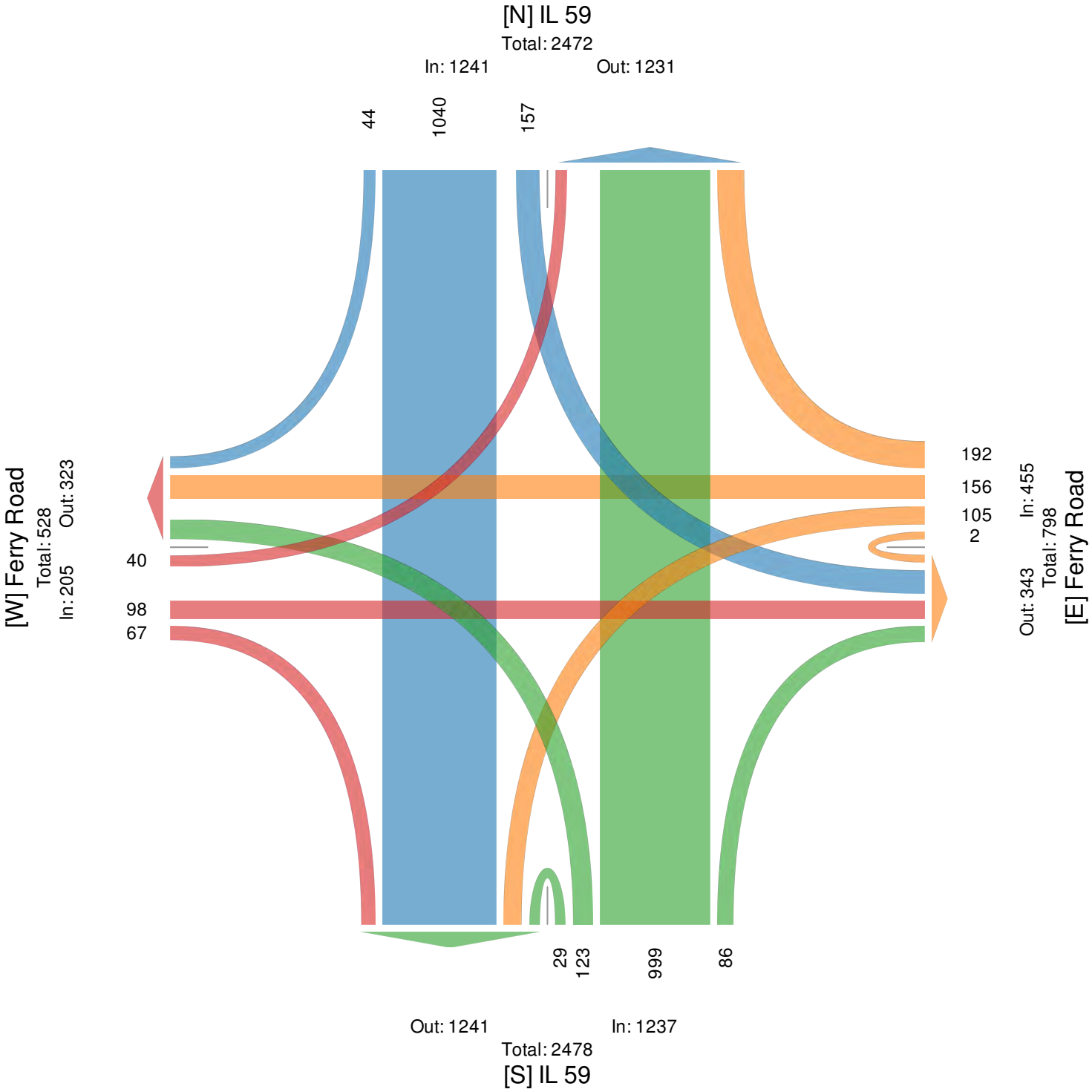
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	IL 59						Ferry Road						IL 59						Ferry Road						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2019-09-21 1:00PM	7	269	35	0	**311**	0	57	44	25	0	**126**	0	17	225	28	7	**277**	0	10	25	10	0	**45**	0	**759**
1:15PM	12	254	40	0	**306**	0	39	44	17	0	**100**	0	22	237	24	6	**289**	0	18	22	5	0	**45**	0	**740**
1:30PM	14	262	41	0	**317**	0	42	40	33	1	**116**	0	24	237	32	6	**299**	0	17	22	14	0	**53**	0	**785**
1:45PM	11	255	41	0	**307**	0	54	28	30	1	**113**	0	23	300	39	10	**372**	0	22	29	11	0	**62**	0	**854**
Total	44	1040	157	0	**1241**	0	192	156	105	2	**455**	0	86	999	123	29	**1237**	0	67	98	40	0	**205**	0	**3138**
% Approach	3.5%	83.8%	12.7%	0%	-	-	42.2%	34.3%	23.1%	0.4%	-	-	7.0%	80.8%	9.9%	2.3%	-	-	32.7%	47.8%	19.5%	0%	-	-	-
% Total	1.4%	33.1%	5.0%	0%	**39.5%**	-	6.1%	5.0%	3.3%	0.1%	**14.5%**	-	2.7%	31.8%	3.9%	0.9%	**39.4%**	-	2.1%	3.1%	1.3%	0%	**6.5%**	-	-
PHF	0.786	0.967	0.957	-	**0.979**	-	0.842	0.881	0.795	0.500	**0.901**	-	0.896	0.833	0.788	0.725	**0.831**	-	0.761	0.845	0.714	-	**0.827**	-	0.919
Lights	42	1001	156	0	**1199**	-	191	152	104	2	**449**	-	83	957	120	29	**1189**	-	60	98	40	0	**198**	-	3035
% Lights	95.5%	96.3%	99.4%	0%	**96.6%**	-	99.5%	97.4%	99.0%	100%	**98.7%**	-	96.5%	95.8%	97.6%	100%	**96.1%**	-	89.6%	100%	100%	0%	**96.6%**	-	96.7%
Single-Unit Trucks	0	13	1	0	**14**	-	1	2	0	0	**3**	-	1	21	2	0	**24**	-	2	0	0	0	**2**	-	43
% Single-Unit Trucks	0%	1.3%	0.6%	0%	**1.1%**	-	0.5%	1.3%	0%	0%	**0.7%**	-	1.2%	2.1%	1.6%	0%	**1.9%**	-	3.0%	0%	0%	0%	**1.0%**	-	1.4%
Articulated Trucks	2	26	0	0	**28**	-	0	1	1	0	**2**	-	1	21	1	0	**23**	-	5	0	0	0	**5**	-	58
% Articulated Trucks	4.5%	2.5%	0%	0%	**2.3%**	-	0%	0.6%	1.0%	0%	**0.4%**	-	1.2%	2.1%	0.8%	0%	**1.9%**	-	7.5%	0%	0%	0%	**2.4%**	-	1.8%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	1
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.2%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.6%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

IL 59 with Ferry Road - TMC
Sat Sep 21, 2019
PM Peak (WKND) (Sep 21 2019 1PM - 2 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699278, Location: 41.80986, -88.203617

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



IL 59 with Ferry Road - TMC
Tue Sep 24, 2019
AM Peak (Sep 24 2019 7:15AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699278, Location: 41.80986, -88.203617

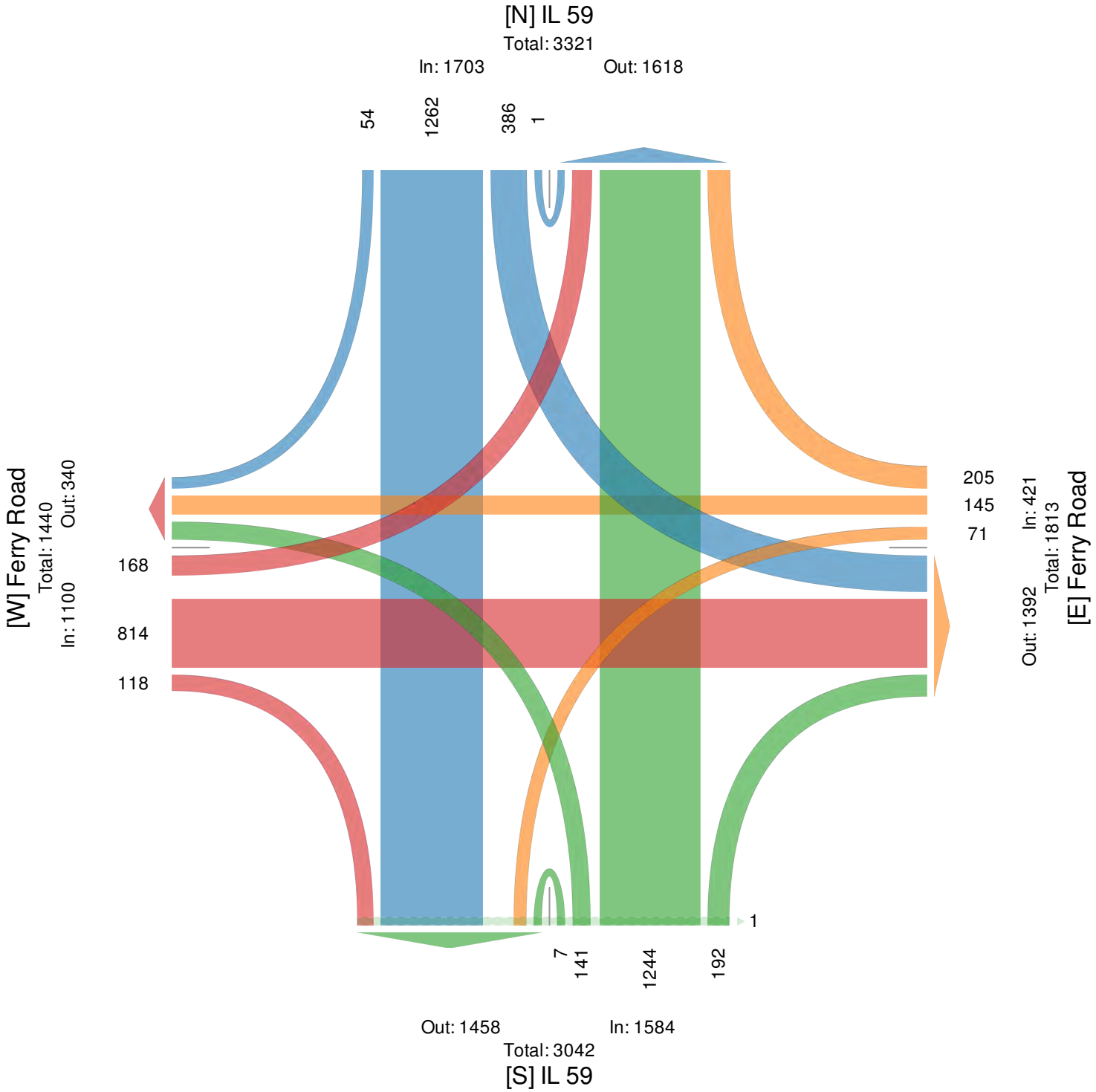
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	IL 59						Ferry Road						IL 59						Ferry Road						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2019-09-24 7:15AM	11	319	88	0	**418**	0	62	33	12	0	**107**	0	33	358	37	1	**429**	1	35	144	40	0	**219**	0	**1173**
7:30AM	15	299	85	0	**399**	0	51	42	19	0	**112**	0	41	299	28	0	**368**	0	41	229	62	0	**332**	0	**1211**
7:45AM	15	326	126	1	**468**	0	38	32	16	0	**86**	0	56	305	42	2	**405**	0	28	186	39	0	**253**	0	**1212**
8:00AM	13	318	87	0	**418**	0	54	38	24	0	**116**	0	62	282	34	4	**382**	0	14	255	27	0	**296**	0	**1212**
Total	54	1262	386	1	**1703**	0	205	145	71	0	**421**	0	192	1244	141	7	**1584**	1	118	814	168	0	**1100**	0	**4808**
% Approach	3.2%	74.1%	22.7%	0.1%	-	-	48.7%	34.4%	16.9%	0%	-	-	12.1%	78.5%	8.9%	0.4%	-	-	10.7%	74.0%	15.3%	0%	-	-	-
% Total	1.1%	26.2%	8.0%	0%	**35.4%**	-	4.3%	3.0%	1.5%	0%	**8.8%**	-	4.0%	25.9%	2.9%	0.1%	**32.9%**	-	2.5%	16.9%	3.5%	0%	**22.9%**	-	-
PHF	0.900	0.968	0.766	0.250	**0.910**	-	0.827	0.863	0.740	-	**0.907**	-	0.774	0.869	0.839	0.438	**0.923**	-	0.720	0.798	0.677	-	**0.828**	-	0.992
Lights	48	1135	381	1	**1565**	-	201	139	65	0	**405**	-	189	1134	122	7	**1452**	-	98	807	160	0	**1065**	-	4487
% Lights	88.9%	89.9%	98.7%	100%	**91.9%**	-	98.0%	95.9%	91.5%	0%	**96.2%**	-	98.4%	91.2%	86.5%	100%	**91.7%**	-	83.1%	99.1%	95.2%	0%	**96.8%**	-	93.3%
Single-Unit Trucks	4	35	1	0	**40**	-	2	5	2	0	**9**	-	0	22	3	0	**25**	-	6	3	4	0	**13**	-	87
% Single-Unit Trucks	7.4%	2.8%	0.3%	0%	**2.3%**	-	1.0%	3.4%	2.8%	0%	**2.1%**	-	0%	1.8%	2.1%	0%	**1.6%**	-	5.1%	0.4%	2.4%	0%	**1.2%**	-	1.8%
Articulated Trucks	2	89	4	0	**95**	-	2	1	3	0	**6**	-	1	83	15	0	**99**	-	14	1	4	0	**19**	-	219
% Articulated Trucks	3.7%	7.1%	1.0%	0%	**5.6%**	-	1.0%	0.7%	4.2%	0%	**1.4%**	-	0.5%	6.7%	10.6%	0%	**6.3%**	-	11.9%	0.1%	2.4%	0%	**1.7%**	-	4.6%
Buses	0	3	0	0	**3**	-	0	0	1	0	**1**	-	2	5	1	0	**8**	-	0	3	0	0	**3**	-	15
% Buses	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	1.4%	0%	**0.2%**	-	1.0%	0.4%	0.7%	0%	**0.5%**	-	0%	0.4%	0%	0%	**0.3%**	-	0.3%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

IL 59 with Ferry Road - TMC
Tue Sep 24, 2019
AM Peak (Sep 24 2019 7:15AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699278, Location: 41.80986, -88.203617

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



IL 59 with Ferry Road - TMC
Tue Sep 24, 2019
PM Peak (Sep 24 2019 4:45PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699278, Location: 41.80986, -88.203617

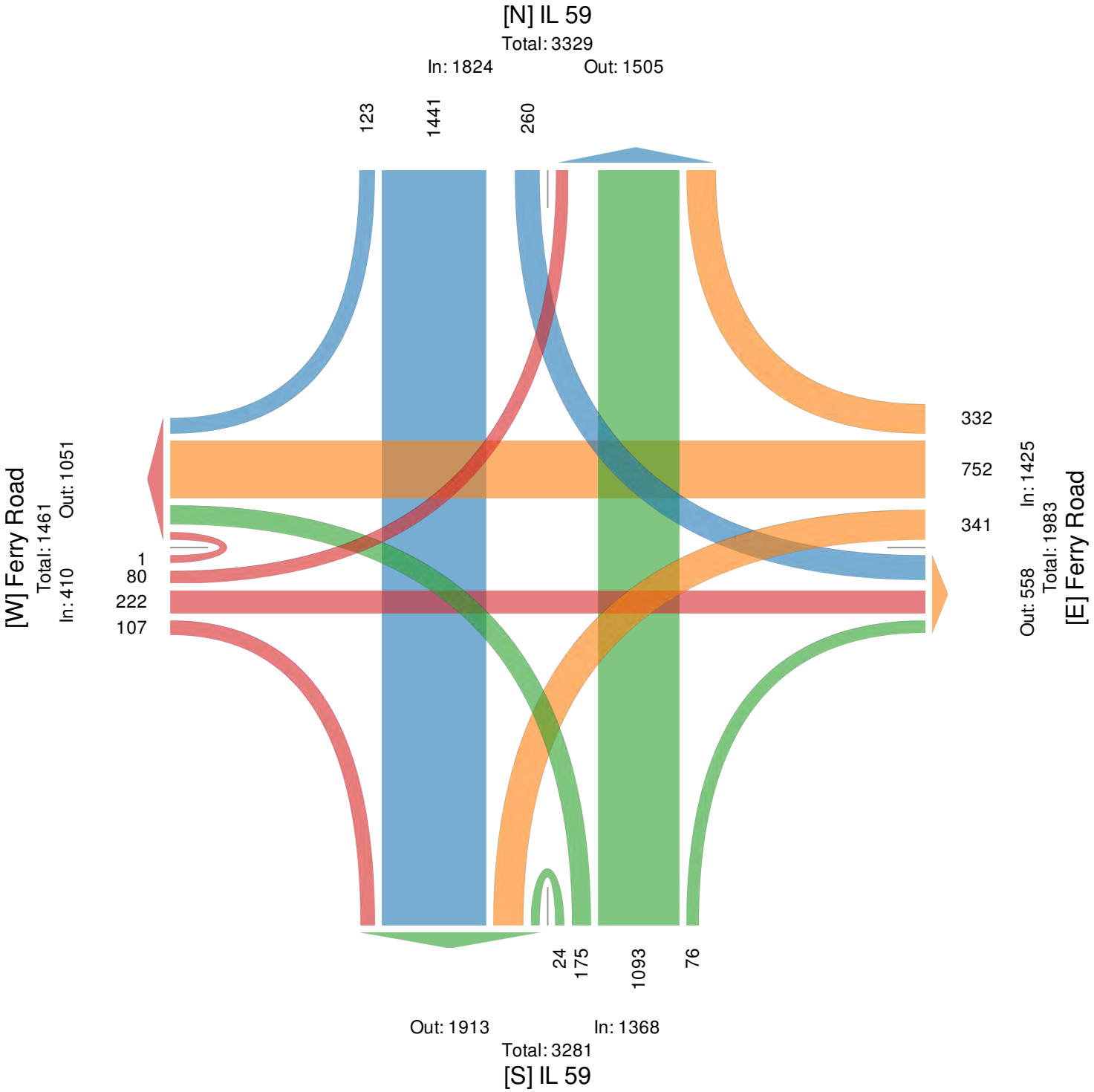
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	IL 59						Ferry Road						IL 59						Ferry Road						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2019-09-24 4:45PM	31	341	56	0	**428**	0	81	177	84	0	**342**	0	16	257	37	7	**317**	0	18	59	17	0	**94**	0	**1181**
5:00PM	24	321	69	0	**414**	0	89	182	89	0	**360**	0	20	281	47	8	**356**	0	32	61	25	0	**118**	0	**1248**
5:15PM	27	399	67	0	**493**	0	99	195	82	0	**376**	0	21	312	45	2	**380**	0	22	44	19	1	**86**	0	**1335**
5:30PM	41	380	68	0	**489**	0	63	198	86	0	**347**	0	19	243	46	7	**315**	0	35	58	19	0	**112**	0	**1263**
Total	123	1441	260	0	**1824**	0	332	752	341	0	**1425**	0	76	1093	175	24	**1368**	0	107	222	80	1	**410**	0	**5027**
% Approach	6.7%	79.0%	14.3%	0%	-	-	23.3%	52.8%	23.9%	0%	-	-	5.6%	79.9%	12.8%	1.8%	-	-	26.1%	54.1%	19.5%	0.2%	-	-	-
% Total	2.4%	28.7%	5.2%	0%	**36.3%**	-	6.6%	15.0%	6.8%	0%	**28.3%**	-	1.5%	21.7%	3.5%	0.5%	**27.2%**	-	2.1%	4.4%	1.6%	0%	**8.2%**	-	-
PHF	0.750	0.903	0.942	-	**0.925**	-	0.838	0.949	0.958	-	**0.947**	-	0.905	0.876	0.931	0.750	**0.900**	-	0.764	0.910	0.800	0.250	**0.869**	-	0.941
Lights	119	1368	256	0	**1743**	-	327	748	341	0	**1416**	-	71	1027	161	24	**1283**	-	98	220	80	1	**399**	-	4841
% Lights	96.7%	94.9%	98.5%	0%	**95.6%**	-	98.5%	99.5%	100%	0%	**99.4%**	-	93.4%	94.0%	92.0%	100%	**93.8%**	-	91.6%	99.1%	100%	100%	**97.3%**	-	96.3%
Single-Unit Trucks	4	24	3	0	**31**	-	1	3	0	0	**4**	-	1	25	1	0	**27**	-	4	0	0	0	**4**	-	66
% Single-Unit Trucks	3.3%	1.7%	1.2%	0%	**1.7%**	-	0.3%	0.4%	0%	0%	**0.3%**	-	1.3%	2.3%	0.6%	0%	**2.0%**	-	3.7%	0%	0%	0%	**1.0%**	-	1.3%
Articulated Trucks	0	49	1	0	**50**	-	2	1	0	0	**3**	-	3	39	13	0	**55**	-	4	1	0	0	**5**	-	113
% Articulated Trucks	0%	3.4%	0.4%	0%	**2.7%**	-	0.6%	0.1%	0%	0%	**0.2%**	-	3.9%	3.6%	7.4%	0%	**4.0%**	-	3.7%	0.5%	0%	0%	**1.2%**	-	2.2%
Buses	0	0	0	0	**0**	-	2	0	0	0	**2**	-	1	2	0	0	**3**	-	1	1	0	0	**2**	-	7
% Buses	0%	0%	0%	0%	**0%**	-	0.6%	0%	0%	0%	**0.1%**	-	1.3%	0.2%	0%	0%	**0.2%**	-	0.9%	0.5%	0%	0%	**0.5%**	-	0.1%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

IL 59 with Ferry Road - TMC
Tue Sep 24, 2019
PM Peak (Sep 24 2019 4:45PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699278, Location: 41.80986, -88.203617

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Ferry Road with Celebration Drive - TMC

Sat Sep 21, 2019
Full Length (12 PM-2 PM, 7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699279, Location: 41.810371, -88.206547

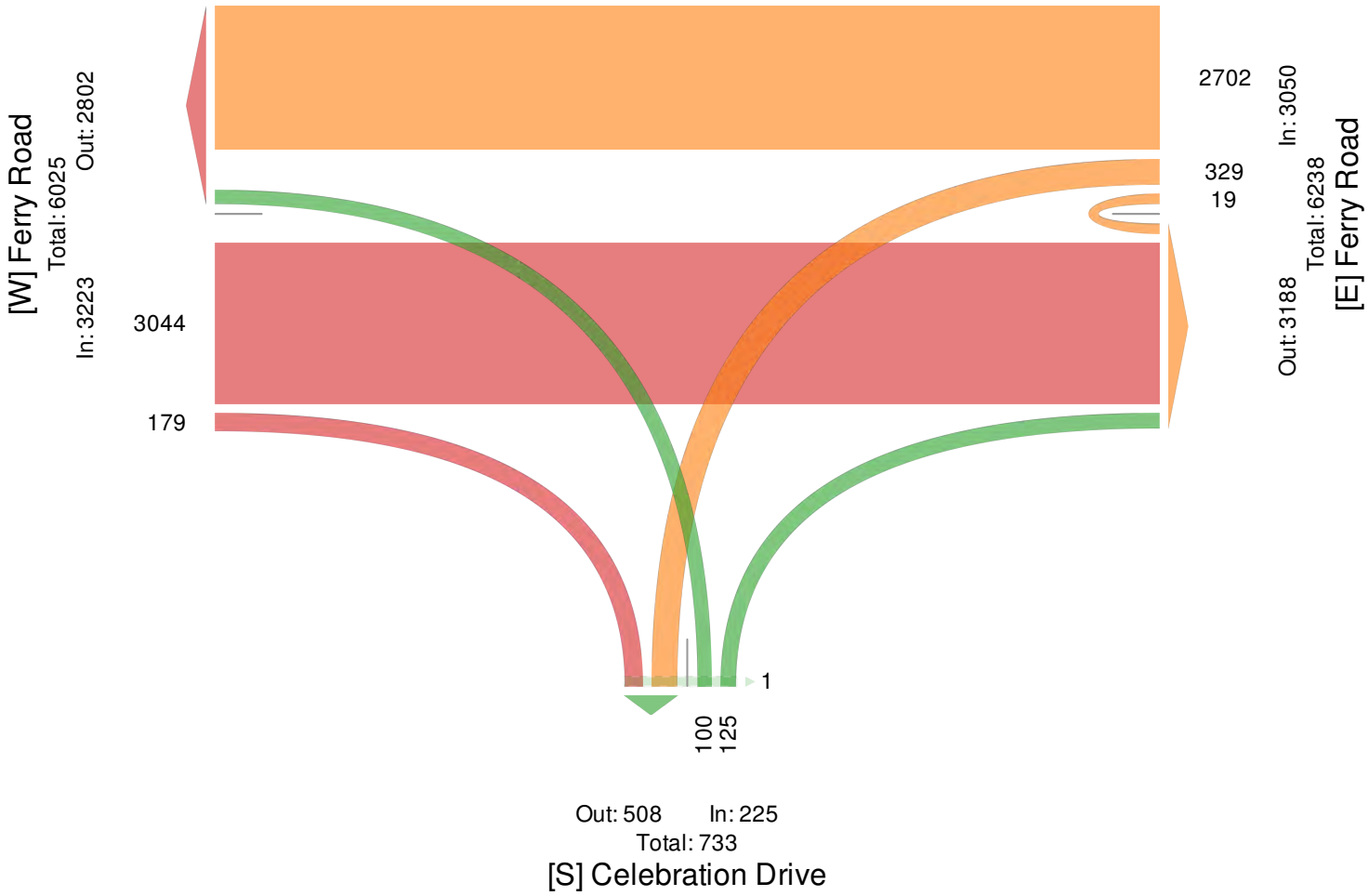
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	Ferry Road					Celebration Drive					Ferry Road					
Direction	Westbound					Northbound					Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2019-09-21 12:00PM	56	16	2	**74**	0	9	3	0	**12**	1	2	54	0	**56**	0	**142**
12:15PM	57	20	0	**77**	0	4	2	0	**6**	0	6	52	0	**58**	0	**141**
12:30PM	49	16	0	**65**	0	3	8	0	**11**	0	4	60	0	**64**	0	**140**
12:45PM	62	23	1	**86**	0	7	6	0	**13**	0	14	47	0	**61**	0	**160**
Hourly Total	224	75	3	**302**	0	23	19	0	**42**	1	26	213	0	**239**	0	**583**
1:00PM	64	14	2	**80**	0	3	9	0	**12**	0	7	45	0	**52**	0	**144**
1:15PM	58	12	0	**70**	0	7	7	0	**14**	0	6	41	0	**47**	0	**131**
1:30PM	64	22	3	**89**	0	6	6	0	**12**	0	8	39	0	**47**	0	**148**
1:45PM	54	21	2	**77**	0	7	4	0	**11**	0	7	55	0	**62**	0	**150**
Hourly Total	240	69	7	**316**	0	23	26	0	**49**	0	28	180	0	**208**	0	**573**
2019-09-24 7:00AM	53	9	0	**62**	0	2	2	0	**4**	0	9	173	0	**182**	0	**248**
7:15AM	78	7	0	**85**	0	3	2	0	**5**	0	6	255	0	**261**	0	**351**
7:30AM	79	5	0	**84**	0	2	2	0	**4**	0	3	356	0	**359**	0	**447**
7:45AM	83	9	0	**92**	0	4	1	0	**5**	0	16	305	0	**321**	0	**418**
Hourly Total	293	30	0	**323**	0	11	7	0	**18**	0	34	1089	0	**1123**	0	**1464**
8:00AM	71	7	0	**78**	0	1	3	0	**4**	0	16	269	0	**285**	0	**367**
8:15AM	56	4	1	**61**	0	2	1	0	**3**	0	14	278	0	**292**	0	**356**
8:30AM	69	9	0	**78**	0	2	1	0	**3**	0	7	161	0	**168**	0	**249**
8:45AM	67	10	1	**78**	0	2	3	0	**5**	0	6	138	0	**144**	0	**227**
Hourly Total	263	30	2	**295**	0	7	8	0	**15**	0	43	846	0	**889**	0	**1199**
4:00PM	154	15	1	**170**	0	15	6	0	**21**	0	10	98	0	**108**	0	**299**
4:15PM	174	12	0	**186**	0	3	4	0	**7**	0	6	88	0	**94**	0	**287**
4:30PM	260	7	2	**269**	0	6	3	0	**9**	0	5	97	0	**102**	0	**380**
4:45PM	191	15	1	**207**	0	4	8	0	**12**	0	6	90	0	**96**	0	**315**
Hourly Total	779	49	4	**832**	0	28	21	0	**49**	0	27	373	0	**400**	0	**1281**
5:00PM	250	22	1	**273**	0	11	9	0	**20**	0	10	110	0	**120**	0	**413**
5:15PM	248	16	0	**264**	0	9	3	0	**12**	0	2	78	0	**80**	0	**356**
5:30PM	250	19	1	**270**	0	8	6	0	**14**	0	5	101	0	**106**	0	**390**
5:45PM	155	19	1	**175**	0	5	1	0	**6**	0	4	54	0	**58**	0	**239**
Hourly Total	903	76	3	**982**	0	33	19	0	**52**	0	21	343	0	**364**	0	**1398**
Total	2702	329	19	**3050**	0	125	100	0	**225**	1	179	3044	0	**3223**	0	**6498**
% Approach	88.6%	10.8%	0.6%	**-**	-	55.6%	44.4%	0%	**-**	-	5.6%	94.4%	0%	**-**	-	-
% Total	41.6%	5.1%	0.3%	**46.9%**	-	1.9%	1.5%	0%	**3.5%**	-	2.8%	46.8%	0%	**49.6%**	-	-
Lights	2583	321	17	**2921**	-	122	99	0	**221**	-	178	2942	0	**3120**	-	6262
% Lights	95.6%	97.6%	89.5%	**95.8%**	-	97.6%	99.0%	0%	**98.2%**	-	99.4%	96.6%	0%	**96.8%**	-	96.4%
Single-Unit Trucks	37	5	1	**43**	-	1	1	0	**2**	-	1	40	0	**41**	-	86
% Single-Unit Trucks	1.4%	1.5%	5.3%	**1.4%**	-	0.8%	1.0%	0%	**0.9%**	-	0.6%	1.3%	0%	**1.3%**	-	1.3%
Articulated Trucks	80	3	1	**84**	-	2	0	0	**2**	-	0	54	0	**54**	-	140
% Articulated Trucks	3.0%	0.9%	5.3%	**2.8%**	-	1.6%	0%	0%	**0.9%**	-	0%	1.8%	0%	**1.7%**	-	2.2%
Buses	2	0	0	**2**	-	0	0	0	**0**	-	0	8	0	**8**	-	10
% Buses	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	**0%**	-	0%	0.3%	0%	**0.2%**	-	0.2%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	1	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ferry Road with Celebration Drive - TMC
Sat Sep 21, 2019
Full Length (12 PM-2 PM, 7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699279, Location: 41.810371, -88.206547

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Ferry Road with Celebration Drive - TMC

Sat Sep 21, 2019
Midday Peak (WKND) (Sep 21 2019 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699279, Location: 41.810371, -88.206547

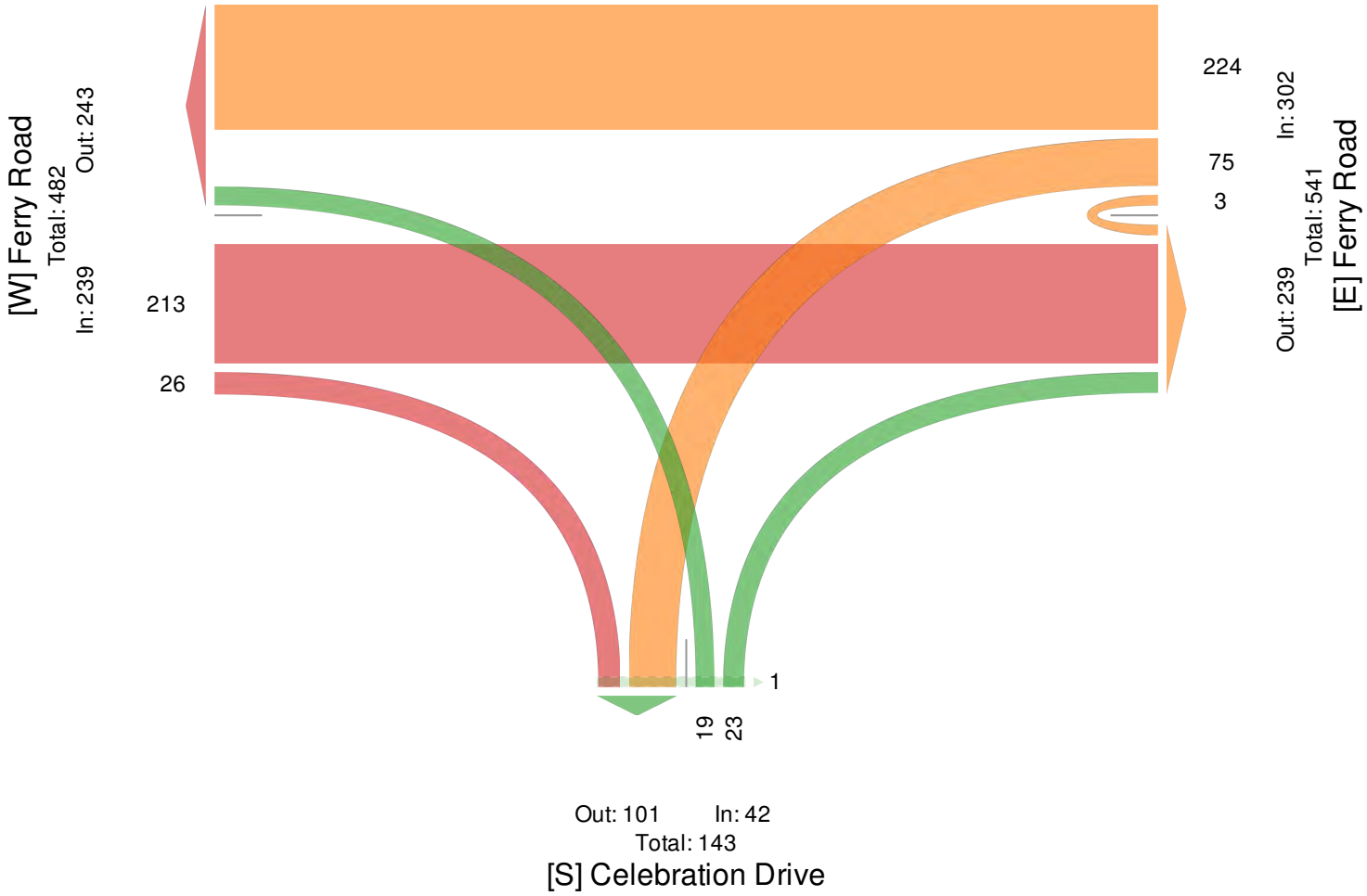
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	Ferry Road					Celebration Drive					Ferry Road					
Direction	Westbound					Northbound					Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2019-09-21 12:00PM	56	16	2	**74**	0	9	3	0	**12**	1	2	54	0	**56**	0	**142**
12:15PM	57	20	0	**77**	0	4	2	0	**6**	0	6	52	0	**58**	0	**141**
12:30PM	49	16	0	**65**	0	3	8	0	**11**	0	4	60	0	**64**	0	**140**
12:45PM	62	23	1	**86**	0	7	6	0	**13**	0	14	47	0	**61**	0	**160**
Total	224	75	3	**302**	0	23	19	0	**42**	1	26	213	0	**239**	0	**583**
% Approach	74.2%	24.8%	1.0%	**-**	-	54.8%	45.2%	0%	**-**	-	10.9%	89.1%	0%	**-**	-	-
% Total	38.4%	12.9%	0.5%	**51.8%**	-	3.9%	3.3%	0%	**7.2%**	-	4.5%	36.5%	0%	**41.0%**	-	-
PHF	0.903	0.815	0.375	**0.878**	-	0.639	0.594	-	**0.808**	-	0.464	0.888	-	**0.934**	-	0.911
Lights	217	75	2	**294**	-	23	19	0	**42**	-	26	208	0	**234**	-	570
% Lights	96.9%	100%	66.7%	**97.4%**	-	100%	100%	0%	**100%**	-	100%	97.7%	0%	**97.9%**	-	97.8%
Single-Unit Trucks	1	0	0	**1**	-	0	0	0	**0**	-	0	1	0	**1**	-	2
% Single-Unit Trucks	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	**0%**	-	0%	0.5%	0%	**0.4%**	-	0.3%
Articulated Trucks	6	0	1	**7**	-	0	0	0	**0**	-	0	4	0	**4**	-	11
% Articulated Trucks	2.7%	0%	33.3%	**2.3%**	-	0%	0%	0%	**0%**	-	0%	1.9%	0%	**1.7%**	-	1.9%
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%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	1	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ferry Road with Celebration Drive - TMC
Sat Sep 21, 2019
Midday Peak (WKND) (Sep 21 2019 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699279, Location: 41.810371, -88.206547

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Ferry Road with Celebration Drive - TMC

Sat Sep 21, 2019
PM Peak (WKND) (Sep 21 2019 1PM - 2 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699279, Location: 41.810371, -88.206547

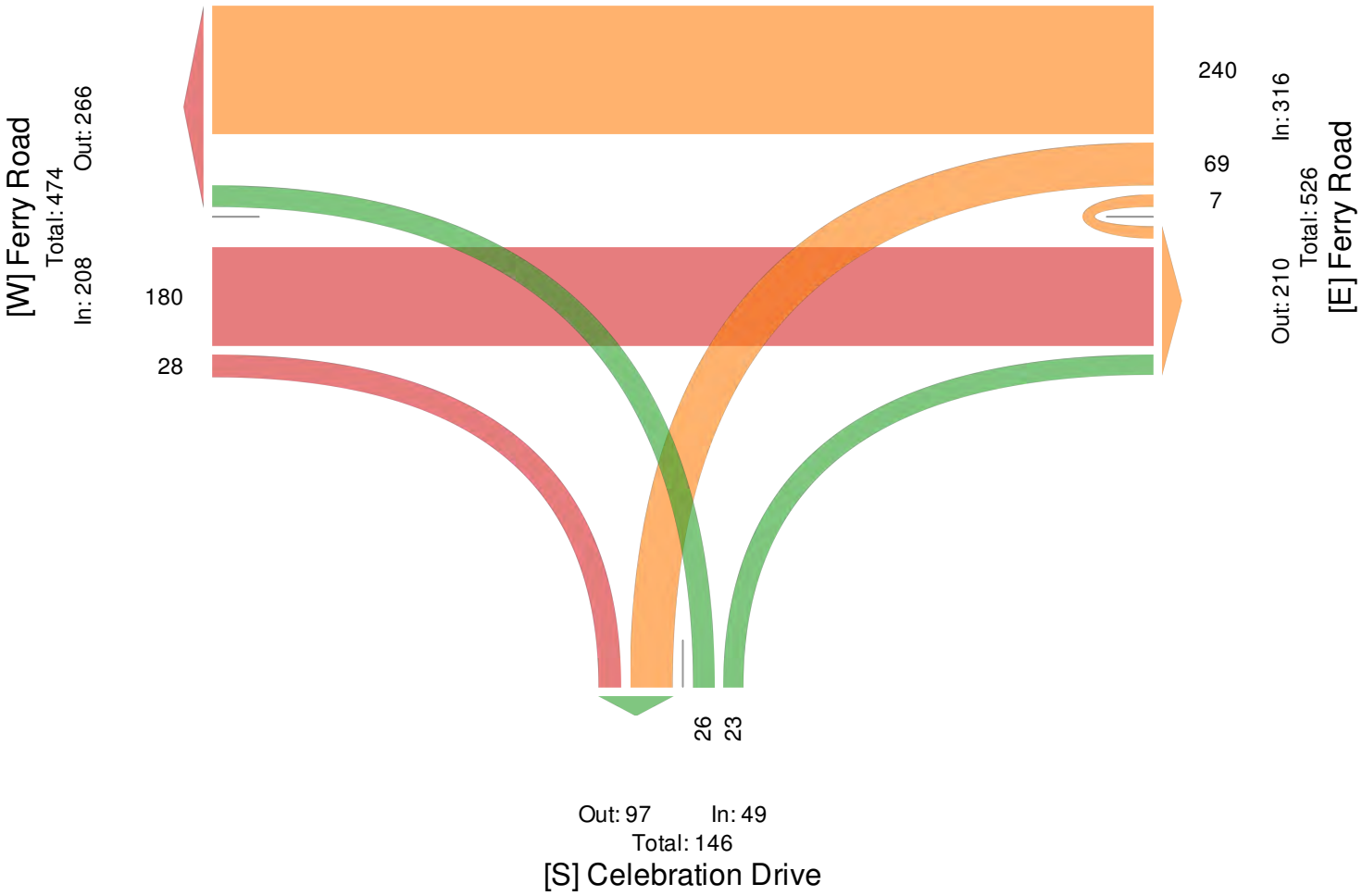
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	Ferry Road					Celebration Drive					Ferry Road					
Direction	Westbound					Northbound					Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2019-09-21 1:00PM	64	14	2	**80**	0	3	9	0	**12**	0	7	45	0	**52**	0	**144**
1:15PM	58	12	0	**70**	0	7	7	0	**14**	0	6	41	0	**47**	0	**131**
1:30PM	64	22	3	**89**	0	6	6	0	**12**	0	8	39	0	**47**	0	**148**
1:45PM	54	21	2	**77**	0	7	4	0	**11**	0	7	55	0	**62**	0	**150**
Total	240	69	7	**316**	0	23	26	0	**49**	0	28	180	0	**208**	0	**573**
% Approach	75.9%	21.8%	2.2%	**-**	-	46.9%	53.1%	0%	**-**	-	13.5%	86.5%	0%	**-**	-	-
% Total	41.9%	12.0%	1.2%	**55.1%**	-	4.0%	4.5%	0%	**8.6%**	-	4.9%	31.4%	0%	**36.3%**	-	-
PHF	0.938	0.784	0.583	**0.888**	-	0.821	0.722	-	**0.875**	-	0.875	0.818	-	**0.839**	-	0.955
Lights	234	68	7	**309**	-	23	26	0	**49**	-	28	173	0	**201**	-	559
% Lights	97.5%	98.6%	100%	**97.8%**	-	100%	100%	0%	**100%**	-	100%	96.1%	0%	**96.6%**	-	97.6%
Single-Unit Trucks	3	1	0	**4**	-	0	0	0	**0**	-	0	2	0	**2**	-	6
% Single-Unit Trucks	1.3%	1.4%	0%	**1.3%**	-	0%	0%	0%	**0%**	-	0%	1.1%	0%	**1.0%**	-	1.0%
Articulated Trucks	3	0	0	**3**	-	0	0	0	**0**	-	0	5	0	**5**	-	8
% Articulated Trucks	1.3%	0%	0%	**0.9%**	-	0%	0%	0%	**0%**	-	0%	2.8%	0%	**2.4%**	-	1.4%
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%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ferry Road with Celebration Drive - TMC
Sat Sep 21, 2019
PM Peak (WKND) (Sep 21 2019 1PM - 2 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699279, Location: 41.810371, -88.206547

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Ferry Road with Celebration Drive - TMC

Tue Sep 24, 2019
AM Peak (Sep 24 2019 7:30AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699279, Location: 41.810371, -88.206547

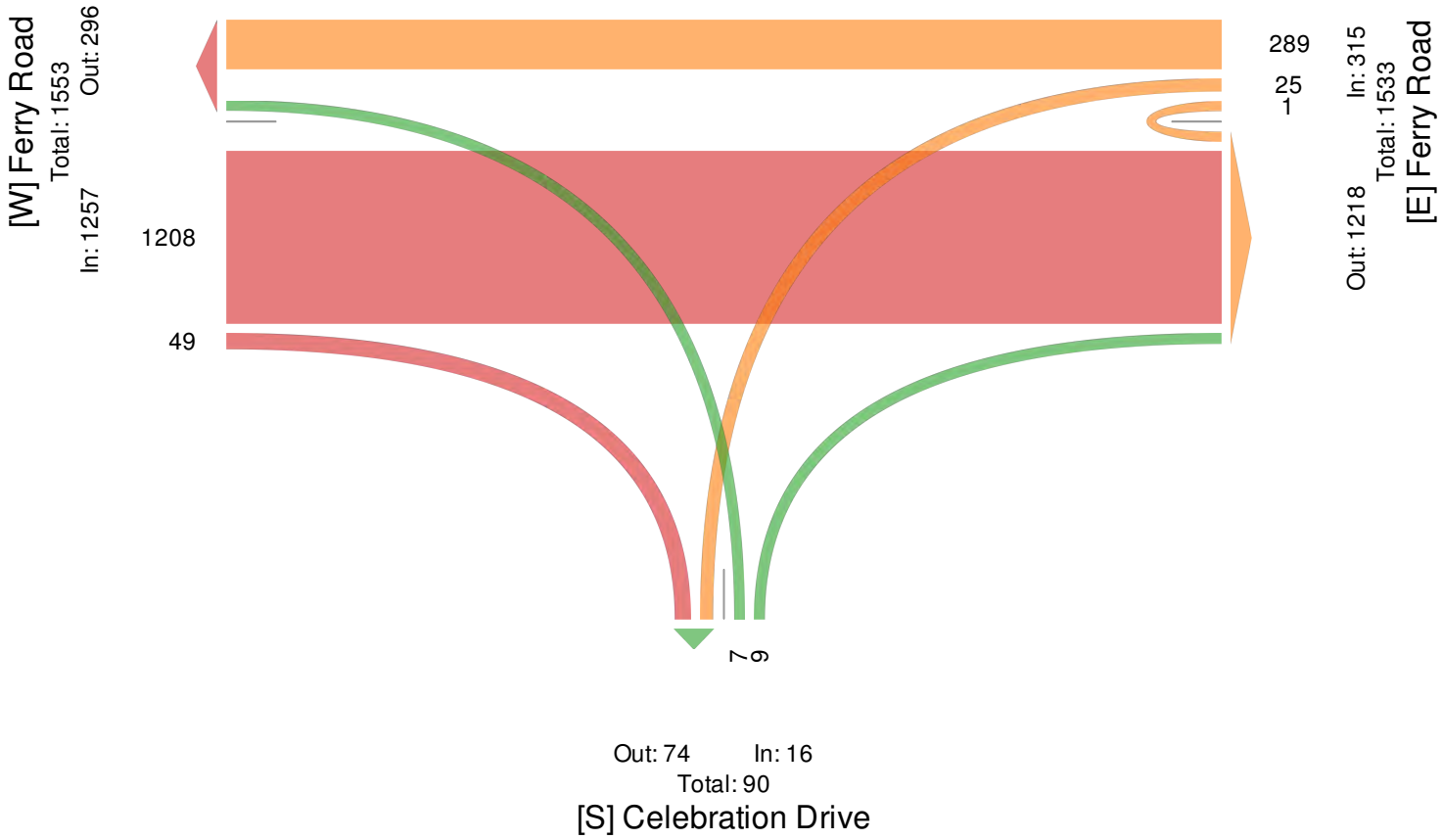
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	Ferry Road					Celebration Drive					Ferry Road					
Direction	Westbound					Northbound					Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2019-09-24 7:30AM	79	5	0	**84**	0	2	2	0	**4**	0	3	356	0	**359**	0	**447**
7:45AM	83	9	0	**92**	0	4	1	0	**5**	0	16	305	0	**321**	0	**418**
8:00AM	71	7	0	**78**	0	1	3	0	**4**	0	16	269	0	**285**	0	**367**
8:15AM	56	4	1	**61**	0	2	1	0	**3**	0	14	278	0	**292**	0	**356**
Total	289	25	1	**315**	0	9	7	0	**16**	0	49	1208	0	**1257**	0	**1588**
% Approach	91.7%	7.9%	0.3%	**-**	-	56.3%	43.8%	0%	**-**	-	3.9%	96.1%	0%	**-**	-	-
% Total	18.2%	1.6%	0.1%	**19.8%**	-	0.6%	0.4%	0%	**1.0%**	-	3.1%	76.1%	0%	**79.2%**	-	-
PHF	0.870	0.694	0.250	**0.856**	-	0.563	0.583	-	**0.800**	-	0.766	0.848	-	**0.875**	-	0.888
Lights	261	25	1	**287**	-	8	7	0	**15**	-	48	1168	0	**1216**	-	1518
% Lights	90.3%	100%	100%	**91.1%**	-	88.9%	100%	0%	**93.8%**	-	98.0%	96.7%	0%	**96.7%**	-	95.6%
Single-Unit Trucks	12	0	0	**12**	-	0	0	0	**0**	-	1	18	0	**19**	-	31
% Single-Unit Trucks	4.2%	0%	0%	**3.8%**	-	0%	0%	0%	**0%**	-	2.0%	1.5%	0%	**1.5%**	-	2.0%
Articulated Trucks	16	0	0	**16**	-	1	0	0	**1**	-	0	17	0	**17**	-	34
% Articulated Trucks	5.5%	0%	0%	**5.1%**	-	11.1%	0%	0%	**6.3%**	-	0%	1.4%	0%	**1.4%**	-	2.1%
Buses	0	0	0	**0**	-	0	0	0	**0**	-	0	5	0	**5**	-	5
% Buses	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0.4%	0%	**0.4%**	-	0.3%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ferry Road with Celebration Drive - TMC
Tue Sep 24, 2019
AM Peak (Sep 24 2019 7:30AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699279, Location: 41.810371, -88.206547

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Ferry Road with Celebration Drive - TMC

Tue Sep 24, 2019
PM Peak (Sep 24 2019 4:45PM - 5:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699279, Location: 41.810371, -88.206547

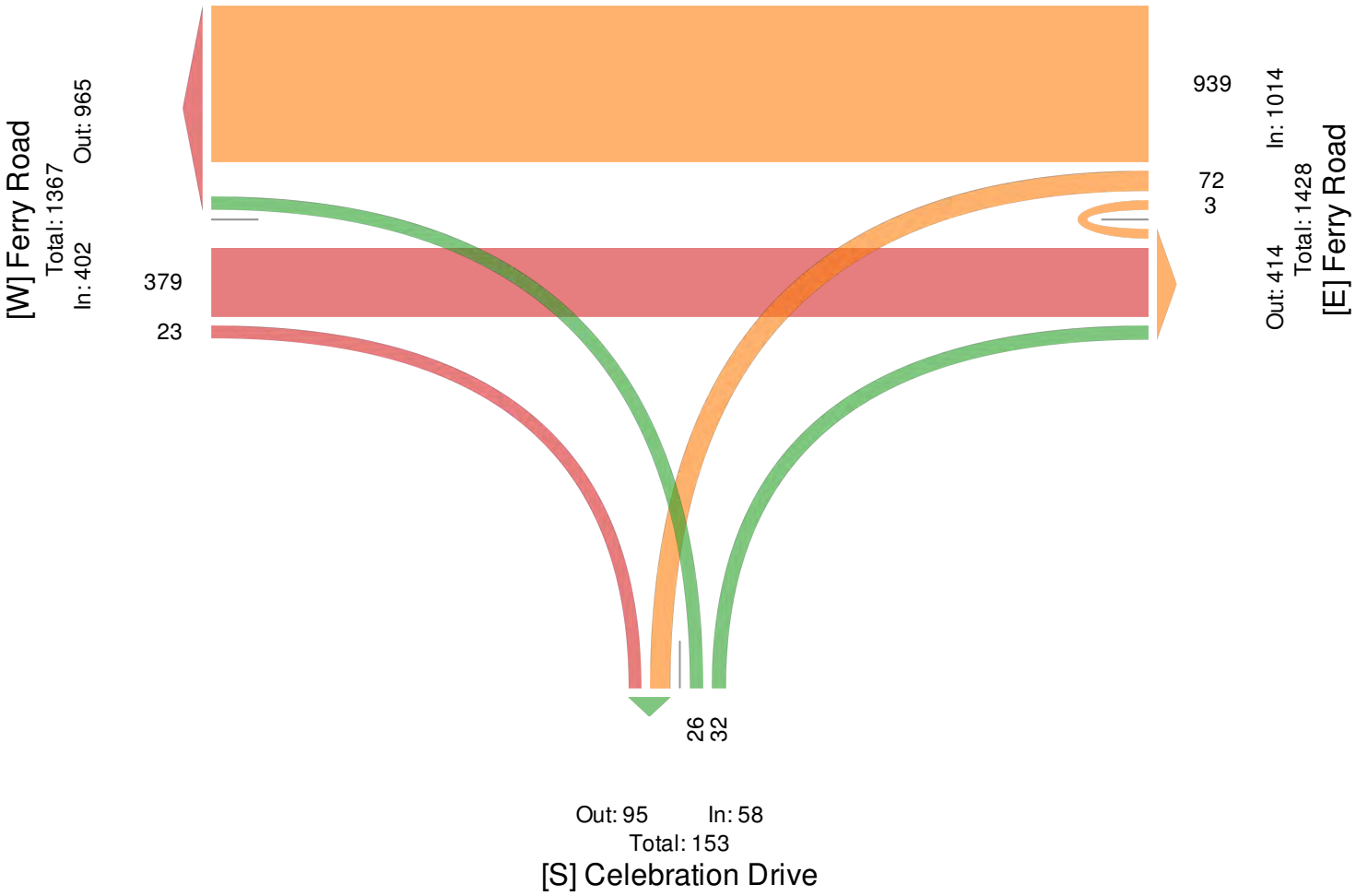
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	Ferry Road					Celebration Drive					Ferry Road					
Direction	Westbound					Northbound					Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2019-09-24 4:45PM	191	15	1	**207**	0	4	8	0	**12**	0	6	90	0	**96**	0	**315**
5:00PM	250	22	1	**273**	0	11	9	0	**20**	0	10	110	0	**120**	0	**413**
5:15PM	248	16	0	**264**	0	9	3	0	**12**	0	2	78	0	**80**	0	**356**
5:30PM	250	19	1	**270**	0	8	6	0	**14**	0	5	101	0	**106**	0	**390**
Total	939	72	3	**1014**	0	32	26	0	**58**	0	23	379	0	**402**	0	**1474**
% Approach	92.6%	7.1%	0.3%	**-**	-	55.2%	44.8%	0%	**-**	-	5.7%	94.3%	0%	**-**	-	-
% Total	63.7%	4.9%	0.2%	**68.8%**	-	2.2%	1.8%	0%	**3.9%**	-	1.6%	25.7%	0%	**27.3%**	-	-
PHF	0.939	0.818	0.750	**0.929**	-	0.727	0.722	-	**0.725**	-	0.575	0.861	-	**0.838**	-	0.892
Lights	919	70	3	**992**	-	32	26	0	**58**	-	23	368	0	**391**	-	1441
% Lights	97.9%	97.2%	100%	**97.8%**	-	100%	100%	0%	**100%**	-	100%	97.1%	0%	**97.3%**	-	97.8%
Single-Unit Trucks	9	1	0	**10**	-	0	0	0	**0**	-	0	5	0	**5**	-	15
% Single-Unit Trucks	1.0%	1.4%	0%	**1.0%**	-	0%	0%	0%	**0%**	-	0%	1.3%	0%	**1.2%**	-	1.0%
Articulated Trucks	11	1	0	**12**	-	0	0	0	**0**	-	0	5	0	**5**	-	17
% Articulated Trucks	1.2%	1.4%	0%	**1.2%**	-	0%	0%	0%	**0%**	-	0%	1.3%	0%	**1.2%**	-	1.2%
Buses	0	0	0	**0**	-	0	0	0	**0**	-	0	1	0	**1**	-	1
% Buses	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0.3%	0%	**0.2%**	-	0.1%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ferry Road with Celebration Drive - TMC
Tue Sep 24, 2019
PM Peak (Sep 24 2019 4:45PM - 5:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699279, Location: 41.810371, -88.206547

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Odyssey Avenue Right-In/Right-Out - ATR

Sat Sep 21, 2019
Full Length (12 PM-2 PM, 7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 699280, Location: 41.807818, -88.203899

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
2019-09-21 12:00PM	9	**9**	18	**18**	**27**
12:15PM	7	**7**	10	**10**	**17**
12:30PM	6	**6**	13	**13**	**19**
12:45PM	15	**15**	14	**14**	**29**
Hourly Total	37	**37**	55	**55**	**92**
1:00PM	9	**9**	14	**14**	**23**
1:15PM	7	**7**	16	**16**	**23**
1:30PM	14	**14**	15	**15**	**29**
1:45PM	16	**16**	27	**27**	**43**
Hourly Total	46	**46**	72	**72**	**118**
2019-09-24 7:00AM	2	**2**	3	**3**	**5**
7:15AM	1	**1**	3	**3**	**4**
7:30AM	1	**1**	1	**1**	**2**
7:45AM	4	**4**	9	**9**	**13**
Hourly Total	8	**8**	16	**16**	**24**
8:00AM	6	**6**	15	**15**	**21**
8:15AM	0	**0**	8	**8**	**8**
8:30AM	7	**7**	2	**2**	**9**
8:45AM	5	**5**	1	**1**	**6**
Hourly Total	18	**18**	26	**26**	**44**
4:00PM	5	**5**	25	**25**	**30**
4:15PM	7	**7**	15	**15**	**22**
4:30PM	6	**6**	10	**10**	**16**
4:45PM	13	**13**	21	**21**	**34**
Hourly Total	31	**31**	71	**71**	**102**
5:00PM	14	**14**	15	**15**	**29**
5:15PM	11	**11**	14	**14**	**25**
5:30PM	13	**13**	14	**14**	**27**
5:45PM	19	**19**	12	**12**	**31**
Hourly Total	57	**57**	55	**55**	**112**
Total	197	**197**	295	**295**	**492**
% Approach	100%	-	100%	-	-
% Total	40.0%	**40.0%**	60.0%	**60.0%**	-
Lights	194	**194**	290	**290**	484
% Lights	98.5%	**98.5%**	98.3%	**98.3%**	98.4%
Single-Unit Trucks	3	**3**	4	**4**	7
% Single-Unit Trucks	1.5%	**1.5%**	1.4%	**1.4%**	1.4%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	0	**0**	1	**1**	1
% Buses	0%	**0%**	0.3%	**0.3%**	0.2%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Odyssey Avenue Right-In/Right-Out - ATR
Sat Sep 21, 2019
Full Length (12 PM-2 PM, 7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 699280, Location: 41.807818, -88.203899

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Odyssey Avenue Right-In/Right-Out - ATR

Sat Sep 21, 2019
Midday Peak (WKND) (Sep 21 2019 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 699280, Location: 41.807818, -88.203899

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
2019-09-21 12:00PM	9	**9**	18	**18**	**27**
12:15PM	7	**7**	10	**10**	**17**
12:30PM	6	**6**	13	**13**	**19**
12:45PM	15	**15**	14	**14**	**29**
Total	37	**37**	55	**55**	**92**
% Approach	100%	**-**	100%	**-**	-
% Total	40.2%	**40.2%**	59.8%	**59.8%**	-
PHF	0.617	**0.617**	0.764	**0.764**	0.793
Lights	36	**36**	55	**55**	91
% Lights	97.3%	**97.3%**	100%	**100%**	98.9%
Single-Unit Trucks	1	**1**	0	**0**	1
% Single-Unit Trucks	2.7%	**2.7%**	0%	**0%**	1.1%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	0	**0**	0	**0**	0
% Buses	0%	**0%**	0%	**0%**	0%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Odyssey Avenue Right-In/Right-Out - ATR
Sat Sep 21, 2019
Midday Peak (WKND) (Sep 21 2019 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 699280, Location: 41.807818, -88.203899

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Odyssey Avenue Right-In/Right-Out - ATR

Sat Sep 21, 2019
PM Peak (WKND) (Sep 21 2019 1PM - 2 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 699280, Location: 41.807818, -88.203899

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
2019-09-21 1:00PM	9	**9**	14	**14**	**23**
1:15PM	7	**7**	16	**16**	**23**
1:30PM	14	**14**	15	**15**	**29**
1:45PM	16	**16**	27	**27**	**43**
Total	46	**46**	72	**72**	**118**
% Approach	100%	-	100%	-	-
% Total	39.0%	**39.0%**	61.0%	**61.0%**	-
PHF	0.719	**0.719**	0.667	**0.667**	0.686
Lights	46	**46**	72	**72**	118
% Lights	100%	**100%**	100%	**100%**	100%
Single-Unit Trucks	0	**0**	0	**0**	0
% Single-Unit Trucks	0%	**0%**	0%	**0%**	0%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	0	**0**	0	**0**	0
% Buses	0%	**0%**	0%	**0%**	0%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Odyssey Avenue Right-In/Right-Out - ATR
Sat Sep 21, 2019
PM Peak (WKND) (Sep 21 2019 1PM - 2 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 699280, Location: 41.807818, -88.203899

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Odyssey Avenue Right-In/Right-Out - ATR

Tue Sep 24, 2019
AM Peak (Sep 24 2019 7:45AM - 8:45 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 699280, Location: 41.807818, -88.203899

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
2019-09-24 7:45AM	4	**4**	9	**9**	**13**
8:00AM	6	**6**	15	**15**	**21**
8:15AM	0	**0**	8	**8**	**8**
8:30AM	7	**7**	2	**2**	**9**
Total	17	**17**	34	**34**	**51**
% Approach	100%	-	100%	-	-
% Total	33.3%	**33.3%**	66.7%	**66.7%**	-
PHF	0.607	**0.607**	0.567	**0.567**	0.607
Lights	17	**17**	32	**32**	49
% Lights	100%	**100%**	94.1%	**94.1%**	96.1%
Single-Unit Trucks	0	**0**	2	**2**	2
% Single-Unit Trucks	0%	**0%**	5.9%	**5.9%**	3.9%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	0	**0**	0	**0**	0
% Buses	0%	**0%**	0%	**0%**	0%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Odyssey Avenue Right-In/Right-Out - ATR
Tue Sep 24, 2019
AM Peak (Sep 24 2019 7:45AM - 8:45 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 699280, Location: 41.807818, -88.203899

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Odyssey Avenue Right-In/Right-Out - ATR

Tue Sep 24, 2019
PM Peak (Sep 24 2019 4:45PM - 5:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 699280, Location: 41.807818, -88.203899

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
2019-09-24 4:45PM	13	**13**	21	**21**	**34**
5:00PM	14	**14**	15	**15**	**29**
5:15PM	11	**11**	14	**14**	**25**
5:30PM	13	**13**	14	**14**	**27**
Total	51	**51**	64	**64**	**115**
% Approach	100%	-	100%	-	-
% Total	44.3%	**44.3%**	55.7%	**55.7%**	-
PHF	0.911	**0.911**	0.762	**0.762**	0.846
Lights	51	**51**	63	**63**	114
% Lights	100%	**100%**	98.4%	**98.4%**	99.1%
Single-Unit Trucks	0	**0**	0	**0**	0
% Single-Unit Trucks	0%	**0%**	0%	**0%**	0%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	0	**0**	1	**1**	1
% Buses	0%	**0%**	1.6%	**1.6%**	0.9%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Odyssey Avenue Right-In/Right-Out - ATR
Tue Sep 24, 2019
PM Peak (Sep 24 2019 4:45PM - 5:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 699280, Location: 41.807818, -88.203899

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Odyssey Avenue with Celebration Drive - TMC

Sat Sep 21, 2019
Full Length (12 PM-2 PM, 7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699281, Location: 41.807396, -88.206216

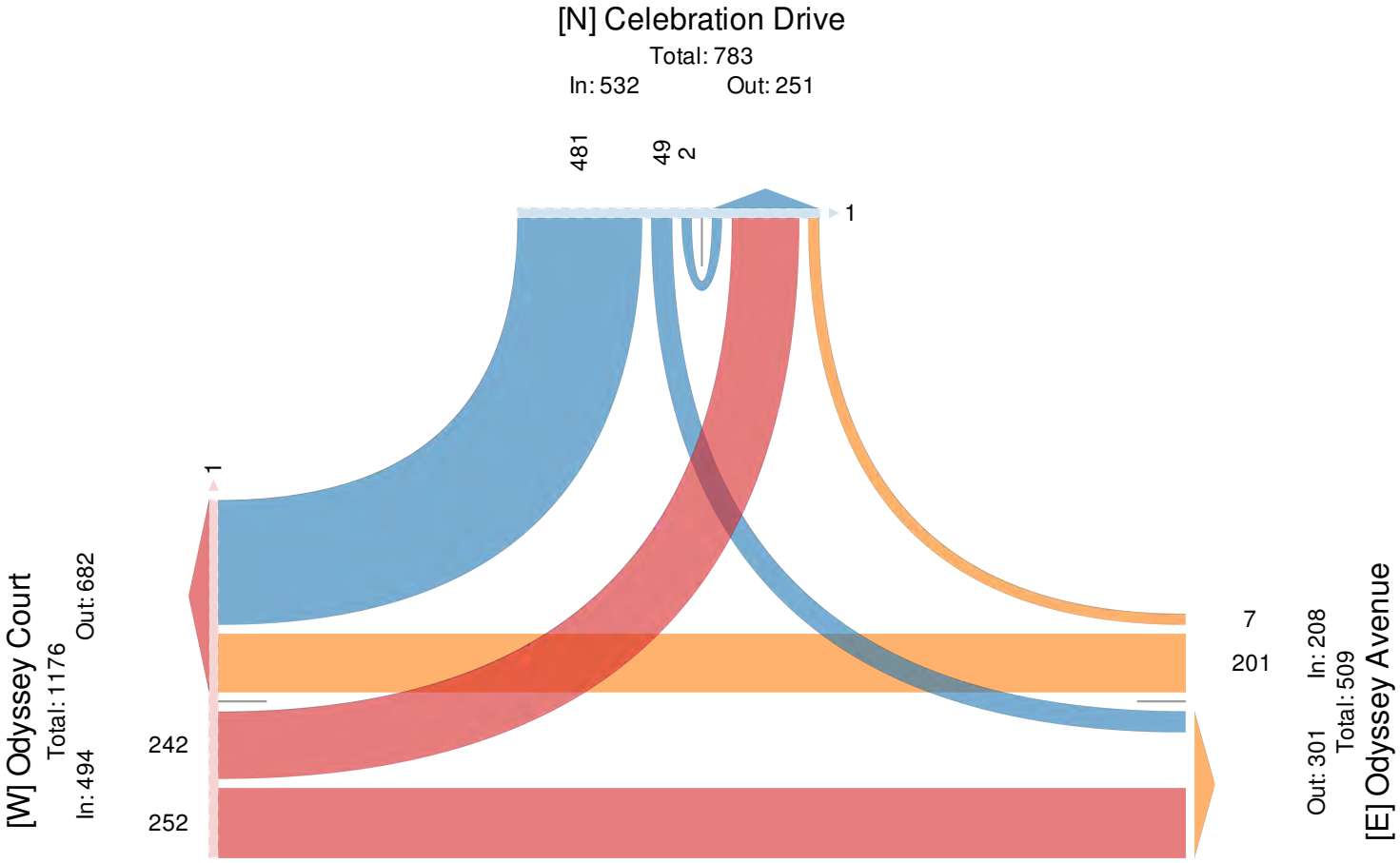
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	Celebration Drive					Odyssey Avenue					Odyssey Court					
Direction	Southbound					Westbound					Eastbound					
Time	R	L	U	App	Ped*	R	T	U	App	Ped*	T	L	U	App	Ped*	Int
2019-09-21 12:00PM	22	0	0	**22**	0	1	10	0	**11**	0	19	15	0	**34**	0	**67**
12:15PM	26	1	0	**27**	0	0	7	0	**7**	0	9	9	0	**18**	0	**52**
12:30PM	25	0	0	**25**	0	0	6	0	**6**	0	13	14	0	**27**	1	**58**
12:45PM	36	2	0	**38**	0	2	14	0	**16**	0	14	13	0	**27**	0	**81**
Hourly Total	109	3	0	**112**	0	3	37	0	**40**	0	55	51	0	**106**	1	**258**
1:00PM	22	0	0	**22**	0	1	9	0	**10**	0	14	16	0	**30**	0	**62**
1:15PM	24	1	0	**25**	1	0	7	0	**7**	0	15	17	0	**32**	0	**64**
1:30PM	28	1	0	**29**	0	0	13	0	**13**	0	15	15	0	**30**	0	**72**
1:45PM	30	3	0	**33**	0	1	16	0	**17**	0	26	11	0	**37**	0	**87**
Hourly Total	104	5	0	**109**	1	2	45	0	**47**	0	70	59	0	**129**	0	**285**
2019-09-24 7:00AM	12	0	0	**12**	0	0	2	0	**2**	0	4	4	0	**8**	0	**22**
7:15AM	10	2	1	**13**	0	0	1	0	**1**	0	1	4	0	**5**	0	**19**
7:30AM	4	2	0	**6**	0	0	1	0	**1**	0	1	4	0	**5**	0	**12**
7:45AM	15	8	0	**23**	0	0	5	0	**5**	0	2	3	0	**5**	0	**33**
Hourly Total	41	12	1	**54**	0	0	9	0	**9**	0	8	15	0	**23**	0	**86**
8:00AM	10	12	0	**22**	0	0	6	0	**6**	0	1	3	0	**4**	0	**32**
8:15AM	11	7	1	**19**	0	0	0	0	**0**	0	1	3	0	**4**	0	**23**
8:30AM	15	1	0	**16**	0	1	5	0	**6**	0	2	2	0	**4**	0	**26**
8:45AM	14	0	0	**14**	0	0	6	0	**6**	0	0	5	0	**5**	0	**25**
Hourly Total	50	20	1	**71**	0	1	17	0	**18**	0	4	13	0	**17**	0	**106**
4:00PM	27	1	0	**28**	0	1	4	0	**5**	0	25	16	0	**41**	0	**74**
4:15PM	17	3	0	**20**	0	0	7	0	**7**	0	12	9	0	**21**	0	**48**
4:30PM	12	0	0	**12**	0	0	6	0	**6**	0	10	10	0	**20**	0	**38**
4:45PM	22	0	0	**22**	0	0	13	0	**13**	0	19	14	0	**33**	0	**68**
Hourly Total	78	4	0	**82**	0	1	30	0	**31**	0	66	49	0	**115**	0	**228**
5:00PM	32	1	0	**33**	0	0	15	0	**15**	0	16	20	0	**36**	0	**84**
5:15PM	19	1	0	**20**	0	0	12	0	**12**	0	13	13	0	**26**	0	**58**
5:30PM	23	2	0	**25**	0	0	16	0	**16**	0	10	17	0	**27**	0	**68**
5:45PM	25	1	0	**26**	0	0	20	0	**20**	0	10	5	0	**15**	0	**61**
Hourly Total	99	5	0	**104**	0	0	63	0	**63**	0	49	55	0	**104**	0	**271**
Total	481	49	2	**532**	1	7	201	0	**208**	0	252	242	0	**494**	1	**1234**
% Approach	90.4%	9.2%	0.4%	-	-	3.4%	96.6%	0%	-	-	51.0%	49.0%	0%	-	-	-
% Total	39.0%	4.0%	0.2%	**43.1%**	-	0.6%	16.3%	0%	**16.9%**	-	20.4%	19.6%	0%	**40.0%**	-	-
Lights	474	47	1	**522**	-	7	198	0	**205**	-	247	237	0	**484**	-	1211
% Lights	98.5%	95.9%	50.0%	**98.1%**	-	100%	98.5%	0%	**98.6%**	-	98.0%	97.9%	0%	**98.0%**	-	98.1%
Single-Unit Trucks	4	2	1	**7**	-	0	3	0	**3**	-	3	3	0	**6**	-	16
% Single-Unit Trucks	0.8%	4.1%	50.0%	**1.3%**	-	0%	1.5%	0%	**1.4%**	-	1.2%	1.2%	0%	**1.2%**	-	1.3%
Articulated Trucks	3	0	0	**3**	-	0	0	0	**0**	-	1	2	0	**3**	-	6
% Articulated Trucks	0.6%	0%	0%	**0.6%**	-	0%	0%	0%	**0%**	-	0.4%	0.8%	0%	**0.6%**	-	0.5%
Buses	0	0	0	**0**	-	0	0	0	**0**	-	1	0	0	**1**	-	1
% Buses	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0.4%	0%	0%	**0.2%**	-	0.1%
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%
Pedestrians	-	-	-	-	1	-	-	-	-	0	-	-	-	-	1	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Odyssey Avenue with Celebration Drive - TMC
Sat Sep 21, 2019
Full Length (12 PM-2 PM, 7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699281, Location: 41.807396, -88.206216

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Odyssey Avenue with Celebration Drive - TMC

Sat Sep 21, 2019
Midday Peak (WKND) (Sep 21 2019 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699281, Location: 41.807396, -88.206216

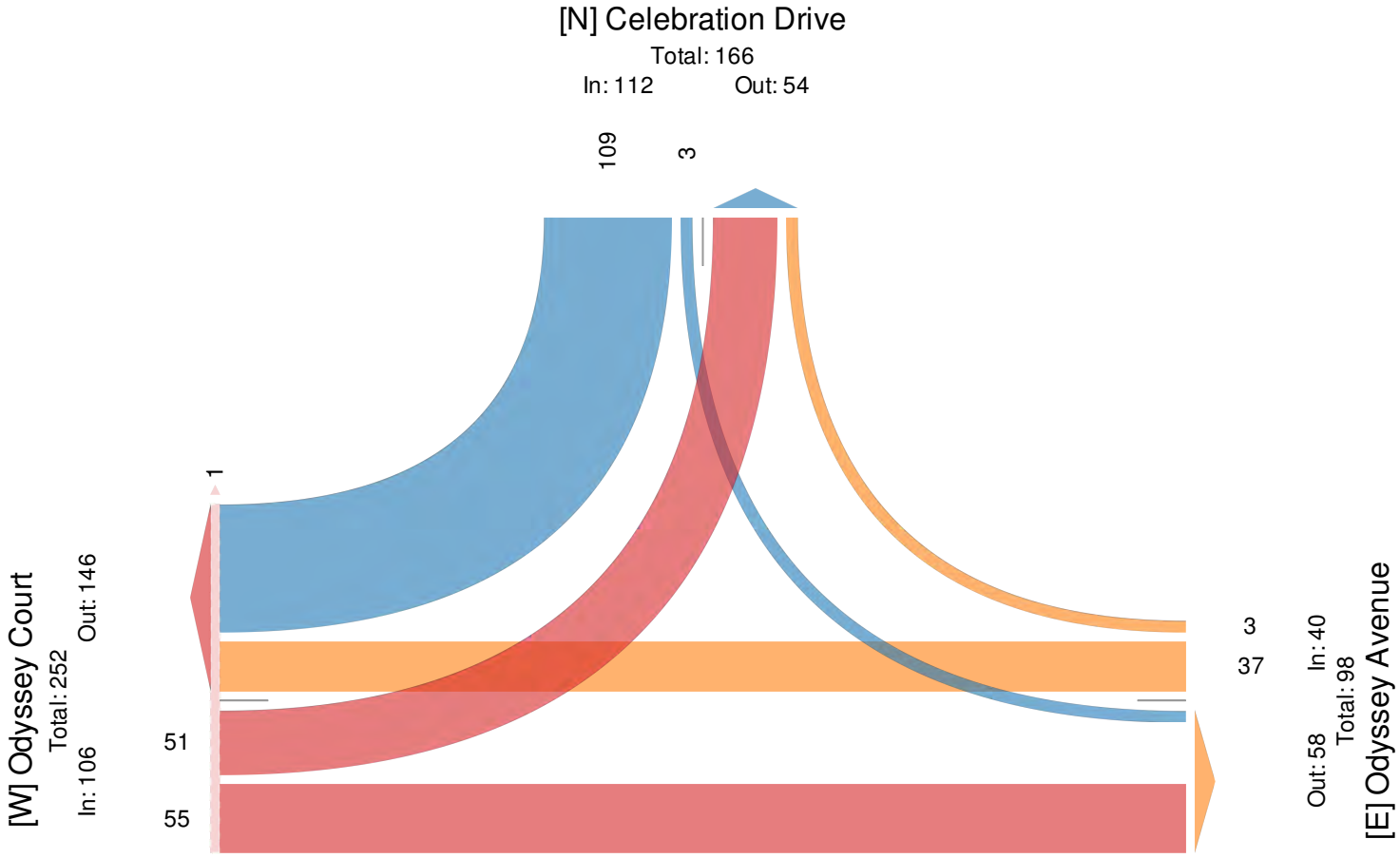
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	Celebration Drive					Odyssey Avenue					Odyssey Court					
Direction	Southbound					Westbound					Eastbound					
Time	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2019-09-21 12:00PM	22	0	0	**22**	0	1	10	0	**11**	0	19	15	0	**34**	0	**67**
12:15PM	26	1	0	**27**	0	0	7	0	**7**	0	9	9	0	**18**	0	**52**
12:30PM	25	0	0	**25**	0	0	6	0	**6**	0	13	14	0	**27**	1	**58**
12:45PM	36	2	0	**38**	0	2	14	0	**16**	0	14	13	0	**27**	0	**81**
Total	109	3	0	**112**	0	3	37	0	**40**	0	55	51	0	**106**	1	**258**
% Approach	97.3%	2.7%	0%	**-**	-	7.5%	92.5%	0%	**-**	-	51.9%	48.1%	0%	**-**	-	-
% Total	42.2%	1.2%	0%	**43.4%**	-	1.2%	14.3%	0%	**15.5%**	-	21.3%	19.8%	0%	**41.1%**	-	-
PHF	0.757	0.375	-	**0.737**	-	0.375	0.661	-	**0.625**	-	0.724	0.850	-	**0.779**	-	0.796
Lights	109	3	0	**112**	-	3	36	0	**39**	-	55	50	0	**105**	-	256
% Lights	100%	100%	0%	**100%**	-	100%	97.3%	0%	**97.5%**	-	100%	98.0%	0%	**99.1%**	-	99.2%
Single-Unit Trucks	0	0	0	**0**	-	0	1	0	**1**	-	0	1	0	**1**	-	2
% Single-Unit Trucks	0%	0%	0%	**0%**	-	0%	2.7%	0%	**2.5%**	-	0%	2.0%	0%	**0.9%**	-	0.8%
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%
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%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Odyssey Avenue with Celebration Drive - TMC
Sat Sep 21, 2019
Midday Peak (WKND) (Sep 21 2019 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699281, Location: 41.807396, -88.206216

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Odyssey Avenue with Celebration Drive - TMC

Sat Sep 21, 2019
PM Peak (WKND) (Sep 21 2019 1PM - 2 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699281, Location: 41.807396, -88.206216

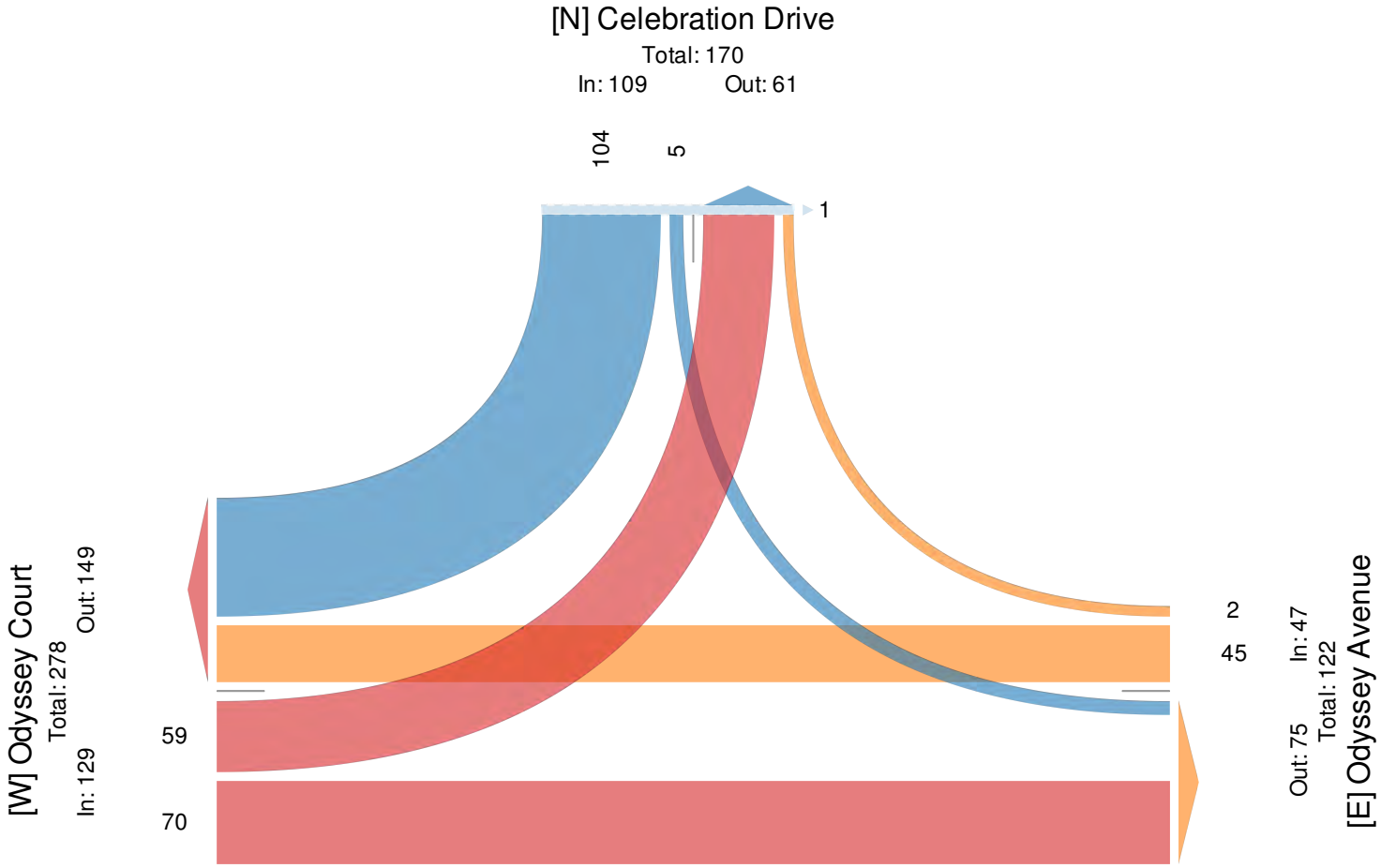
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg Direction	Celebration Drive Southbound					Odyssey Avenue Westbound					Odyssey Court Eastbound					
Time	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2019-09-21 1:00PM	22	0	0	**22**	0	1	9	0	**10**	0	14	16	0	**30**	0	**62**
1:15PM	24	1	0	**25**	1	0	7	0	**7**	0	15	17	0	**32**	0	**64**
1:30PM	28	1	0	**29**	0	0	13	0	**13**	0	15	15	0	**30**	0	**72**
1:45PM	30	3	0	**33**	0	1	16	0	**17**	0	26	11	0	**37**	0	**87**
Total	104	5	0	**109**	1	2	45	0	**47**	0	70	59	0	**129**	0	**285**
% Approach	95.4%	4.6%	0%	-	-	4.3%	95.7%	0%	-	-	54.3%	45.7%	0%	-	-	-
% Total	36.5%	1.8%	0%	**38.2%**	-	0.7%	15.8%	0%	**16.5%**	-	24.6%	20.7%	0%	**45.3%**	-	-
PHF	0.867	0.417	-	**0.826**	-	0.500	0.703	-	**0.691**	-	0.673	0.868	-	**0.872**	-	0.819
Lights	103	5	0	**108**	-	2	45	0	**47**	-	70	59	0	**129**	-	284
% Lights	99.0%	100%	0%	**99.1%**	-	100%	100%	0%	**100%**	-	100%	100%	0%	**100%**	-	99.6%
Single-Unit Trucks	1	0	0	**1**	-	0	0	0	**0**	-	0	0	0	**0**	-	1
% Single-Unit Trucks	1.0%	0%	0%	**0.9%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0.4%
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%
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%
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%
Pedestrians	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Odyssey Avenue with Celebration Drive - TMC
Sat Sep 21, 2019
PM Peak (WKND) (Sep 21 2019 1PM - 2 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699281, Location: 41.807396, -88.206216

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Odyssey Avenue with Celebration Drive - TMC

Tue Sep 24, 2019
AM Peak (Sep 24 2019 7:45AM - 8:45 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699281, Location: 41.807396, -88.206216

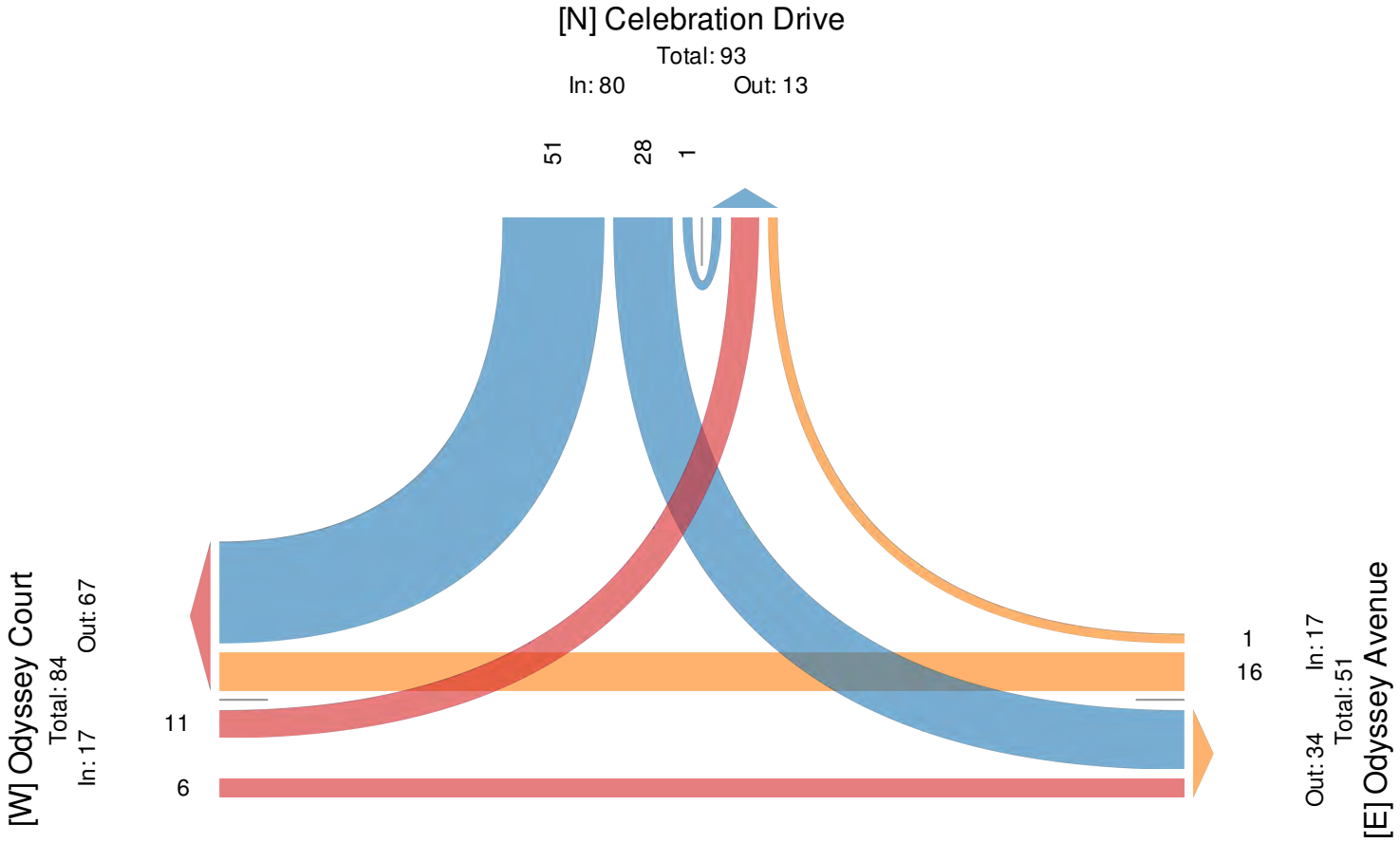
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg	Celebration Drive					Odyssey Avenue					Odyssey Court					
Direction	Southbound					Westbound					Eastbound					
Time	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2019-09-24 7:45AM	15	8	0	**23**	0	0	5	0	**5**	0	2	3	0	**5**	0	**33**
8:00AM	10	12	0	**22**	0	0	6	0	**6**	0	1	3	0	**4**	0	**32**
8:15AM	11	7	1	**19**	0	0	0	0	**0**	0	1	3	0	**4**	0	**23**
8:30AM	15	1	0	**16**	0	1	5	0	**6**	0	2	2	0	**4**	0	**26**
Total	51	28	1	**80**	0	1	16	0	**17**	0	6	11	0	**17**	0	**114**
% Approach	63.8%	35.0%	1.3%	**-**	-	5.9%	94.1%	0%	**-**	-	35.3%	64.7%	0%	**-**	-	-
% Total	44.7%	24.6%	0.9%	**70.2%**	-	0.9%	14.0%	0%	**14.9%**	-	5.3%	9.6%	0%	**14.9%**	-	-
PHF	0.850	0.583	0.250	**0.870**	-	0.250	0.667	-	**0.708**	-	0.750	0.917	-	**0.850**	-	0.864
Lights	50	27	1	**78**	-	1	16	0	**17**	-	5	11	0	**16**	-	111
% Lights	98.0%	96.4%	100%	**97.5%**	-	100%	100%	0%	**100%**	-	83.3%	100%	0%	**94.1%**	-	97.4%
Single-Unit Trucks	0	1	0	**1**	-	0	0	0	**0**	-	1	0	0	**1**	-	2
% Single-Unit Trucks	0%	3.6%	0%	**1.3%**	-	0%	0%	0%	**0%**	-	16.7%	0%	0%	**5.9%**	-	1.8%
Articulated Trucks	1	0	0	**1**	-	0	0	0	**0**	-	0	0	0	**0**	-	1
% Articulated Trucks	2.0%	0%	0%	**1.3%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0.9%
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%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Odyssey Avenue with Celebration Drive - TMC
Tue Sep 24, 2019
AM Peak (Sep 24 2019 7:45AM - 8:45 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699281, Location: 41.807396, -88.206216

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Odyssey Avenue with Celebration Drive - TMC

Tue Sep 24, 2019
PM Peak (Sep 24 2019 4:45PM - 5:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699281, Location: 41.807396, -88.206216

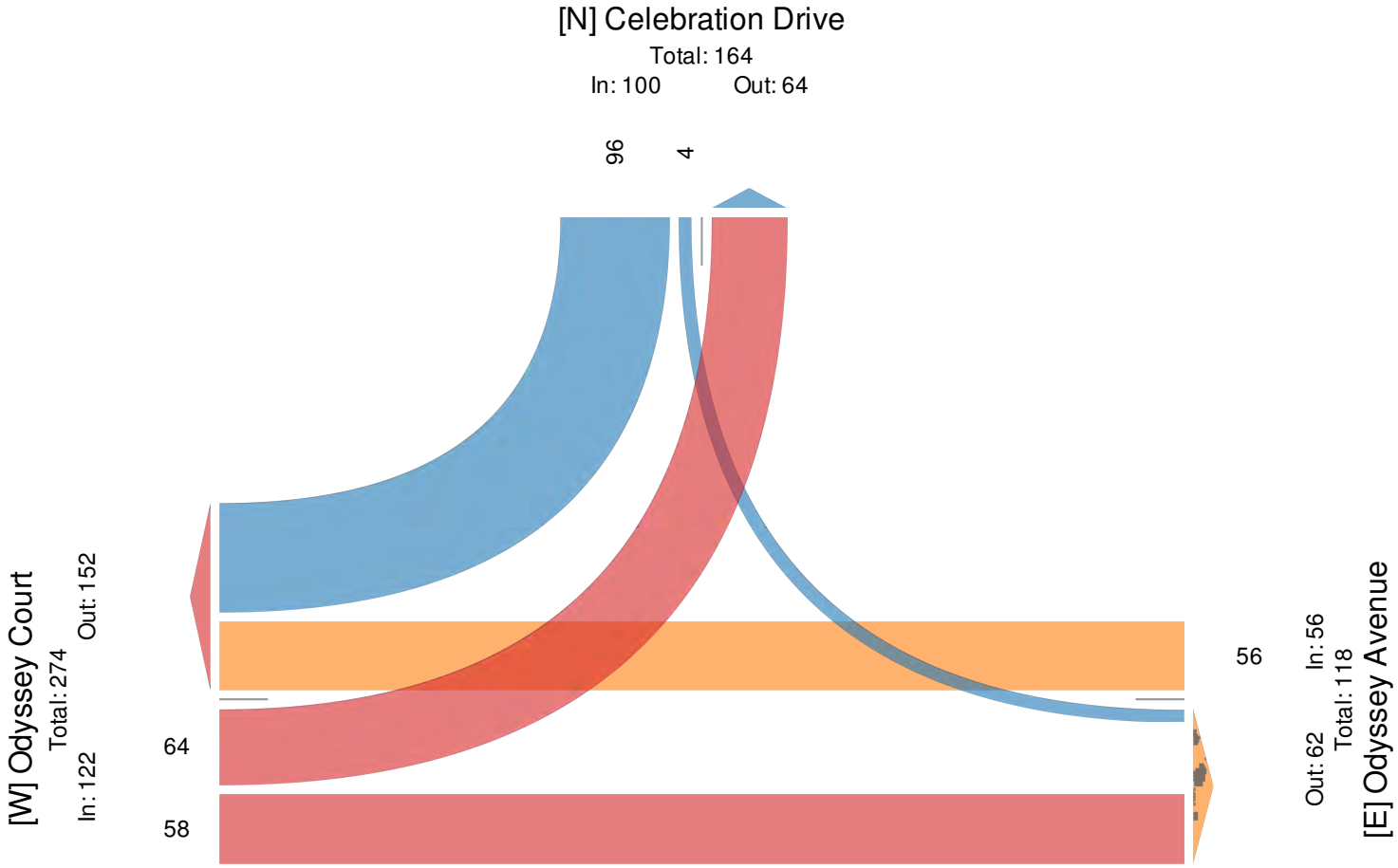
Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US

Leg / Direction	Celebration Drive Southbound					Odyssey Avenue Westbound					Odyssey Court Eastbound					
Time	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2019-09-24 4:45PM	22	0	0	**22**	0	0	13	0	**13**	0	19	14	0	**33**	0	**68**
5:00PM	32	1	0	**33**	0	0	15	0	**15**	0	16	20	0	**36**	0	**84**
5:15PM	19	1	0	**20**	0	0	12	0	**12**	0	13	13	0	**26**	0	**58**
5:30PM	23	2	0	**25**	0	0	16	0	**16**	0	10	17	0	**27**	0	**68**
Total	96	4	0	**100**	0	0	56	0	**56**	0	58	64	0	**122**	0	**278**
% Approach	96.0%	4.0%	0%	-	-	0%	100%	0%	-	-	47.5%	52.5%	0%	-	-	-
% Total	34.5%	1.4%	0%	**36.0%**	-	0%	20.1%	0%	**20.1%**	-	20.9%	23.0%	0%	**43.9%**	-	-
PHF	0.750	0.500	-	**0.758**	-	-	0.875	-	**0.875**	-	0.763	0.800	-	**0.847**	-	0.827
Lights	94	4	0	**98**	-	0	56	0	**56**	-	57	64	0	**121**	-	275
% Lights	97.9%	100%	0%	**98.0%**	-	0%	100%	0%	**100%**	-	98.3%	100%	0%	**99.2%**	-	98.9%
Single-Unit Trucks	1	0	0	**1**	-	0	0	0	**0**	-	0	0	0	**0**	-	1
% Single-Unit Trucks	1.0%	0%	0%	**1.0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0.4%
Articulated Trucks	1	0	0	**1**	-	0	0	0	**0**	-	0	0	0	**0**	-	1
% Articulated Trucks	1.0%	0%	0%	**1.0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0.4%
Buses	0	0	0	**0**	-	0	0	0	**0**	-	1	0	0	**1**	-	1
% Buses	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	1.7%	0%	0%	**0.8%**	-	0.4%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Odyssey Avenue with Celebration Drive - TMC
Tue Sep 24, 2019
PM Peak (Sep 24 2019 4:45PM - 5:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road)
All Movements
ID: 699281, Location: 41.807396, -88.206216

Provided by: Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400,
Rosemont, IL, 60018, US



Site Plan

PRELIMINARY ENGINEERING
FOR
CITY GATE WEST
NAPERVILLE, ILLINOIS

PART OF SECTIONS 3 AND 4, TOWNSHIP 38 NORTH, RANGE 9 EAST F THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

NORTH
BASIS OF BEARING:
ILLINOIS STATE PLANE – EAST ZONE

P.I.N.: 07–03–102–007
07–04–204–007
07–04–204–008
07–04–204–013
07–04–400–011

ADDRESSES: 3440 ODYSSEY CT
NAPERVILLE, IL 60540

AND

RT. 59
NAPERVILLE, IL 60540

REVISION RECORD		
NO	DATE	DESCRIPTION

SUBMITTAL RECORD		
NO	DATE	DESCRIPTION

LEGAL DESCRIPTION

PARCEL A (07–04–204–013)
LOT 2 IN THE FINAL PLAT OF SUBDIVISION OF ODYSSEY WEST 1B, BEING A SUBDIVISION OF LOT 2 IN TOPGOLF SUBDIVISION, OF PART OF SECTIONS 3 AND 4, TOWNSHIP 38 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO A PLAT THEREOF RECORDED NOVEMBER 14, 2018 AS DOCUMENT R2018–106050, IN DUPAGE COUNTY, ILLINOIS.

PARCEL B (07–03–102–007)
THAT PART OF SECTION 4, TOWNSHIP 38 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF FERRY ROAD WITH THE CURVED WESTERLY LINE OF ILLINOIS ROUTE 59, AS SAID ROUTE WAS DEDICATED BY DEED AND PLAT RECORDED AS DOCUMENT 314666 AND RUNNING THENCE SOUTHERLY, ALONG THE AFORESAID CURVED WESTERLY LINE OF ROUTE 59, ON A CURVE WHOSE CENTER LIES WESTERLY AND HAS A RADIUS OF 4042.66 FEET, 35.02 FEET, ARC (CHORD BEARING SOUTH 01 DEGREE 45 MINUTES 09 SECONDS EAST, 35.02 FEET, CHORD), TO THE NORTHERLY LINE OF PROPERTY TAKEN FOR ROADWAY PURPOSES; THENCE NORTH 72 DEGREES 11 MINUTES 22 SECONDS WEST, ALONG SAID NORTHERLY LINE, 30.00 FEET, TO A WESTERLY LINE OF PROPERTY TAKEN FOR ROADWAY PURPOSES; THENCE SOUTH 22 DEGREES 13 MINUTES 10 SECONDS EAST, ALONG SAID WESTERLY LINE, 37.41 FEET; THENCE SOUTH 00 DEGREES 52 MINUTES 03 SECONDS EAST, ALONG SAID WESTERLY LINE, 39.36 FEET; THENCE SOUTH 02 DEGREES 47 MINUTES 39 SECONDS EAST, ALONG SAID WESTERLY LINE, 98.60 FEET; THENCE SOUTH 01 DEGREE 18 MINUTES 08 SECONDS WEST, ALONG SAID WESTERLY LINE, 257.40 FEET; THENCE SOUTH 4 DEGREES 12 MINUTES 10 SECONDS WEST, ALONG SAID WESTERLY LINE, 278.67 FEET TO THE POINT OF BEGINNING ON THE NORTH LINE OF ODYSSEY AVENUE HERETOFORE DEDICATED PER PLAT OF DEDICATION TO THE CITY OF NAPERVILLE RECORDED AS DOCUMENT R2011–023171; THENCE WEST ALONG SAID NORTH LINE THE NEXT 5 COURSES, NORTH 88 DEGREES 39 MINUTES 35 SECONDS WEST, 33.42 FEET; THENCE SOUTHWESTERLY ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 533.00 FEET, AN ARC DISTANCE OF 244.10 FEET (CHORD BEARING SOUTH 78 DEGREES 13 MINUTES 12 SECONDS WEST, 241.98 FEET, CHORD); THENCE SOUTH 65 DEGREES 05 MINUTES 59 SECONDS WEST, 113.63 FEET; THENCE SOUTHWESTERLY ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 467.00 FEET, AN ARC DISTANCE OF 163.53 FEET (CHORD BEARING SOUTH 75 DEGREES 07 MINUTES 54 SECONDS WEST, 162.70 FEET, CHORD); THENCE NORTH 48 DEGREES 14 MINUTES 29 SECONDS WEST, 13.90 FEET TO A POINT ON THE EAST RIGHT OF WAY LINE OF CELEBRATION DRIVE HERETOFORE DEDICATED PER PLAT OF DEDICATION TO THE CITY OF NAPERVILLE RECORDED AS DOCUMENT R2011–023171; THENCE NORTH ALONG SAID EAST RIGHT OF WAY LINE THE NEXT 6 COURSES, NORTH 02 DEGREES 15 MINUTES 36 SECONDS WEST, 454.75 FEET; THENCE NORTHWESTERLY ALONG A CURVE TO LEFT, HAVING A RADIUS OF 540.00 FEET, AN ARC DISTANCE OF 150.36 FEET (CHORD BEARING NORTH 10 DEGREES 14 MINUTES 12 SECONDS WEST, 149.87 FEET, CHORD); THENCE NORTH 18 DEGREES 12 MINUTES 48 SECONDS WEST, 125.82 FEET; THENCE NORTHERLY ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 460.00 FEET, AN ARC DISTANCE OF 224.71 FEET (CHORD BEARING NORTH 04 DEGREES 13 MINUTES 07 SECONDS WEST, 222.49 FEET, CHORD); THENCE NORTH 09 DEGREES 46 MINUTES 34 SECONDS EAST, 11.56 FEET; THENCE NORTH 58 DEGREES 46 MINUTES 58 SECONDS EAST, 26.24 FEET TO A POINT ON THE SOUTH LINE OF FERRY ROAD HERETOFORE DEDICATED PER PLAT OF HIGHWAYS RECORDED AS DOCUMENT R2007–090410; THENCE EAST ALONG SAID SOUTH LINE THE NEXT 3 COURSES, SOUTH 72 DEGREES 12 MINUTES 37 SECONDS EAST, 157.22 FEET; THENCE SOUTH 75 DEGREES 36 MINUTES 47 SECONDS EAST, 499.04 FEET; THENCE SOUTH 46 DEGREES 12 MINUTES 40 SECONDS EAST, 48.66 FEET TO A POINT ON THE WEST LINE OF PARCEL 1HJ0163B LIS PENDENS NOTICE RECORDED AS DOCUMENT R2012–131923 (ALSO KNOW AS THE WEST LINE OF LOT 9 IN ODYSSEY WEST ASSESSMENT PLAT RECORDED AS DOCUMENT R98–266997); THENCE SOUTH ALONG SAID WEST LINE THE NEXT 3 COURSES, SOUTH 02 DEGREES 47 MINUTES 39 SECONDS EAST, 100.27 FEET; THENCE SOUTH 01 DEGREE 18 MINUTES 08 SECONDS WEST, 255.57 FEET; THENCE SOUTH 04 DEGREES 12 MINUTES 10 SECONDS WEST, 249.41 FEET TO THE POINT OF BEGINNING, ALL IN DUPAGE COUNTY, ILLINOIS.

ALSO KNOWN AS LOT 2 IN ODYSSEY WEST ASSESSMENT PLAT OF PART OF SECTIONS 3 AND 4, TOWNSHIP 38 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID ODYSSEY WEST ASSESSMENT PLAT RECORDED DECEMBER 17, 1998, AS DOCUMENT R98–266997, IN DUPAGE COUNTY, ILLINOIS.

PARCEL C (07–04–204–007)
THAT PART OF SECTION 4, TOWNSHIP 38 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOOLOWS: COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF FERRY ROAD WITH THE CURVED WESTERLY LINE OF ILLINOIS ROUTE 59, AS SAID ROUTE WAS DEDICATED BY DEED AND PLAT RECORDED AS DOCUMENT 314666 AND RUNNING THENCE SOUTHERLY, ALONG THE AFORESAID CURVED WESTERLY LINE OF ROUTE 59, ON A CURVE WHOSE CENTER LIES WESTERLY AND HAS A RADIUS OF 4042.66 FEET, 35.02 FEET, ARC (CHORD BEARING SOUTH 01 DEGREE 45 MINUTES 09 SECONDS EAST, 35.02 FEET, CHORD), TO THE NORTHERLY LINE OF PROPERTY TAKEN FOR ROADWAY PURPOSES; THENCE NORTH 72 DEGREES 11 MINUTES 22 SECONDS WEST, ALONG SAID NORTHERLY LINE, 30.00 FEET, TO A WESTERLY LINE OF PROPERTY TAKEN FOR ROADWAY PURPOSES; THENCE SOUTH 22 DEGREES 13 MINUTES 10 SECONDS EAST, ALONG SAID WESTERLY LINE, 37.41 FEET; THENCE SOUTH 00 DEGREES 52 MINUTES 03 SECONDS EAST, ALONG SAID WESTERLY LINE, 39.36 FEET; THENCE SOUTH 02 DEGREES 47 MINUTES 39 SECONDS EAST, ALONG SAID WESTERLY LINE, 98.60 FEET; THENCE SOUTH 01 DEGREE 18 MINUTES 08 SECONDS WEST, ALONG SAID WESTERLY LINE, 257.40 FEET; THENCE SOUTH 04 DEGREES 12 MINUTES 10 SECONDS WEST, ALONG SAID WESTERLY LINE, 300.38 FEET; THENCE SOUTH 03 DEGREES 04 MINUTES 17 SECONDS WEST, ALONG SAID WESTERLY LINE, 94.33 FEET; THENCE NORTH 88 DEGREES 09 MINUTES 35 SECONDS WEST, 20.01 FEET TO THE POINT OF BEGINNING BEING A POINT ON THE WEST LINE OF PARCEL 1HJ0163B LIS PENDENS NOTICE RECORDED AS DOCUMENT R2012–131923 (ALSO KNOW AS THE WEST LINE OF LOT 10 IN ODYSSEY WEST ASSESSMENT PLAT RECORDED AS DOCUMENT R98–266997); THENCE SOUTH ALONG SAID WEST LINE, SOUTH 03 DEGREES 04 MINUTES 17 SECONDS WEST, 265.85 FEET; THENCE SOUTH 82 DEGREES 15 MINUTES 52 SECONDS WEST, 882.10 FEET; THENCE NORTH 37 DEGREES 49 MINUTES 26 SECONDS WEST, 80.26 FEET; THENCE SOUTH 83 DEGREES 10 MINUTES 55 SECONDS WEST, 266.06 FEET; THENCE NORTH 06 DEGREES 27 MINUTES 09 SECONDS WEST, 215.00 FEET TO A POINT ON THE SOUTH LINE OF ODYSSEY COURT HERETOFORE DEDICATED PER PLAT OF DEDICATION TO THE CITY OF NAPERVILLE RECORDED AS DOCUMENT R2011–023171; THENCE EAST ALONG SAID SOUTH LINE THE NEXT 8 COURSES, NORTH 83 DEGREES 32 MINUTES 51 SECONDS, 128.99 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 5696.58 FEET, AN ARC DISTANCE OF 416.85 FEET (CHORD BEARING NORTH 85 DEGREES 38 MINUTES 38 SECONDS EAST, 416.75 FEET, CHORD); THENCE NORTH 87 DEGREES 44 MINUTES 24 SECONDS EAST, 100.00 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 533.00 FEET, AN ARC DISTANCE OF 209.25 FEET (CHORD BEARING NORTH 76 DEGREES 25 MINUTES 12 SECONDS EAST, 209.25 FEET, CHORD); THENCE NORTH 65 DEGREES 05 MINUTES 59 SECONDS EAST. 113.63 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 467.00 FEET, AN ARC DISTANCE OF 213.88 FEET (CHORD BEARING NORTH 78 DEGREES 13 MINUTES 12 SECONDS EAST, 212.01 FEET, CHORD)' THENCE SOUTH 88 DEGREES 39 MINUTES 35 SECONDS EAST, 21.02 FEET; THENCE SOUTH 42 DEGREES 47 MINUTES 39 SECONDS EAST, 69.63 FEET TO THE POINT OF BEGINNING, ALL IN DUPAGE COUNTY, ILLINOIS.

ALSO KNOWN AS LOT 3 IN ODYSSEY WEST ASSESSMENT PLAT OF PART OF SECTIONS 3 AND 4, TOWNSHIP 38 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID ODYSSEY WEST ASSESSMENT PLAT RECORDED DECEMBER 17, 1998, AS DOCUMENT R98–266997, IN DUPAGE COUNTY, ILLINOIS.

PARCEL D (07–04–400–011)
THAT PART OF SECTION 4, TOWNSHIP 38 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF FERRY ROAD WITH THE CURVE WESTERLY LINE OF ILLINOIS ROUTE 59, AS SAID ROUTE WAS DEDICATED BY DEED AND PLAT RECORDED AS DOCUMENT 314666 AND RUNNING THENCE SOUTHERLY, ALONG THE AFORESAID CURVED WESTERLY LINE OF ROUTE 59, ON A CURVE WHOSE CENTER LIES WESTERLY AND HAS A RADIUS OF 4042.66 FEET, 35.02 FEET, ARC (CHORD BEARING SOUTH 01 DEGREES 45 MINUTES 09 SECONDS EAST, 35.02 FEET, CHORD), TO THE NORTHERLY LINE OF PROPERTY TAKEN FOR ROADWAY PURPOSES; THENCE NORTH 72 DEGREES 11 MINUTES 22 SECONDS WEST, ALONG SAID NORTHERLY LINE, 30.00 FEET, TO A WESTERLY LINE OF PROPERTY TAKEN FOR ROADWAY PURPOSES; THENCE SOUTH 22 DEGREES 13 MINUTES 10 SECONDS EAST, ALONG SAID WESTERLY LINE, 37.41 FEET; THENCE SOUTH 00 DEGREES 52 MINUTES 03 SECONDS EAST, ALONG SAID WESTERLY LINE, 39.36 FEET; THENCE SOUTH 02 DEGREES 47 MINUTES 39 SECONDS EAST, ALONG SAID WESTERLY LINE, 98.60 FEET; THENCE SOUTH 01 DEGREES 18 MINUTES 08 SECONDS WEST, ALONG SAID WESTERLY LINE, 257.40 FEET; THENCE SOUTH 04 DEGREES 12 MINUTES 10 SECONDS WEST, ALONG SAID WESTERLY LINE 300.38 FEET; THENCE SOUTH 03 DEGREES 04 MINUTES 17 SECONDS WEST, ALONG SAID WESTERLY LINE, 660.22 FEET, TO THE NORTHERLY LINE OF PROPERTY CONVEYED TO THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY BY DOCUMENT R81–44506; THENCE SOUTH 14 DEGREES 15 MINUTES 41 SECONDS WEST, ALONG SAID NORTHERLY LINE 246.24 FEET; THENCE NORTH 87 DEGREES 53 MINUTES 31 SECONDS WEST, ALONG SAID NORTHERLY LINE, 235.86 FEET; THENCE SOUTH 42 DEGREES 52 MINUTES 44 SECONDS WEST, ALONG SAID NORTHERLY LINE, 678.99 FEET, TO THE NORTHERLY LINE OF NORTHERN ILLINOIS GAS COMPANY NAPERVILLE TOWNSHIP ASSESSMENT PLAT NO. 1; THENCE SOUTH 83 DEGREES 32 MINUTES 51 SECONDS WEST, ALONG SAID NORTHERLY LINE OF ASSESSMENT PLAT NO. 1, A DISTANCE OF 1241.21 FEET FOR THE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID NORTHERLY LINE, SOUTH 83 DEGREES 32 MINUTES 51 SECONDS WEST, A DISTANCE OF 1013.38 FEET TO AN ANGLE POINT IN SAID NORTH LINE; THENCE NORTH 73 DEGREES 57 MINUTES 09 SECONDS WEST ALONG SAID NORTH LINE , A DISTANCE OF 39.20 FEET TO AN ANGLE POINT; THENCE SOUTH 83 DEGREES 32 MINUTES 51 SECONDS WEST ALONG SAID NORTH LINE, A DISTANCE OF 344.38 FEET TO A POINT ON THE SOUTHEASTERLY LINE OF THE DUPAGE COUNTY PARKWAY, (FORMERLY THE CHICAGO, AURORA, AND ELGIN RAILROAD); THENCE NORTH 43 DEGREES 20 MINUTES 34 SECONDS EAST, ALONG SAID SOUTHEASTERLY LINE, A DISTANCE OF 1939.67 FEET; THENCE SOUTH 46 DEGREES 39 MINUTES 26 SECONDS EAST, 61.19 FEET TO A POINT OF CURVATURE; THENCE EASTERLY, ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 62.00 FEET, AN ARC DISTANCE OF 53.88 FEET, THE CHORD OF WHICH BEARS SOUTH 71 DEGREES 33 MINUTES 18 SECONDS EAST, A DISTANCE OF 52.20 FEET; THENCE NORTH 83 DEGREES 32 MINUTES 51 SECONDS EAST, A DISTANCE OF 50.42 FEET TO A POINT OF CUSP; THENCE SOUTHWESTERLY, ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 60.00 FEET, AN ARC DISTANCE OF 38.75 FEET, THE CHORD OF WHICH BEARS SOUTH 65 DEGREES 02 MINUTES 51 SECONDS WEST, A DISTANCE OF 38.08 FEET TO A POINT OF TANGENCY; THENCE SOUTH 46 DEGREES 32 MINUTES 51 SECONDS WEST, A DISTANCE OF 55.55 FEET TO A POINT OF CURVATURE; THENCE WESTERLY ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 62.00 FEET, AN ARC DISTANCE OF 93.92 FEET, THE CHORD OF WHICH BEARS SOUTH 89 DEGREES 56 MINUTES 42 SECONDS WEST, A DISTANCE OF 85.20 FEET; THENCE SOUTH 43 DEGREES 20 MINUTES 34 SECONDS WEST, A DISTANCE OF 77.99 FEET; THENCE SOUTH 06 DEGREES 27 MINUTES 09 SECONDS EAST, A DISTANCE OF 1112.03 FEET TO THE POINT OF BEGINNING, ALL IN DUPAGE COUNTY, ILLINOIS.

ALSO KNOWN AS LOT 5 IN ODYSSEY WEST ASSESSMENT PLAT OF PART OF SECTIONS 3 AND 4, TOWNSHIP 38 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID ODYSSEY WEST ASSESSMENT PLAT RECORDED DECEMBER 17, 1998, AS DOCUMENT R98–266997, IN DUPAGE COUNTY, ILLINOIS.

PARCEL E (07–04–204–008)
THAT PART OF SECTION 4, TOWNSHIP 38 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS: COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF FERRY ROAD WITH THE CURVED WESTERLY LINE OF ILLINOIS ROUTE 59, AS SAID ROUTE WAS DEDICATED BY DEED AND PLAT RECORDED AS DOCUMENT 314666 AND RUNNING THENCE SOUTHERLY, ALONG THE AFORESAID CURVED WESTERLY LINE OF ROUTE 59, ON A CURVE WHOSE CENTER LIES WESTERLY AND HAS A RADIUS OF 4042.66 FEET, 35.02 FEET, ARC (CHORD BEARING SOUTH 01 DEGREE 45 MINUTES 09 SECONDS EAST, 35.02 FEET, CHORD), TO THE NORTHERLY LINE OF PROPERTY TAKEN FOR ROADWAY PURPOSES; THENCE NORTH 72 DEGREES 11 MINUTES 22 SECONDS WEST, ALONG SAID NORTHERLY LINE, 30.00 FEET, TO A WESTERLY LINE OF PROPERTY TAKEN FOR ROADWAY PURPOSES; THENCE SOUTH 22 DEGREES 13 MINUTES 10 SECONDS EAST, ALONG SAID WESTERLY LINE, 37.41 FEET; THENCE SOUTH 0 DEGREES 52 MINUTES 03 SECONDS EAST, ALONG SAID WESTERLY LINE, 39.36 FEET; THENCE SOUTH 02 DEGREES 47 MINUTES 39 SECONDS EAST, ALONG SAID WESTERLY LINE, 98.60 FEET; THENCE SOUTH 01 DEGREE 18 MINUTES 08 SECONDS WEST, ALONG SAID WESTERLY LINE, 257.40 FEET; THENCE SOUTH 4 DEGREES 12 MINUTES 10 SECONDS WEST, ALONG SAID WESTERLY LINE, 300.38 FEET; THENCE SOUTH 03 DEGREES 04 MINUTES 17 SECONDS WEST, ALONG SAID WESTERLY LINE, 660.22 FEET, TO THE NORTHERLY LINE OF PROPERTY CONVEYED TO THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY BY DOCUMENT R81–44506; THENCE SOUTH 14 DEGREES 15 MINUTES 41 SECONDS WEST ALONG SAID NORTHERLY LINE, 103.06 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID NORTHERLY LINE SOUTH 14 DEGREES 15 MINUTES 41 SECONDS WEST, 143.18 FEET; THENCE NORTH 87 DEGREES 53 MINUTES 31 SECONDS WEST, ALONG SAID NORTHERLY LINE, 235.86 FEET; THENCE SOUTH 42 DEGREES 52 MINUTES 44 SECONDS WEST, ALONG SAID NORTHERLY LINE, 678.99 FEET, TO THE NORTHERLY LINE OF NORTHERN ILLINOIS GAS COMPANY NAPERVILLE TOWNSHIP ASSESSMENT PLAT NO. 1; THENCE SOUTH 83 DEGREES 32 MINUTES 51 SECONDS WEST, ALONG SAID NORTHERLY LINE OF ASSESSMENT PLAT NO. 1, A DISTANCE OF 324.57 FEET; THENCE NORTH 06 DEGREES 27 MINUTES 09 SECONDS WEST, A DISTANCE OF 983.39 FEET; THENCE NORTH 83 DEGREES 10 MINUTES 55 SECONDS EAST, A DISTANCE OF 266.06 FEET; THENCE SOUTH 37 DEGREES 49 MINUTES 26 SECONDS EAST, A DISTANCE OF 80.26 FEET; THENCE NORTH 82 DEGREES 15 MINUTES 52 SECONDS EAST, A DISTANCE OF 882.10 FEET; THENCE SOUTH 03 DEGREES 04 MINUTES 17 SECONDS WEST, A DISTANCE OF 400.53 FEET TO THE POINT OF BEGINNING; ALL IN DUPAGE COUNTY, ILLINOIS.

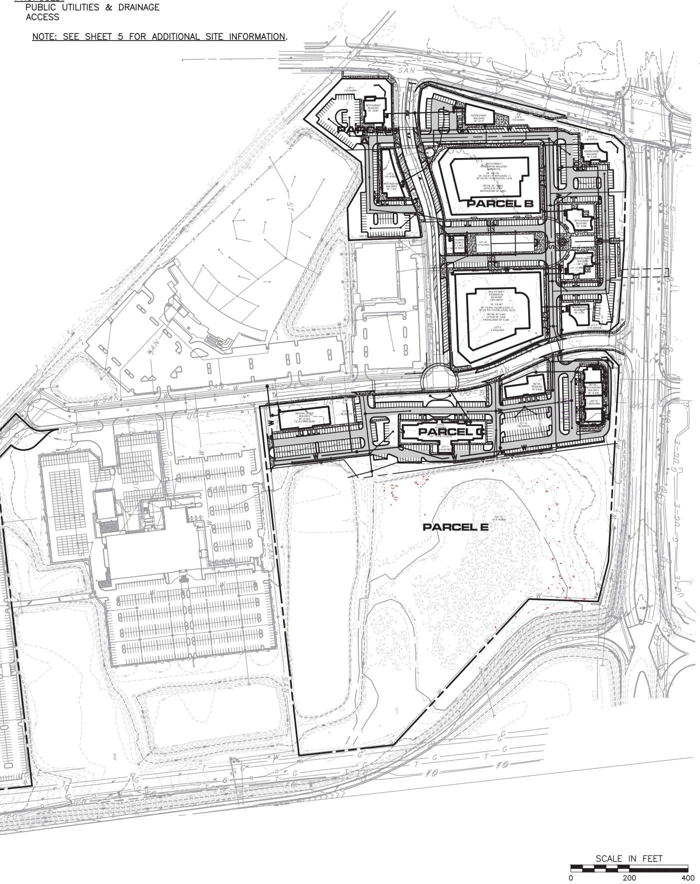
ALSO KNOWN AS LOT 6 IN ODYSSEY WEST ASSESSMENT PLAT OF PART OF SECTIONS 3 AND 4, TOWNSHIP 38 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SAID ODYSSEY WEST ASSESSMENT PLAT RECORDED DECEMBER 17, 1998, AS DOCUMENT R98–266997, IN DUPAGE COUNTY, ILLINOIS.

SITE DATA

GROSS AREA	2,623,459 S.F. (60.226 AC.)
NET AREA	2,623,459 S.F. (60.226 AC.)
NO. OF LOTS	16
EASEMENTS:	
EXISTING:	
PUBLIC UTILITIES & DRAINAGE	333,649 S.F. (7.660 AC.)
PUBLIC UTILITIES, DRAINAGE & SIDEWALK	41,670 S.F. (0.957 AC.)
ROADWAY & UTILITIES	20,500 S.F. (0.471 AC.)
PUBLIC UTILITIES, DRAINAGE & STORMWATER MANAGEMENT	301,021 S.F. (6.911 AC.)
AMERITECH	400 S.F. (0.009 AC.)
DRAINAGE & WETLAND CONSERVATION	529,729 S.F. (12.161 AC.)
PERPETUAL	14,007 S.F. (0.322 AC.)
EMERGENCY ACCESS & INGRESS/EGRESS	14,000 S.F. (0.321 AC.)
TEMP CONSTRUCTION & DRAINAGE	4,913 S.F. (0.113 AC.)
SIGN	2,641 S.F. (0.061 AC.)
PROPOSED:	
PUBLIC UTILITIES & DRAINAGE	
ACCESS	

NOTE: SEE SHEET 5 FOR ADDITIONAL SITE INFORMATION.

LOT NO.	LOT AREA
1	56,643 S.F. (1.30 AC.)
2	57,855 S.F. (1.33 AC.)
3	52,144 S.F. (1.20 AC.)
4	142,441 S.F. (3.27 AC.)
5	138,435 S.F. (3.18 AC.)
6	55,647 S.F. (1.28 AC.)
7	42,012 S.F. (0.96 AC.)
8	38,540 S.F. (0.89 AC.)
9	33,856 S.F. (0.78 AC.)
10	80,371 S.F. (1.85 AC.)
11	135,688 S.F. (3.12 AC.)
12	38,414 S.F. (0.88 AC.)
13	67,786 S.F. (1.56 AC.)
14	832,565 S.F. (19.11 AC.)
15	851,062 S.F. (19.54 AC.)
16	--- ---



SCALE IN FEET
0 200 400
BASIS OF BEARING:
ILLINOIS STATE PLANE – EAST ZONE

LOCATION MAP
N.T.S.

LINE TYPE LEGEND

PROPOSED	EXISTING	DESCRIPTION
——— – – ———	——— – – ———	SUBDIVISION BOUNDARY
————	————	RIGHT OF WAY
————	————	LOT LINE
——— – ———	——— – ———	CENTER LINE
—— —— ——	— — — — —	EASEMENT LINE
- - - - - - -	- - - - - - -	ACCESS EASEMENT LINE
- - - - - - - - -	——— ———	BUILDING LINE
————	————	SECTION LINE
	— — — — — —	UNDERLYING LOT LINE
(grey fill)		PUBLIC UTILITIES & DRAINAGE EASEMENT HEREBY GRANTED
(hatched)		CROSS ACCESS EASEMENT HEREBY GRANTED

ABBREVIATIONS

REC.	RECORD DATA	S.F.	SQUARE FEET
MEAS.	MEASURED DATA	AC.	ACRE
DEED	DEEDED DATA	FIP	FOUND IRON PIPE
R.	RADIUS	N	NORTH
A.	ARC DATA	S	SOUTH
ROW	RIGHT OF WAY	E	EAST
PL	PROPERTY LINE	W	WEST
CL	CENTERLINE		

CITY PROJECT NO. __–________

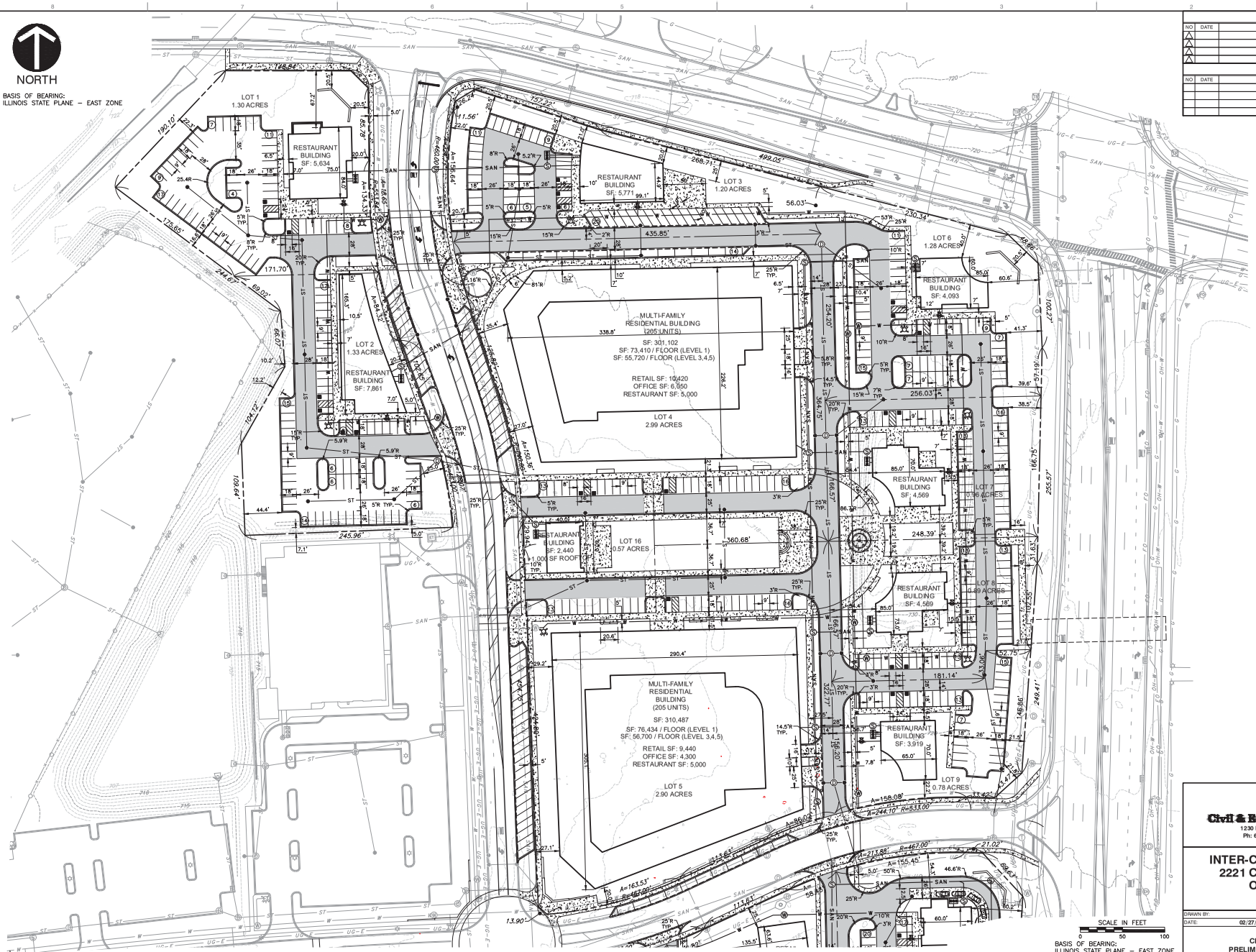
Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200 - Naperville, IL 60563
Ph: 630.963.6026 · 877.963.6026 · Fax: 630.963.6027
www.cecinc.com

INTER-CONTINENTAL EQUITIES, LLC
2221 CAMDEN COURT, SUITE 200
OAK BROOK, ILLINOIS
TEL. (630) 560-8018

DRAWN BY:	SRH	CHECKED BY:	DRM	APPROVED BY:	LHW
DATE:	02/27/2020	DWG SCALE:	1"=200'	PROJECT NO:	195-318.AW00

CITY GATE WEST
PRELIMINARY ENGINNERING

DRAWING NO.: CV100



REVISION RECORD

NO	DATE	DESCRIPTION
1		
2		
3		

SUBMITTAL RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200 - Naperville, IL 60563
Ph: 630.963.6026 - 877.963.6026 - Fax: 630.963.6027
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INTER-CONTINENTAL EQUITIES, LLC
2221 CAMDEN COURT, SUITE 200
OAK BROOK, ILLINOIS
TEL. (630) 560-8018

DRAWN BY:	SRH	CHECKED BY:	DRM	APPROVED BY:	LHW
DATE:	02/27/2020	DWG SCALE:	1"=50'	PROJECT NO:	19S-318.AW00

CITY GATE WEST
PRELIMINARY ENGINEERING

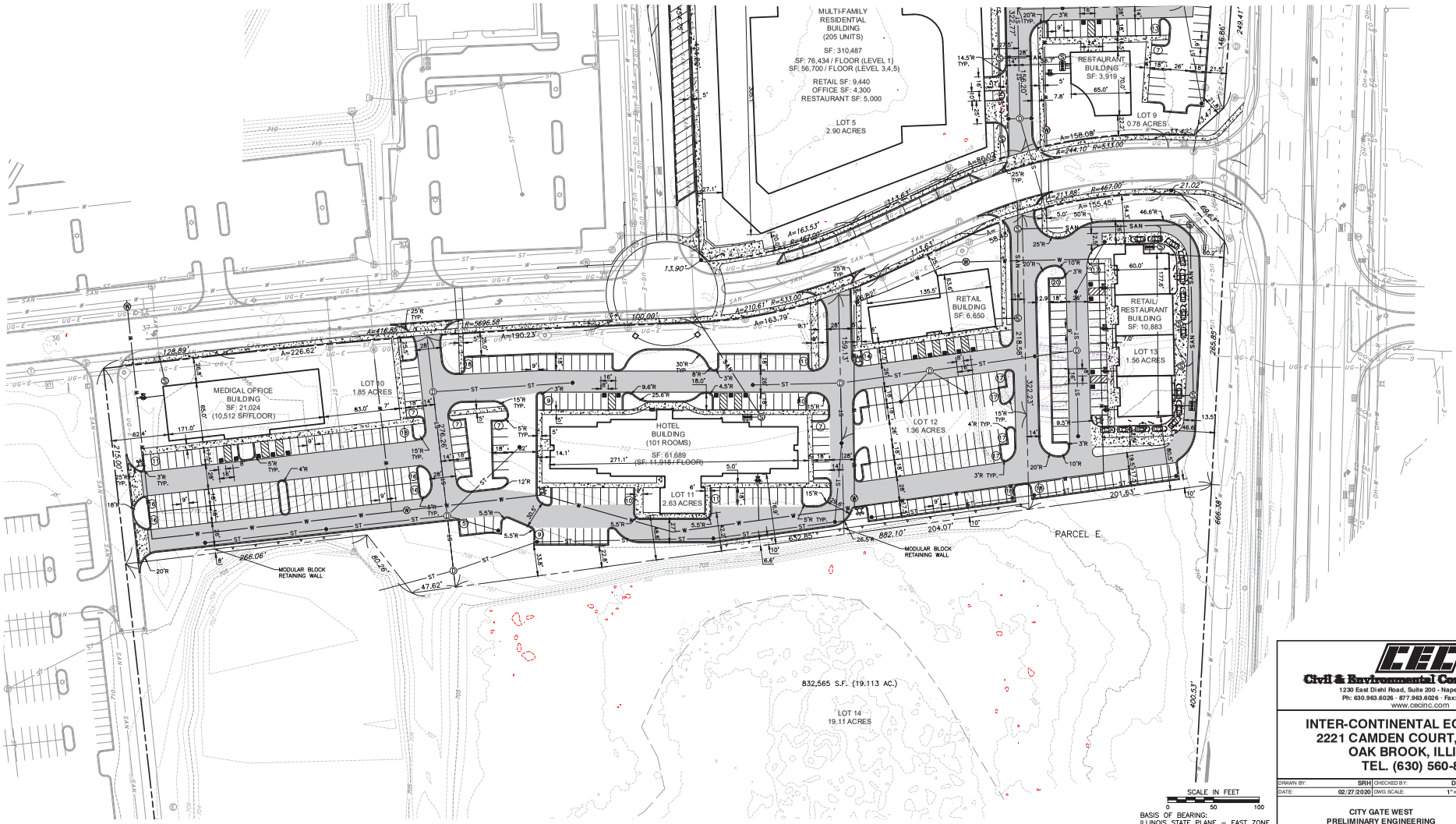
DRAWING NO.: **CV101**
SHEET 2 OF 8

NORTH

BASIS OF BEARING:
ILLINOIS STATE PLANE – EAST ZONE

REVISION RECORD		
NO	DATE	DESCRIPTION

SUBMITTAL RECORD		
NO	DATE	DESCRIPTION



SCALE IN FEET
0 50 100

BASIS OF BEARING:
ILLINOIS STATE PLANE – EAST ZONE

Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200 - Naperville, IL 60563
Ph: 630.963.6026 - 877.963.6026 - Fax: 630.963.6027
www.cecinc.com

INTER-CONTINENTAL EQUITIES, LLC
2221 CAMDEN COURT, SUITE 200
OAK BROOK, ILLINOIS
TEL. (630) 560-8018

DRAWN BY:	SRH	CHECKED BY:	DRM	APPROVED BY:	LHW
DATE:	02/27/2020	DWG SCALE:	1"=50'	PROJECT NO:	196-318.AW00

CITY GATE WEST
PRELIMINARY ENGINEERING

DRAWING NO.: **CV102**
SHEET 3 OF 8

P:\2018\196-318\~CADD\Dwg\ARCH-ENGINEER\ENGINEERING\196318-ARCH-PRELIM ENGINEERING.dwg[PRINT] 2/27/2020 - mmui - LP: 2/27/2020 10:05 AM

REVISION RECORD

NO	DATE	DESCRIPTION

SUBMITTAL RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200 · Naperville, IL 60563
Ph: 630.963.6026 · 877.963.6026 · Fax: 630.963.6027
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INTER-CONTINENTAL EQUITIES, LLC
2221 CAMDEN COURT, SUITE 200
OAK BROOK, ILLINOIS
TEL. (630) 560-8018

DRAWN BY: SRH	CHECKED BY: DRM	APPROVED BY: LHW
DATE: 02/27/2020	DWG SCALE: 1"=60'	PROJECT NO: 195-318.AW00

CITY GATE WEST
PRELIMINARY ENGINEERING

DRAWING NO.: **CV103**
SHEET 4 OF 8

NORTH

BASIS OF BEARING:
ILLINOIS STATE PLANE – EAST ZONE

SITE DATA

(FOR INFORMATIONAL PURPOSES ONLY)

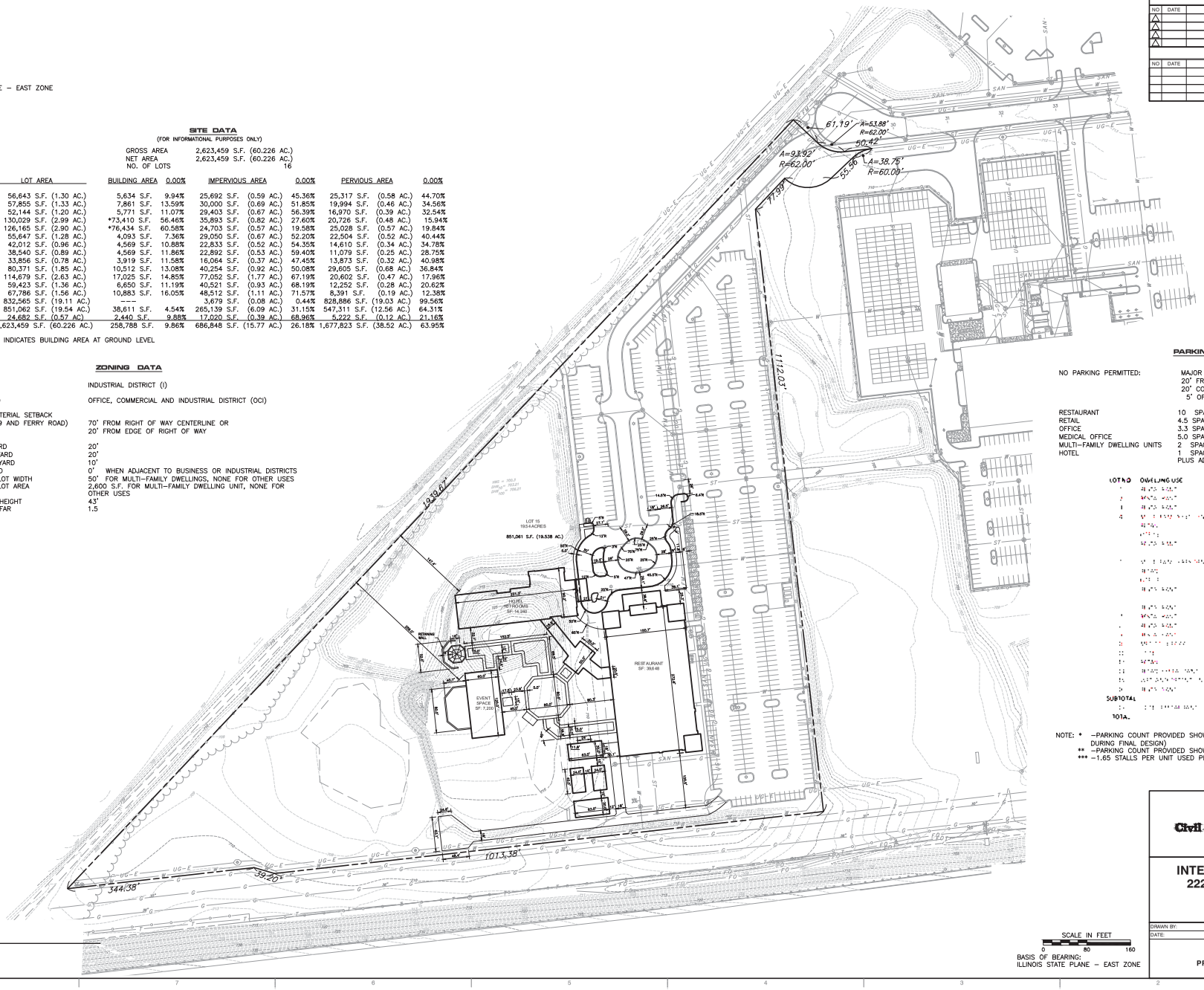
GROSS AREA	2,623,459 S.F. (60.226 AC.)
NET AREA	2,623,459 S.F. (60.226 AC.)
NO. OF LOTS	16

LOT NO.	LOT AREA	BUILDING AREA	0.00%	IMPERVIOUS AREA	0.00%	PERVIOUS AREA	0.00%
1	56,643 S.F. (1.30 AC.)	5,634 S.F.	9.94%	25,692 S.F. (0.59 AC.)	45.36%	25,317 S.F. (0.58 AC.)	44.70%
2	57,855 S.F. (1.33 AC.)	7,861 S.F.	13.59%	30,000 S.F. (0.69 AC.)	51.85%	19,994 S.F. (0.46 AC.)	34.56%
3	52,144 S.F. (1.20 AC.)	5,771 S.F.	11.07%	29,403 S.F. (0.67 AC.)	56.39%	16,970 S.F. (0.39 AC.)	32.54%
4	130,029 S.F. (2.99 AC.)	*73,410 S.F.	56.46%	35,893 S.F. (0.82 AC.)	27.60%	20,726 S.F. (0.48 AC.)	15.94%
5	126,165 S.F. (2.90 AC.)	*76,434 S.F.	60.58%	24,703 S.F. (0.57 AC.)	19.58%	25,028 S.F. (0.57 AC.)	19.84%
6	55,647 S.F. (1.28 AC.)	4,093 S.F.	7.36%	29,050 S.F. (0.67 AC.)	52.20%	22,504 S.F. (0.52 AC.)	40.44%
7	42,012 S.F. (0.96 AC.)	4,569 S.F.	10.88%	22,833 S.F. (0.52 AC.)	54.35%	14,610 S.F. (0.34 AC.)	34.78%
8	38,540 S.F. (0.89 AC.)	4,569 S.F.	11.86%	22,892 S.F. (0.53 AC.)	59.40%	11,079 S.F. (0.25 AC.)	28.75%
9	33,856 S.F. (0.78 AC.)	3,919 S.F.	11.58%	16,064 S.F. (0.37 AC.)	47.45%	13,873 S.F. (0.32 AC.)	40.98%
10	80,371 S.F. (1.85 AC.)	10,512 S.F.	13.08%	40,254 S.F. (0.92 AC.)	50.08%	29,605 S.F. (0.68 AC.)	36.84%
11	114,679 S.F. (2.63 AC.)	17,025 S.F.	14.85%	77,052 S.F. (1.77 AC.)	67.19%	20,602 S.F. (0.47 AC.)	17.96%
12	59,423 S.F. (1.36 AC.)	6,650 S.F.	11.19%	40,521 S.F. (0.93 AC.)	68.19%	12,252 S.F. (0.28 AC.)	20.62%
13	67,786 S.F. (1.56 AC.)	10,883 S.F.	16.05%	48,512 S.F. (1.11 AC.)	71.57%	8,391 S.F. (0.19 AC.)	12.38%
14	832,565 S.F. (19.11 AC.)	---		3,679 S.F. (0.08 AC.)	0.44%	828,886 S.F. (19.03 AC.)	99.56%
15	851,062 S.F. (19.54 AC.)	38,611 S.F.	4.54%	265,139 S.F. (6.09 AC.)	31.15%	547,311 S.F. (12.56 AC.)	64.31%
16	24,682 S.F. (0.57 AC)	2,440 S.F.	9.88%	17,020 S.F. (0.39 AC.)	68.96%	5,222 S.F. (0.12 AC.)	21.16%
TOTAL	2,623,459 S.F. (60.226 AC.)	258,788 S.F.	9.86%	686,848 S.F. (15.77 AC.)	26.18%	1,677,823 S.F. (38.52 AC.)	63.95%

NOTE: * – INDICATES BUILDING AREA AT GROUND LEVEL

ZONING DATA

CURRENT	INDUSTRIAL DISTRICT (I)
PROPOSED	OFFICE, COMMERCIAL AND INDUSTRIAL DISTRICT (OCI)
MAJOR ARTERIAL SETBACK (ROUTE 59 AND FERRY ROAD)	70' FROM RIGHT OF WAY CENTERLINE OR 20' FROM EDGE OF RIGHT OF WAY
FRONT YARD	20'
CORNER YARD	20'
INTERIOR YARD	10'
REAR YARD	0' WHEN ADJACENT TO BUSINESS OR INDUSTRIAL DISTRICTS
MINIMUM LOT WIDTH	50' FOR MULTI–FAMILY DWELLINGS, NONE FOR OTHER USES
MINIMUM LOT AREA	2,600 S.F. FOR MULTI–FAMILY DWELLING UNIT, NONE FOR OTHER USES
MAXIMUM HEIGHT	43'
MAXIMUM FAR	1.5



PARKING DATA

NO PARKING PERMITTED: MAJOR ARTERIAL SETBACK (ROUTE 59 AND FERRY ROAD)
20' FRONT YARD
20' CORNER YARD
5' OF ANY OTHER PROPERTY LINE

RESTAURANT	10 SPACES / 1,000 S.F. OF GROSS FLOOR AREA
RETAIL	4.5 SPACES / 1,000 S.F. OF GROSS FLOOR AREA
OFFICE	3.3 SPACES / 1,000 S.F. OF GROSS FLOOR AREA
MEDICAL OFFICE	5.0 SPACES / 1,000 S.F. OF GROSS FLOOR AREA
MULTI–FAMILY DWELLING UNITS	2 SPACES PLUS 0.25 GUEST SPACES / UNIT***
HOTEL	1 SPACE / DWELLING UNIT PLUS 1 SPACE PER EACH EMPLOYEE PLUS ADDITIONAL SPACES FOR RETAIL–SERVICE–ENTERTAINMENT AREA AS APPLICABLE

LOT NO.	DWELLING USE	PARKING REQUIRED	PARKING PROVIDED
[illegible]	[illegible]	[illegible]	[illegible]
SUBTOTAL		1543 + 62[HC] = 1609	3615 + 68[HC] = 3683
TOTAL		2069 + 73[HC] = 2142	2215 + 83[HC] = 2299

NOTE: * –PARKING COUNT PROVIDED SHOWS INTERNAL PARKING (FINAL COUNT WILL BE ESTABLISHED DURING FINAL DESIGN)
** –PARKING COUNT PROVIDED SHOWS EXTERNAL PARKING
*** –1.65 STALLS PER UNIT USED PER KOLA PARKING STUDY

REFERENCE

1. NOTE 1
2. NOTE 2
3. NOTE 3

SCALE IN FEET
0 80 160

BASIS OF BEARING:
ILLINOIS STATE PLANE – EAST ZONE

REVISION RECORD

NO	DATE	DESCRIPTION
1		
2		
3		
4		

SUBMITTAL RECORD

NO	DATE	DESCRIPTION

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DRAWN BY:	SRH	CHECKED BY:	DRM	APPROVED BY:	LHW
DATE:	02/27/2020	DWG SCALE:	1"=80'	PROJECT NO.	196-318.AW00

CITY GATE WEST
PRELIMINARY ENGINEERING

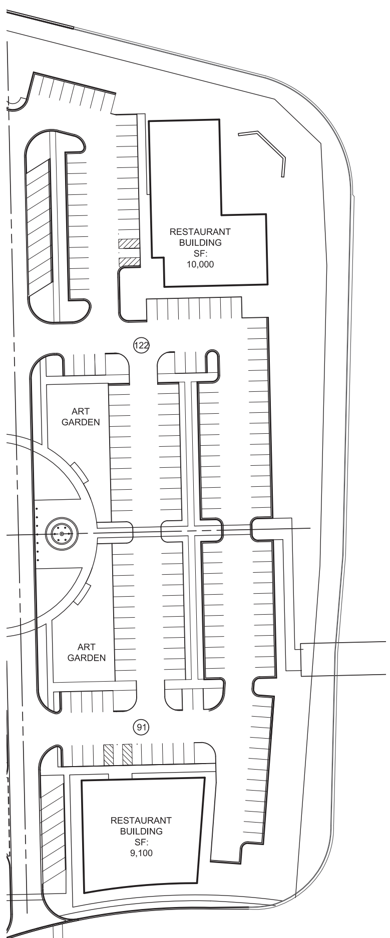
DRAWING NO.: **CV104**
SHEET 5 OF 8

P:\2019\196-318\--CIVIL\dwg\MXD\-PRELIMINARY ENGINEERING\196318-MXD-PRELIM ENG.dwg(PRINT) (02/27/2020 - mlaul) - LP: 2/27/2020 8:56 PM

NORTH

BASIS OF BEARING:
ILLINOIS STATE PLANE – EAST ZONE

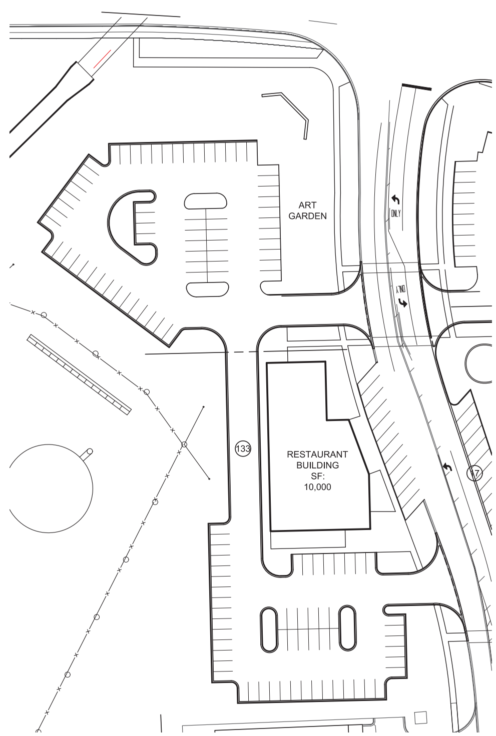
ALTERNATE A



ALTERNATE SITE LAYOUT OPTION A

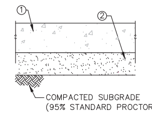
USAGE	BUILDING AREA	PARKING REQUIRED	PARKING PROVIDED
RESTAURANT	19,100 S.F.	191	213

ALTERNATE B



ALTERNATE SITE LAYOUT OPTION B

USAGE	BUILDING AREA	PARKING REQUIRED	PARKING PROVIDED
RESTAURANT	10,000 S.F.	100	133



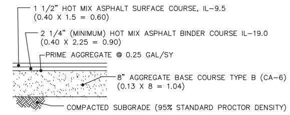
DRIVEWAY APRONS, SIDEWALK THROUGH DRIVEWAY APRONS, GAS PUMP CANOPY, DUMPSTER ENCLOSURE AND DUMPSTER ENCLOSURE PAD

8" PORTLAND CEMENT CONCRETE, CLASS PV
4" COMPACTED CA-6 AGGREGATE BASE COURSE

SIDEWALK

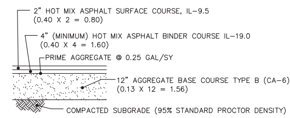
4" PORTLAND CEMENT CONCRETE, CLASS SI (PUBLIC)
5" PORTLAND CEMENT CONCRETE, CLASS SI (PRIVATE)
2" COMPACTED CA-6 AGGREGATE BASE COURSE (PUBLIC)
4" COMPACTED CA-6 AGGREGATE BASE COURSE (PRIVATE)

CONCRETE PAVEMENT
(NTS)



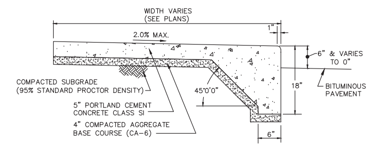
ASPHALT PAVEMENT SECTION
(CULVERS AND CIRCLE K PARKING LOT)

STRUCTURAL NUMBER = 0.6 + 0.9 + 1.04 = 2.54
(NTS)

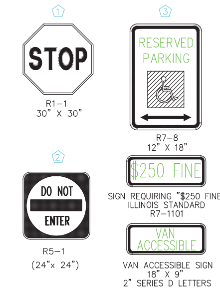


HEAVY DUTY ASPHALT PAVEMENT SECTION
(CULVERS AND CIRCLE K ACCESS ROAD)

STRUCTURAL NUMBER = 0.8 + 1.60 + 1.56 = 3.96
(NTS)



MONOLITHIC SIDEWALK
(NTS)



REVISION RECORD

NO	DATE	DESCRIPTION

SUBMITTAL RECORD

NO	DATE	DESCRIPTION

SCALE IN FEET
0 50 100

BASIS OF BEARING:
ILLINOIS STATE PLANE – EAST ZONE

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DRAWN BY: SRH	CHECKED BY: DRM	APPROVED BY: LHW
DATE: 02/27/2020	DWG SCALE: 1"=50'	PROJECT NO: 195-318.AW00

CITY GATE WEST
PRELIMINARY ENGINEERING

DRAWING NO.: CV105
SHEET 6 OF 8

P:\2019\195-318\-CADD\Dwg\AW00-PRELIMINARY ENGINEERING\195318-AW00-PRELIM ENG.dwg[SHT06] LS(2/27/2020 - mikie) - LP: 2/27/2020 3:06 PM

CMAP 2050 Projections Letter

Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

October 7, 2019

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

Subject: IL 59 @ Ferry Road
IDOT

Dear Mr. Millan:

In response to a request made on your behalf and dated October 1, 2019, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current Volumes	Year 2050 ADT
IL 59 south of Ferry Rd	37,100	44,600
Ferry Rd east of IL 59	15,100	18,200
Ferry Rd westof IL 59	10,500	17,200

Traffic projections are developed using existing ADT data provided in the request letter and the results from the March 2019 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.

Sincerely,

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

cc: Quigley (IDOT)
S:\AdminGroups\ResearchAnalysis\2019_ForecastsTraffic\Naperville\du-31-19\du-31-19.docx

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	168	814	118	71	145	205	7	141	1244	192	386	1262
Future Volume (vph)	168	814	118	71	145	205	7	141	1244	192	386	1262
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	11	12	12	11	12	12	12	11	12	12	11	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	335		200	335		455		650		220	575	
Storage Lanes	1		1	1		1		1		0	1	
Taper Length (ft)	175			175				125			180	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1662	3762	1538	1616	3654	1583	0	1552	3486	1583	1728	3455
Flt Permitted	0.642			0.122				0.139			0.076	
Satd. Flow (perm)	1123	3762	1538	207	3654	1583	0	227	3486	1583	138	3455
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)			82			79				78		
Link Speed (mph)		45			45				40			45
Link Distance (ft)		834			848				778			1388
Travel Time (s)		12.6			12.8				13.3			21.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	1%	5%	8%	4%	2%	0%	13%	9%	2%	1%	10%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	170	822	119	72	146	207	0	149	1257	194	390	1275
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	custom	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	5!	3	8	1		5	2	3	1	6
Permitted Phases	4		4	8		8	5!	2		2	6	
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.0	39.0	8.0	8.0	37.0	8.0	8.0	8.0	49.5	8.0	8.0	51.5
Total Split (s)	13.0	39.0	15.0	13.0	39.0	36.0	15.0	15.0	52.0	13.0	36.0	73.0
Total Split (%)	9.3%	27.9%	10.7%	9.3%	27.9%	25.7%	10.7%	10.7%	37.1%	9.3%	25.7%	52.1%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5		3.5	6.0	3.5	3.5	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	45.5	33.5	50.2	43.8	32.7	68.3		62.4	49.2	63.8	84.8	68.1
Actuated g/C Ratio	0.32	0.24	0.36	0.31	0.23	0.49		0.45	0.35	0.46	0.61	0.49

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	54
Future Volume (vph)	54
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	190
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1455
Flt Permitted	
Satd. Flow (perm)	1455
Right Turn on Red	Yes
Satd. Flow (RTOR)	51
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.99
Growth Factor	100%
Heavy Vehicles (%)	11%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	55
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	13.0
Total Split (%)	9.3%
Yellow Time (s)	3.5
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	83.6
Actuated g/C Ratio	0.60

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.42	0.91	0.20	0.48	0.17	0.25		0.74	1.03	0.25	0.93	0.76
Control Delay	38.0	67.1	11.9	42.2	43.4	12.8		45.3	77.0	15.2	69.5	33.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	38.0	67.1	11.9	42.2	43.4	12.8		45.3	77.0	15.2	69.5	33.1
LOS	D	E	B	D	D	B		D	E	B	E	C
Approach Delay		56.7			28.3				66.6			40.4
Approach LOS		E			C				E			D
Queue Length 50th (ft)	112	388	22	45	56	60		57	~680	63	291	494
Queue Length 95th (ft)	176	#508	67	83	87	111		#153	#821	119	#469	587
Internal Link Dist (ft)		754			768				698			1308
Turn Bay Length (ft)	335		200	335		455		650		220	575	
Base Capacity (vph)	401	900	612	161	861	843		211	1225	773	452	1681
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.42	0.91	0.19	0.45	0.17	0.25		0.71	1.03	0.25	0.86	0.76

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: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 51.7 Intersection LOS: D
Intersection Capacity Utilization 96.0% ICU Level of Service F
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.

! Phase conflict between lane groups.

Splits and Phases: 1: Rt 59 & Ferry Road

Lane Group	SBR
v/c Ratio	0.06
Control Delay	3.7
Queue Delay	0.0
Total Delay	3.7
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	1
Queue Length 95th (ft)	20
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	889
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.06

Intersection Summary

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1092	41	28	312	10	8
Future Vol, veh/h	1092	41	28	312	10	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	142	-	150	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	3	2	0	10	0	11
Mvmt Flow	1227	46	31	351	11	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1273	0	1488	637
Stage 1	-	-	-	-	1250	-
Stage 2	-	-	-	-	238	-
Critical Hdwy	-	-	4.1	-	6.8	7.12
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.41
Pot Cap-1 Maneuver	-	-	552	-	117	399
Stage 1	-	-	-	-	237	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	552	-	110	399
Mov Cap-2 Maneuver	-	-	-	-	189	-
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	785	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	20.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	189	399	-	-	552	-
HCM Lane V/C Ratio	0.059	0.023	-	-	0.057	-
HCM Control Delay (s)	25.2	14.2	-	-	11.9	-
HCM Lane LOS	D	B	-	-	B	-
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	5	13	0	24	39
Future Vol, veh/h	14	5	13	0	24	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	172	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	17	0	0	4	2
Mvmt Flow	16	6	15	0	28	45

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	15	0	-	0	53	15
Stage 1	-	-	-	-	15	-
Stage 2	-	-	-	-	38	-
Critical Hdwy	4.1	-	-	-	6.44	6.22
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.2	-	-	-	3.536	3.318
Pot Cap-1 Maneuver	1616	-	-	-	950	1065
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	979	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1616	-	-	-	941	1065
Mov Cap-2 Maneuver	-	-	-	-	941	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	979	-

Approach	EB	WB	SB
HCM Control Delay, s	5.3	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1616	-	-	-	941	1065
HCM Lane V/C Ratio	0.01	-	-	-	0.03	0.043
HCM Control Delay (s)	7.2	-	-	-	8.9	8.5
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	29	0	1584	1445	13
Future Vol, veh/h	0	29	0	1584	1445	13
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	-	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	0	2	7	10	0
Mvmt Flow	0	31	0	1667	1521	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	761	-	0	-	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	302	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	302	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	302	-	-
HCM Lane V/C Ratio	-	0.101	-	-
HCM Control Delay (s)	-	18.3	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	80	222	107	341	752	332	24	175	1093	76	260	1441
Future Volume (vph)	80	222	107	341	752	332	24	175	1093	76	260	1441
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	11	12	12	11	12	12	12	11	12	12	11	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	335		200	335		455		650		220	575	
Storage Lanes	1		1	1		1		1		0	1	
Taper Length (ft)	175			175				125			180	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1745	3762	1553	1745	3762	1599	0	1630	3585	1524	1711	3619
Flt Permitted	0.242			0.404				0.065			0.104	
Satd. Flow (perm)	444	3762	1553	742	3762	1599	0	112	3585	1524	187	3619
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)			78			74				81		
Link Speed (mph)		45			45				40			45
Link Distance (ft)		834			848				778			1388
Travel Time (s)		12.6			12.8				13.3			21.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	4%	0%	1%	1%	0%	8%	6%	6%	2%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	236	114	363	800	353	0	212	1163	81	277	1533
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	custom	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	5!	3	8	1		5	2	3	1	6
Permitted Phases	4		4	8		8	5!	2		2	6	
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.0	22.0	8.0	8.0	37.0	8.0	8.0	8.0	49.5	8.0	8.0	51.5
Total Split (s)	13.0	22.0	22.0	30.0	39.0	22.0	22.0	22.0	66.0	30.0	22.0	66.0
Total Split (%)	9.3%	15.7%	15.7%	21.4%	27.9%	15.7%	15.7%	15.7%	47.1%	21.4%	15.7%	47.1%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5		3.5	6.0	3.5	3.5	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	27.9	16.5	39.2	48.0	33.2	56.9		80.4	61.2	92.7	82.6	62.3
Actuated g/C Ratio	0.20	0.12	0.28	0.34	0.24	0.41		0.57	0.44	0.66	0.59	0.44

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	123
Future Volume (vph)	123
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	190
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1568
Flt Permitted	
Satd. Flow (perm)	1568
Right Turn on Red	Yes
Satd. Flow (RTOR)	78
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.94
Growth Factor	100%
Heavy Vehicles (%)	3%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	131
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	13.0
Total Split (%)	9.3%
Yellow Time (s)	3.5
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	77.2
Actuated g/C Ratio	0.55

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.50	0.53	0.23	0.83	0.90	0.51		0.87	0.74	0.08	0.91	0.95
Control Delay	44.0	63.1	15.1	55.8	65.7	26.9		68.9	36.7	1.9	64.3	51.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	44.0	63.1	15.1	55.8	65.7	26.9		68.9	36.7	1.9	64.3	51.4
LOS	D	E	B	E	E	C		E	D	A	E	D
Approach Delay		46.8			54.3				39.5			50.3
Approach LOS		D			D				D			D
Queue Length 50th (ft)	53	108	24	272	374	186		140	466	0	168	718
Queue Length 95th (ft)	95	154	74	#411	#485	283		#269	553	18	#335	#893
Internal Link Dist (ft)		754			768				698			1308
Turn Bay Length (ft)	335		200	335		455		650		220	575	
Base Capacity (vph)	179	444	510	443	890	702		266	1567	1047	311	1611
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.47	0.53	0.22	0.82	0.90	0.50		0.80	0.74	0.08	0.89	0.95

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: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 48.2 Intersection LOS: D
Intersection Capacity Utilization 91.1% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 1: Rt 59 & Ferry Road

Lane Group	SBR
v/c Ratio	0.15
Control Delay	7.2
Queue Delay	0.0
Total Delay	7.2
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	22
Queue Length 95th (ft)	55
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	906
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.14

Intersection Summary

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	377	23	72	978	26	32
Future Vol, veh/h	377	23	72	978	26	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	142	-	150	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	3	0	3	3	0	0
Mvmt Flow	424	26	81	1099	29	36

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	450	0	1149	225
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	712	-
Critical Hdwy	-	-	4.16	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.23	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1100	-	195	784
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	453	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1100	-	181	784
Mov Cap-2 Maneuver	-	-	-	-	283	-
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	453	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	283	784	-	-	1100	-
HCM Lane V/C Ratio	0.103	0.046	-	-	0.074	-
HCM Control Delay (s)	19.2	9.8	-	-	8.5	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	64	58	66	0	4	96
Future Vol, veh/h	64	58	66	0	4	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	172	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	2	0	0	0	2
Mvmt Flow	77	70	80	0	5	116

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	80	0	-	0	304	80
Stage 1	-	-	-	-	80	-
Stage 2	-	-	-	-	224	-
Critical Hdwy	4.1	-	-	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.318
Pot Cap-1 Maneuver	1531	-	-	-	692	980
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	818	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1531	-	-	-	657	980
Mov Cap-2 Maneuver	-	-	-	-	657	-
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	818	-

Approach	EB	WB	SB
HCM Control Delay, s	3.9	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1531	-	-	-	657	980
HCM Lane V/C Ratio	0.05	-	-	-	0.007	0.118
HCM Control Delay (s)	7.5	-	-	-	10.5	9.2
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0	0.4

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	62	0	1368	1857	56
Future Vol, veh/h	0	62	0	1368	1857	56
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	-	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	2	2	6	4	0
Mvmt Flow	0	65	0	1440	1955	59

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	978	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	215	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	215	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.9	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	215	-	-
HCM Lane V/C Ratio	-	0.304	-	-
HCM Control Delay (s)	-	28.9	-	-
HCM Lane LOS	-	D	-	-
HCM 95th %tile Q(veh)	-	1.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	53	127	70	79	138	189	20	123	1000	77	164	1053
Future Volume (vph)	53	127	70	79	138	189	20	123	1000	77	164	1053
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	11	12	12	11	12	12	12	11	12	12	11	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	335		200	335		455		650		220	575	
Storage Lanes	1		1	1		1		1		0	1	
Taper Length (ft)	175			175				125			180	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1646	3800	1524	1711	3762	1599	0	1687	3654	1553	1745	3689
Flt Permitted	0.663			0.534				0.217			0.230	
Satd. Flow (perm)	1149	3800	1524	962	3762	1599	0	385	3654	1553	422	3689
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)			78			163				79		
Link Speed (mph)		45			45				40			45
Link Distance (ft)		834			848				778			1388
Travel Time (s)		12.6			12.8				13.3			21.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.99	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	0%	6%	2%	1%	1%	0%	4%	4%	4%	0%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	130	71	81	141	193	0	146	1020	79	167	1074
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	custom	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	5!	3	8	1		5	2	3	1	6
Permitted Phases	4		4	8		8	5!	2		2	6	
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.0	25.0	8.0	8.0	28.0	8.0	8.0	8.0	49.5	8.0	8.0	51.5
Total Split (s)	15.0	25.0	22.0	18.0	28.0	26.0	22.0	22.0	71.0	18.0	26.0	75.0
Total Split (%)	10.7%	17.9%	15.7%	12.9%	20.0%	18.6%	15.7%	15.7%	50.7%	12.9%	18.6%	53.6%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5		3.5	6.0	3.5	3.5	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	22.6	11.1	26.1	26.8	14.8	30.4		100.9	89.5	106.3	102.1	90.1
Actuated g/C Ratio	0.16	0.08	0.19	0.19	0.11	0.22		0.72	0.64	0.76	0.73	0.64

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	49
Future Volume (vph)	49
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	190
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Right Turn on Red	Yes
Satd. Flow (RTOR)	51
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Growth Factor	100%
Heavy Vehicles (%)	2%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	50
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	15.0
Total Split (%)	10.7%
Yellow Time (s)	3.5
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	105.1
Actuated g/C Ratio	0.75

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.25	0.43	0.20	0.34	0.35	0.41		0.40	0.44	0.07	0.42	0.45
Control Delay	47.5	65.5	9.1	49.5	61.0	12.3		8.9	14.2	1.3	8.7	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	65.5	9.1	49.5	61.0	12.3		8.9	14.2	1.3	8.7	14.1
LOS	D	E	A	D	E	B		A	B	A	A	B
Approach Delay		46.0			36.1				12.8			12.9
Approach LOS		D			D				B			B
Queue Length 50th (ft)	41	60	0	62	64	22		32	230	0	38	244
Queue Length 95th (ft)	77	94	36	106	98	87		63	337	15	71	350
Internal Link Dist (ft)		754			768				698			1308
Turn Bay Length (ft)	335		200	335		455		650		220	575	
Base Capacity (vph)	244	515	445	269	591	607		460	2335	1236	529	2373
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.22	0.25	0.16	0.30	0.24	0.32		0.32	0.44	0.06	0.32	0.45

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: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 18.5		Intersection LOS: B	
Intersection Capacity Utilization 63.3%		ICU Level of Service B	
Analysis Period (min) 15			

! Phase conflict between lane groups.

Splits and Phases: 1: Rt 59 & Ferry Road

Lane Group	SBR
v/c Ratio	0.04
Control Delay	1.6
Queue Delay	0.0
Total Delay	1.6
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	12
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	1227
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.04

Intersection Summary

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	227	26	75	235	19	23
Future Vol, veh/h	227	26	75	235	19	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	142	-	150	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	0	0	3	0	0
Mvmt Flow	249	29	82	258	21	25

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	278	0	557	139
Stage 1	-	-	-	-	264	-
Stage 2	-	-	-	-	293	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1296	-	465	890
Stage 1	-	-	-	-	762	-
Stage 2	-	-	-	-	737	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1296	-	436	890
Mov Cap-2 Maneuver	-	-	-	-	510	-
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	737	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	510	890	-	-	1296	-
HCM Lane V/C Ratio	0.041	0.028	-	-	0.064	-
HCM Control Delay (s)	12.4	9.2	-	-	8	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	51	55	37	3	3	109
Future Vol, veh/h	51	55	37	3	3	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	172	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	0	3	0	0	0
Mvmt Flow	59	64	43	3	3	127

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	227	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	182	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1562	-	-	-	766	1031
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	854	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1562	-	-	-	737	1031
Mov Cap-2 Maneuver	-	-	-	-	737	-
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	854	-

Approach	EB	WB	SB
HCM Control Delay, s	3.6	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1562	-	-	-	737	1031
HCM Lane V/C Ratio	0.038	-	-	-	0.005	0.123
HCM Control Delay (s)	7.4	-	-	-	9.9	9
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0	0.4

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	58	0	1220	1182	40
Future Vol, veh/h	0	58	0	1220	1182	40
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	-	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	0	2	4	3	0
Mvmt Flow	0	61	0	1284	1244	42

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	622	-	0	-	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	372	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	372	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	372	-	-
HCM Lane V/C Ratio	-	0.164	-	-
HCM Control Delay (s)	-	16.6	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	217	861	123	108	158	258	7	160	1328	200	467	1467
Future Volume (vph)	217	861	123	108	158	258	7	160	1328	200	467	1467
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	11	12	12	11	12	12	12	11	12	12	11	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	335		200	335		455		650		220	575	
Storage Lanes	1		1	1		1		1		0	1	
Taper Length (ft)	175			175				125			180	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1662	3762	1538	1616	3654	1583	0	1551	3486	1583	1728	3455
Flt Permitted	0.645			0.121				0.087			0.081	
Satd. Flow (perm)	1128	3762	1538	206	3654	1583	0	142	3486	1583	147	3455
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)			78			60				78		
Link Speed (mph)		45			45				40			45
Link Distance (ft)		834			848				778			1388
Travel Time (s)		12.6			12.8				13.3			21.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	1%	5%	8%	4%	2%	0%	13%	9%	2%	1%	10%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	219	870	124	109	160	261	0	169	1341	202	472	1482
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	custom	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	5!	3	8	1		5	2	3	1	6
Permitted Phases	4		4	8		8	5!	2		2	6	
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.0	39.0	8.0	8.0	37.0	8.0	8.0	8.0	49.5	8.0	8.0	51.5
Total Split (s)	13.0	39.0	15.0	13.0	39.0	36.0	15.0	15.0	52.0	13.0	36.0	73.0
Total Split (%)	9.3%	27.9%	10.7%	9.3%	27.9%	25.7%	10.7%	10.7%	37.1%	9.3%	25.7%	52.1%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5		3.5	6.0	3.5	3.5	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	45.3	33.3	50.8	44.7	33.0	71.5		60.0	46.0	61.2	84.5	67.0
Actuated g/C Ratio	0.32	0.24	0.36	0.32	0.24	0.51		0.43	0.33	0.44	0.60	0.48

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	190
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1455
Flt Permitted	
Satd. Flow (perm)	1455
Right Turn on Red	Yes
Satd. Flow (RTOR)	54
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.99
Growth Factor	100%
Heavy Vehicles (%)	11%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	78
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	13.0
Total Split (%)	9.3%
Yellow Time (s)	3.5
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	82.5
Actuated g/C Ratio	0.59

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.55	0.97	0.20	0.69	0.19	0.31		0.96	1.17	0.27	1.04	0.90
Control Delay	42.0	77.2	13.3	55.5	43.5	16.2		97.0	128.3	16.0	93.0	41.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	42.0	77.2	13.3	55.5	43.5	16.2		97.0	128.3	16.0	93.0	41.8
LOS	D	E	B	E	D	B		F	F	B	F	D
Approach Delay		64.3			32.5				111.9			52.3
Approach LOS		E			C				F			D
Queue Length 50th (ft)	150	417	28	69	61	102		108	~764	68	~409	635
Queue Length 95th (ft)	224	#557	74	#129	94	163		#258	#903	126	#631	749
Internal Link Dist (ft)		754			768				698			1308
Turn Bay Length (ft)	335		200	335		455		650		220	575	
Base Capacity (vph)	400	893	607	161	861	837		176	1145	739	455	1653
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.55	0.97	0.20	0.68	0.19	0.31		0.96	1.17	0.27	1.04	0.90

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: 1.17
Intersection Signal Delay: 71.6 Intersection LOS: E
Intersection Capacity Utilization 106.0% ICU Level of Service G
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.
! Phase conflict between lane groups.

Splits and Phases: 1: Rt 59 & Ferry Road

Lane Group	SBR
v/c Ratio	0.09
Control Delay	5.0
Queue Delay	0.0
Total Delay	5.0
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	9
Queue Length 95th (ft)	32
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	879
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.09

Intersection Summary

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1184	44	43	352	12	17
Future Vol, veh/h	1184	44	43	352	12	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	-	-	142	-	150	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	3	2	0	10	0	11
Mvmt Flow	1330	49	48	396	13	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1379	0	1649	690
Stage 1	-	-	-	-	1355	-
Stage 2	-	-	-	-	294	-
Critical Hdwy	-	-	4.1	-	6.8	7.12
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.41
Pot Cap-1 Maneuver	-	-	504	-	92	367
Stage 1	-	-	-	-	209	-
Stage 2	-	-	-	-	736	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	504	-	83	367
Mov Cap-2 Maneuver	-	-	-	-	170	-
Stage 1	-	-	-	-	209	-
Stage 2	-	-	-	-	666	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	20.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	170	367	-	-	504	-
HCM Lane V/C Ratio	0.079	0.052	-	-	0.096	-
HCM Control Delay (s)	28	15.3	-	-	12.9	-
HCM Lane LOS	D	C	-	-	B	-
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0.3	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	14	23	0	24	57
Future Vol, veh/h	25	14	23	0	24	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	172	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	17	0	0	4	2
Mvmt Flow	29	16	27	0	28	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	27	0	-	0	101	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	74	-
Critical Hdwy	4.1	-	-	-	6.44	6.22
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.2	-	-	-	3.536	3.318
Pot Cap-1 Maneuver	1600	-	-	-	893	1048
Stage 1	-	-	-	-	990	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1600	-	-	-	877	1048
Mov Cap-2 Maneuver	-	-	-	-	877	-
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	944	-

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1600	-	-	-	877	1048
HCM Lane V/C Ratio	0.018	-	-	-	0.032	0.063
HCM Control Delay (s)	7.3	-	-	-	9.2	8.7
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	0.2

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	38	0	1695	1682	23
Future Vol, veh/h	0	38	0	1695	1682	23
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	-	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	0	2	7	10	0
Mvmt Flow	0	40	0	1784	1771	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	886	-	0	-	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	250	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	250	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	250	-	-
HCM Lane V/C Ratio	-	0.16	-	-
HCM Control Delay (s)	-	22.1	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	435	26	87	1073	28	44
Future Vol, veh/h	435	26	87	1073	28	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	142	-	150	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	3	0	3	3	0	0
Mvmt Flow	489	29	98	1206	31	49

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	518	0	1303	259
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	799	-
Critical Hdwy	-	-	4.16	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.23	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1037	-	155	746
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	408	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1037	-	140	746
Mov Cap-2 Maneuver	-	-	-	-	265	-
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	369	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	265	746	-	-	1037	-
HCM Lane V/C Ratio	0.119	0.066	-	-	0.094	-
HCM Control Delay (s)	20.4	10.2	-	-	8.8	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0.3	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	78	70	66	0	4	114
Future Vol, veh/h	78	70	66	0	4	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	172	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	2	0	0	0	2
Mvmt Flow	94	84	80	0	5	137

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	80	0	-	0	352	80
Stage 1	-	-	-	-	80	-
Stage 2	-	-	-	-	272	-
Critical Hdwy	4.1	-	-	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.318
Pot Cap-1 Maneuver	1531	-	-	-	650	980
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	778	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1531	-	-	-	610	980
Mov Cap-2 Maneuver	-	-	-	-	610	-
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	778	-

Approach	EB	WB	SB
HCM Control Delay, s	4	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1531	-	-	-	610	980
HCM Lane V/C Ratio	0.061	-	-	-	0.008	0.14
HCM Control Delay (s)	7.5	-	-	-	10.9	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0	0.5

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	74	0	1543	2070	66
Future Vol, veh/h	0	74	0	1543	2070	66
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	-	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	2	2	6	4	0
Mvmt Flow	0	78	0	1624	2179	69

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1090	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	181	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	181	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	39.1	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	181	-	-
HCM Lane V/C Ratio	-	0.43	-	-
HCM Control Delay (s)	-	39.1	-	-
HCM Lane LOS	-	E	-	-
HCM 95th %tile Q(veh)	-	2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	75	142	73	95	152	222	20	148	1040	80	171	1108
Future Volume (vph)	75	142	73	95	152	222	20	148	1040	80	171	1108
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	11	12	12	11	12	12	12	11	12	12	11	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	335		200	335		455		650		220	575	
Storage Lanes	1		1	1		1		1		0	1	
Taper Length (ft)	175			175				125			180	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1646	3800	1524	1711	3762	1599	0	1685	3654	1553	1745	3689
Flt Permitted	0.654			0.576				0.195			0.215	
Satd. Flow (perm)	1133	3800	1524	1037	3762	1599	0	346	3654	1553	395	3689
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)			78			140				82		
Link Speed (mph)		45			45				40			45
Link Distance (ft)		834			848				778			1388
Travel Time (s)		12.6			12.8				13.3			21.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.99	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	0%	6%	2%	1%	1%	0%	4%	4%	4%	0%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	145	74	97	155	227	0	171	1061	82	174	1131
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	custom	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	5!	3	8	1		5	2	3	1	6
Permitted Phases	4		4	8		8	5!	2		2	6	
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.0	25.0	8.0	8.0	28.0	8.0	8.0	8.0	49.5	8.0	8.0	51.5
Total Split (s)	15.0	25.0	22.0	18.0	28.0	26.0	22.0	22.0	71.0	18.0	26.0	75.0
Total Split (%)	10.7%	17.9%	15.7%	12.9%	20.0%	18.6%	15.7%	15.7%	50.7%	12.9%	18.6%	53.6%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5		3.5	6.0	3.5	3.5	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	24.2	11.7	27.5	27.5	13.3	29.5		99.8	87.5	105.2	100.5	87.8
Actuated g/C Ratio	0.17	0.08	0.20	0.20	0.10	0.21		0.71	0.62	0.75	0.72	0.63

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	71
Future Volume (vph)	71
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	190
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Right Turn on Red	Yes
Satd. Flow (RTOR)	70
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Growth Factor	100%
Heavy Vehicles (%)	2%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	72
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	15.0
Total Split (%)	10.7%
Yellow Time (s)	3.5
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	103.9
Actuated g/C Ratio	0.74

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.33	0.46	0.20	0.37	0.43	0.51		0.50	0.46	0.07	0.46	0.49
Control Delay	48.5	65.5	9.4	49.4	63.0	21.7		11.3	15.7	1.4	9.8	15.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	48.5	65.5	9.4	49.4	63.0	21.7		11.3	15.7	1.4	9.8	15.8
LOS	D	E	A	D	E	C		B	B	A	A	B
Approach Delay		47.1			40.7				14.2			14.3
Approach LOS		D			D				B			B
Queue Length 50th (ft)	58	67	0	74	71	68		41	253	0	41	276
Queue Length 95th (ft)	101	102	38	122	105	140		74	372	16	75	391
Internal Link Dist (ft)		754			768				698			1308
Turn Bay Length (ft)	335		200	335		455		650		220	575	
Base Capacity (vph)	249	515	451	285	591	575		433	2283	1216	509	2314
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.31	0.28	0.16	0.34	0.26	0.39		0.39	0.46	0.07	0.34	0.49

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: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 20.7 Intersection LOS: C
Intersection Capacity Utilization 67.0% ICU Level of Service C
Analysis Period (min) 15
! Phase conflict between lane groups.

Splits and Phases: 1: Rt 59 & Ferry Road

Lane Group	SBR
v/c Ratio	0.06
Control Delay	1.6
Queue Delay	0.0
Total Delay	1.6
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	16
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	1208
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.06

Intersection Summary

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	252	30	99	272	23	38
Future Vol, veh/h	252	30	99	272	23	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	142	-	150	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	0	0	3	0	0
Mvmt Flow	277	33	109	299	25	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	310	0	662	155
Stage 1	-	-	-	-	294	-
Stage 2	-	-	-	-	368	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1262	-	399	869
Stage 1	-	-	-	-	736	-
Stage 2	-	-	-	-	676	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1262	-	365	869
Mov Cap-2 Maneuver	-	-	-	-	470	-
Stage 1	-	-	-	-	736	-
Stage 2	-	-	-	-	618	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	470	869	-	-	1262	-
HCM Lane V/C Ratio	0.054	0.048	-	-	0.086	-
HCM Control Delay (s)	13.1	9.4	-	-	8.1	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0.3	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	70	53	3	3	137
Future Vol, veh/h	70	70	53	3	3	137
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	172	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	0	3	0	0	0
Mvmt Flow	81	81	62	3	3	159

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	65	0	-	0	307	64
Stage 1	-	-	-	-	64	-
Stage 2	-	-	-	-	243	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1537	-	-	-	689	1006
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	802	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1537	-	-	-	652	1006
Mov Cap-2 Maneuver	-	-	-	-	652	-
Stage 1	-	-	-	-	913	-
Stage 2	-	-	-	-	802	-

Approach	EB	WB	SB
HCM Control Delay, s	3.7	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1537	-	-	-	652	1006
HCM Lane V/C Ratio	0.053	-	-	-	0.005	0.158
HCM Control Delay (s)	7.5	-	-	-	10.6	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0	0.6

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	73	0	1288	1240	56
Future Vol, veh/h	0	73	0	1288	1240	56
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	-	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	0	2	4	3	0
Mvmt Flow	0	77	0	1356	1305	59

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	653	-	0	-	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	355	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	355	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	355	-	-
HCM Lane V/C Ratio	-	0.216	-	-
HCM Control Delay (s)	-	17.9	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.8	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	353	917	164	138	190	258	16	362	1302	200	467	1563
Future Volume (vph)	353	917	164	138	190	258	16	362	1302	200	467	1563
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	11	12	12	11	12	12	12	11	12	12	11	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	335		0	335		455		650		220	575	
Storage Lanes	1		1	1		1		1		0	1	
Taper Length (ft)	175			175				125			180	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1662	3762	1538	1616	3654	1583	0	1552	3486	1583	1728	3455
Flt Permitted	0.624			0.121				0.087			0.081	
Satd. Flow (perm)	1092	3762	1538	206	3654	1583	0	142	3486	1583	147	3455
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)			78			51				78		
Link Speed (mph)		45			45				40			45
Link Distance (ft)		834			1546				778			1388
Travel Time (s)		12.6			23.4				13.3			21.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	1%	5%	8%	4%	2%	0%	13%	9%	2%	1%	10%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	357	926	166	139	192	261	0	382	1315	202	472	1579
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	custom	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	5!	3	8	1		5	2	3	1	6
Permitted Phases	4		4	8		8	5!	2		2	6	
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.0	39.0	8.0	8.0	37.0	8.0	8.0	8.0	49.5	8.0	8.0	51.5
Total Split (s)	13.0	39.0	15.0	13.0	39.0	36.0	15.0	15.0	52.0	13.0	36.0	73.0
Total Split (%)	9.3%	27.9%	10.7%	9.3%	27.9%	25.7%	10.7%	10.7%	37.1%	9.3%	25.7%	52.1%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5		3.5	6.0	3.5	3.5	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	45.0	33.0	50.5	45.0	33.0	71.5		60.0	46.0	61.5	84.5	67.0
Actuated g/C Ratio	0.32	0.24	0.36	0.32	0.24	0.51		0.43	0.33	0.44	0.60	0.48

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	104
Future Volume (vph)	104
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	190
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1455
Flt Permitted	
Satd. Flow (perm)	1455
Right Turn on Red	Yes
Satd. Flow (RTOR)	68
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.99
Growth Factor	100%
Heavy Vehicles (%)	11%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	105
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	13.0
Total Split (%)	9.3%
Yellow Time (s)	3.5
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	82.5
Actuated g/C Ratio	0.59

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.92	1.05	0.27	0.86	0.22	0.31		2.17	1.15	0.27	1.04	0.96
Control Delay	58.4	82.7	8.3	90.3	39.8	14.0		568.5	119.6	16.0	93.0	49.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	58.4	82.7	8.3	90.3	39.8	14.0		568.5	119.6	16.0	93.0	49.1
LOS	E	F	A	F	D	B		F	F	B	F	D
Approach Delay		68.2			40.3				198.9			56.5
Approach LOS		E			D				F			E
Queue Length 50th (ft)	187	~481	22	108	63	77		~513	~738	68	~409	712
Queue Length 95th (ft)	#414	#606	31	#207	91	113		#722	#877	126	#631	#887
Internal Link Dist (ft)		754			1466				698			1308
Turn Bay Length (ft)	335			335		455		650		220	575	
Base Capacity (vph)	389	886	604	161	861	833		176	1145	739	455	1653
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.92	1.05	0.27	0.86	0.22	0.31		2.17	1.15	0.27	1.04	0.96

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: 2.17
Intersection Signal Delay: 102.1 Intersection LOS: F
Intersection Capacity Utilization 110.4% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 1: Rt 59 & Ferry Road

Lane Group	SBR
v/c Ratio	0.12
Control Delay	5.4
Queue Delay	0.0
Total Delay	5.4
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	14
Queue Length 95th (ft)	40
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	885
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.12

Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1166	104	309	347	54	268
Future Volume (vph)	1166	104	309	347	54	268
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	142		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			175		50	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.988					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3466	0	1805	3455	1805	1455
Flt Permitted			0.120		0.950	
Satd. Flow (perm)	3466	0	228	3455	1805	1455
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11					297
Link Speed (mph)	45			45	35	
Link Distance (ft)	663			834	346	
Travel Time (s)	10.0			12.6	6.7	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	2%	0%	10%	0%	11%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1427	0	347	390	61	301
Turn Type	NA		pm+pt	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases			6			
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	22.0		8.0	22.0	22.0	22.0
Total Split (s)	83.0		28.0	111.0	29.0	29.0
Total Split (%)	59.3%		20.0%	79.3%	20.7%	20.7%
Yellow Time (s)	4.0		3.5	4.0	4.0	4.0
All-Red Time (s)	2.0		0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		3.5	6.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Recall Mode	C-Min		None	C-Min	None	None
Act Effct Green (s)	89.9		118.4	115.9	12.1	12.1
Actuated g/C Ratio	0.64		0.85	0.83	0.09	0.09

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
v/c Ratio	0.64		0.78	0.14	0.39	0.76
Control Delay	18.4		26.5	1.9	66.9	19.7
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	18.4		26.5	1.9	66.9	19.7
LOS	B		C	A	E	B
Approach Delay	18.4			13.5	27.7	
Approach LOS	B			B	C	
Queue Length 50th (ft)	390		181	16	54	7
Queue Length 95th (ft)	580		m160	m21	m94	m92
Internal Link Dist (ft)	583			754	266	
Turn Bay Length (ft)			142		150	
Base Capacity (vph)	2229		483	2859	296	487
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.64		0.72	0.14	0.21	0.62

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 50 (36%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 18.3		Intersection LOS: B	
Intersection Capacity Utilization 69.3%		ICU Level of Service C	
Analysis Period (min) 15			

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

Splits and Phases: 2: Celebration Drive & Ferry Road

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑		↰	↑	
Traffic Vol, veh/h	29	1	12	10	1	203	5	90	10	69	312	32
Future Vol, veh/h	29	1	12	10	1	203	5	90	10	69	312	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	2	0
Mvmt Flow	31	1	13	11	1	214	5	95	11	73	328	34

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	709	607	345	609	619	101	362	0	0	106	0	0
Stage 1	491	491	-	111	111	-	-	-	-	-	-	-
Stage 2	218	116	-	498	508	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	352	414	702	410	407	960	1208	-	-	1498	-	-
Stage 1	563	552	-	899	807	-	-	-	-	-	-	-
Stage 2	789	803	-	558	542	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	262	392	702	386	385	960	1208	-	-	1498	-	-
Mov Cap-2 Maneuver	370	445	-	446	439	-	-	-	-	-	-	-
Stage 1	561	525	-	895	804	-	-	-	-	-	-	-
Stage 2	610	800	-	520	515	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.3	10.3	0.4	1.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1208	-	-	430	906	1498	-	-
HCM Lane V/C Ratio	0.004	-	-	0.103	0.249	0.048	-	-
HCM Control Delay (s)	8	-	-	14.3	10.3	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	1	0.2	-	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	16	36	15	42	96
Future Vol, veh/h	32	16	36	15	42	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	172	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	17	0	0	4	2
Mvmt Flow	37	19	42	17	49	112

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	59	0	-	0	144	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	93	-
Critical Hdwy	4.1	-	-	-	6.44	6.22
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.2	-	-	-	3.536	3.318
Pot Cap-1 Maneuver	1558	-	-	-	844	1017
Stage 1	-	-	-	-	966	-
Stage 2	-	-	-	-	926	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1558	-	-	-	824	1017
Mov Cap-2 Maneuver	-	-	-	-	824	-
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	926	-

Approach	EB	WB	SB
HCM Control Delay, s	4.9	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1558	-	-	-	824	1017
HCM Lane V/C Ratio	0.024	-	-	-	0.059	0.11
HCM Control Delay (s)	7.4	-	-	-	9.6	9
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.4

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	70	1	48	65	69	1	1	54	63	1	1
Future Vol, veh/h	1	70	1	48	65	69	1	1	54	63	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	1	74	1	51	68	73	1	1	57	66	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	141	0	0	75	0	0	285	320	75	313	284	105
Stage 1	-	-	-	-	-	-	77	77	-	207	207	-
Stage 2	-	-	-	-	-	-	208	243	-	106	77	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1455	-	-	1537	-	-	671	600	992	643	628	955
Stage 1	-	-	-	-	-	-	937	835	-	800	734	-
Stage 2	-	-	-	-	-	-	799	708	-	905	835	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1455	-	-	1537	-	-	650	578	992	588	605	955
Mov Cap-2 Maneuver	-	-	-	-	-	-	650	578	-	588	605	-
Stage 1	-	-	-	-	-	-	936	834	-	799	708	-
Stage 2	-	-	-	-	-	-	768	683	-	851	834	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2	9	11.9
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	970	1455	-	-	1537	-	-	592
HCM Lane V/C Ratio	0.061	0.001	-	-	0.033	-	-	0.116
HCM Control Delay (s)	9	7.5	0	-	7.4	0	-	11.9
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.4

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	187	0	1880	1699	182
Future Vol, veh/h	0	187	0	1880	1699	182
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	-	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	0	2	7	10	0
Mvmt Flow	0	197	0	1979	1788	192

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	894	-	0	-	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	247	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	247	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	59.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	247	-	-
HCM Lane V/C Ratio	-	0.797	-	-
HCM Control Delay (s)	-	59.4	-	-
HCM Lane LOS	-	F	-	-
HCM 95th %tile Q(veh)	-	6	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	277	299	152	467	832	404	53	425	1216	79	331	1687
Future Volume (vph)	277	299	152	467	832	404	53	425	1216	79	331	1687
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	11	12	12	11	12	12	12	11	12	12	11	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	335		0	335		455		650		220	575	
Storage Lanes	1		1	1		1		1		0	1	
Taper Length (ft)	175			175				125			180	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1745	3762	1553	1745	3762	1599	0	1629	3585	1524	1711	3619
Flt Permitted	0.250			0.271				0.067			0.067	
Satd. Flow (perm)	459	3762	1553	498	3762	1599	0	115	3585	1524	121	3619
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)			78			51				51		
Link Speed (mph)		45			45				40			45
Link Distance (ft)		834			1555				778			1388
Travel Time (s)		12.6			23.6				13.3			21.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	4%	0%	1%	1%	0%	8%	6%	6%	2%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	292	315	160	492	876	425	0	503	1280	83	348	1776
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	custom	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	5!	3	8	1		5	2	3	1	6
Permitted Phases	4		4	8		8	5!	2		2	6	
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.0	22.0	8.0	8.0	37.0	8.0	8.0	8.0	49.5	8.0	8.0	51.5
Total Split (s)	13.0	22.0	22.0	30.0	39.0	22.0	22.0	22.0	66.0	30.0	22.0	66.0
Total Split (%)	9.3%	15.7%	15.7%	21.4%	27.9%	15.7%	15.7%	15.7%	47.1%	21.4%	15.7%	47.1%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5		3.5	6.0	3.5	3.5	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	28.0	16.0	40.5	48.5	33.0	57.5		81.0	60.0	92.5	81.0	60.0
Actuated g/C Ratio	0.20	0.11	0.29	0.35	0.24	0.41		0.58	0.43	0.66	0.58	0.43

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	210
Future Volume (vph)	210
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	190
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1568
Flt Permitted	
Satd. Flow (perm)	1568
Right Turn on Red	Yes
Satd. Flow (RTOR)	78
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	3%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	221
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	13.0
Total Split (%)	9.3%
Yellow Time (s)	3.5
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	75.5
Actuated g/C Ratio	0.54

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	1.63	0.73	0.32	1.21	0.99	0.62		1.89	0.83	0.08	1.24	1.15
Control Delay	336.3	72.9	17.1	140.7	69.0	27.6		441.6	41.5	3.9	172.3	110.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	336.3	72.9	17.1	140.7	69.0	27.6		441.6	41.5	3.9	172.3	110.5
LOS	F	E	B	F	E	C		F	D	A	F	F
Approach Delay		161.6			78.9				147.7			110.4
Approach LOS		F			E				F			F
Queue Length 50th (ft)	~332	132	31	~472	424	299		~655	538	9	~342	~995
Queue Length 95th (ft)	#525	210	78	#680	#568	423		#881	636	28	#545	#1133
Internal Link Dist (ft)		754			1475				698			1308
Turn Bay Length (ft)	335			335		455		650		220	575	
Base Capacity (vph)	179	429	504	408	886	686		266	1536	1024	280	1551
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	1.63	0.73	0.32	1.21	0.99	0.62		1.89	0.83	0.08	1.24	1.15

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: 1.89
Intersection Signal Delay: 118.1 Intersection LOS: F
Intersection Capacity Utilization 124.6% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

! Phase conflict between lane groups.

Splits and Phases: 1: Rt 59 & Ferry Road

Lane Group	SBR
v/c Ratio	0.25
Control Delay	11.6
Queue Delay	0.0
Total Delay	11.6
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	64
Queue Length 95th (ft)	114
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	881
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.25

Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	431	80	412	1055	85	297
Future Volume (vph)	431	80	412	1055	85	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	142		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			175		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.976					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3436	0	1752	3505	1805	1615
Flt Permitted			0.406		0.950	
Satd. Flow (perm)	3436	0	749	3505	1805	1615
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	16					334
Link Speed (mph)	45			45	35	
Link Distance (ft)	663			834	319	
Travel Time (s)	10.0			12.6	6.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	0%	3%	3%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	574	0	463	1185	96	334
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases			6			8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	22.0		8.0	22.0	22.0	22.0
Total Split (s)	53.0		49.0	102.0	38.0	38.0
Total Split (%)	37.9%		35.0%	72.9%	27.1%	27.1%
Yellow Time (s)	4.0		3.5	4.0	4.0	4.0
All-Red Time (s)	2.0		0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		3.5	6.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	None
Act Effct Green (s)	93.9		116.5	114.0	14.0	14.0
Actuated g/C Ratio	0.67		0.83	0.81	0.10	0.10

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
v/c Ratio	0.25		0.62	0.42	0.53	0.72
Control Delay	10.2		10.1	1.1	71.0	16.1
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	10.2		10.1	1.1	71.0	16.1
LOS	B		B	A	E	B
Approach Delay	10.2			3.7	28.3	
Approach LOS	B			A	C	
Queue Length 50th (ft)	90		82	30	85	6
Queue Length 95th (ft)	168		m45	m35	m132	m77
Internal Link Dist (ft)	583			754	239	
Turn Bay Length (ft)			142		150	
Base Capacity (vph)	2309		949	2853	412	626
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.25		0.49	0.42	0.23	0.53

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 133 (95%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 55.3%		ICU Level of Service B	
Analysis Period (min) 15			

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

Splits and Phases: 2: Celebration Drive & Ferry Road

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↱		↰	↱	
Traffic Vol, veh/h	68	1	13	20	1	131	10	183	20	199	238	55
Future Vol, veh/h	68	1	13	20	1	131	10	183	20	199	238	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	2	0
Mvmt Flow	72	1	14	21	1	138	11	193	21	209	251	58

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	993	934	280	932	953	204	309	0	0	214	0	0
Stage 1	698	698	-	226	226	-	-	-	-	-	-	-
Stage 2	295	236	-	706	727	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	226	268	764	249	261	842	1263	-	-	1368	-	-
Stage 1	434	445	-	781	721	-	-	-	-	-	-	-
Stage 2	718	713	-	430	432	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	165	225	764	214	219	842	1263	-	-	1368	-	-
Mov Cap-2 Maneuver	260	295	-	293	297	-	-	-	-	-	-	-
Stage 1	430	377	-	774	715	-	-	-	-	-	-	-
Stage 2	594	707	-	357	366	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.5	12.1	0.4	3.3
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1263	-	-	291	669	1368	-	-
HCM Lane V/C Ratio	0.008	-	-	0.297	0.239	0.153	-	-
HCM Control Delay (s)	7.9	-	-	22.5	12.1	8.1	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.9	0.5	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	106	94	72	30	47	146
Future Vol, veh/h	106	94	72	30	47	146
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	172	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	2	0	0	0	2
Mvmt Flow	128	113	87	36	57	176

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	123	0	-	0	474	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	369	-
Critical Hdwy	4.1	-	-	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.318
Pot Cap-1 Maneuver	1477	-	-	-	553	949
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	704	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1477	-	-	-	505	949
Mov Cap-2 Maneuver	-	-	-	-	505	-
Stage 1	-	-	-	-	844	-
Stage 2	-	-	-	-	704	-

Approach	EB	WB	SB
HCM Control Delay, s	4.1	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1477	-	-	-	505	949
HCM Lane V/C Ratio	0.086	-	-	-	0.112	0.185
HCM Control Delay (s)	7.7	-	-	-	13	9.7
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.3	-	-	-	0.4	0.7

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	159	1	59	122	103	1	1	20	69	1	1
Future Vol, veh/h	1	159	1	59	122	103	1	1	20	69	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	1	167	1	62	128	108	1	1	21	73	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	236	0	0	168	0	0	477	530	168	487	476	182
Stage 1	-	-	-	-	-	-	170	170	-	306	306	-
Stage 2	-	-	-	-	-	-	307	360	-	181	170	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1343	-	-	1422	-	-	502	457	881	494	491	866
Stage 1	-	-	-	-	-	-	837	762	-	708	665	-
Stage 2	-	-	-	-	-	-	707	630	-	825	762	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1343	-	-	1422	-	-	481	433	881	462	465	866
Mov Cap-2 Maneuver	-	-	-	-	-	-	481	433	-	462	465	-
Stage 1	-	-	-	-	-	-	836	761	-	707	631	-
Stage 2	-	-	-	-	-	-	669	598	-	803	761	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.6	9.6	14.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	812	1343	-	-	1422	-	-	465
HCM Lane V/C Ratio	0.029	0.001	-	-	0.044	-	-	0.161
HCM Control Delay (s)	9.6	7.7	0	-	7.6	0	-	14.2
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.6

Intersection	
Int Delay, s/veh	15.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	248	0	1773	2075	284
Future Vol, veh/h	0	248	0	1773	2075	284
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	-	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	2	2	6	4	0
Mvmt Flow	0	261	0	1866	2184	299

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1092	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	~ 180	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	~ 180	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	279	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	180	-	-
HCM Lane V/C Ratio	-	1.45	-	-
HCM Control Delay (s)	-	279	-	-
HCM Lane LOS	-	F	-	-
HCM 95th %tile Q(veh)	-	16.2	-	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	285	221	128	140	197	222	44	444	989	80	171	1244
Future Volume (vph)	285	221	128	140	197	222	44	444	989	80	171	1244
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	11	12	12	11	12	12	12	11	12	12	11	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	335		0	335		455		650		220	575	
Storage Lanes	1		1	1		1		1		0	1	
Taper Length (ft)	175			175				125			180	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1646	3800	1524	1711	3762	1599	0	1683	3654	1553	1745	3689
Flt Permitted	0.626			0.441				0.100			0.266	
Satd. Flow (perm)	1085	3800	1524	794	3762	1599	0	177	3654	1553	489	3689
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)			88			71				82		
Link Speed (mph)		45			45				40			45
Link Distance (ft)		834			1507				778			1388
Travel Time (s)		12.6			22.8				13.3			21.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.99	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	0%	6%	2%	1%	1%	0%	4%	4%	4%	0%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	291	226	131	143	201	227	0	497	1009	82	174	1269
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	custom	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	5!	3	8	1		5	2	3	1	6
Permitted Phases	4		4	8		8	5!	2		2	6	
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.0	25.0	8.0	8.0	28.0	8.0	8.0	8.0	49.5	8.0	8.0	51.5
Total Split (s)	15.0	25.0	22.0	18.0	28.0	26.0	22.0	22.0	71.0	18.0	26.0	75.0
Total Split (%)	10.7%	17.9%	15.7%	12.9%	20.0%	18.6%	15.7%	15.7%	50.7%	12.9%	18.6%	53.6%
Yellow Time (s)	3.5	4.0	3.5	3.5	4.0	3.5	3.5	3.5	4.0	3.5	3.5	4.0
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5		3.5	6.0	3.5	3.5	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	28.9	14.9	44.7	32.5	16.7	33.0		98.8	82.5	101.8	81.7	69.0
Actuated g/C Ratio	0.21	0.11	0.32	0.23	0.12	0.24		0.71	0.59	0.73	0.58	0.49

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	114
Future Volume (vph)	114
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	190
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Right Turn on Red	Yes
Satd. Flow (RTOR)	100
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Growth Factor	100%
Heavy Vehicles (%)	2%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	116
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	15.0
Total Split (%)	10.7%
Yellow Time (s)	3.5
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	86.5
Actuated g/C Ratio	0.62

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	1.08	0.56	0.24	0.53	0.45	0.53		1.31	0.47	0.07	0.46	0.70
Control Delay	128.9	79.7	8.6	41.2	49.3	28.9		187.1	18.0	1.6	12.8	30.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	128.9	79.7	8.6	41.2	49.3	28.9		187.1	18.0	1.6	12.8	30.0
LOS	F	E	A	D	D	C		F	B	A	B	C
Approach Delay		87.4			39.1				70.1			26.1
Approach LOS		F			D				E			C
Queue Length 50th (ft)	~248	100	1	92	93	139		~501	266	0	48	460
Queue Length 95th (ft)	#442	154	46	137	97	132		#778	367	17	84	541
Internal Link Dist (ft)		754			1427				698			1308
Turn Bay Length (ft)	335			335		455		650		220	575	
Base Capacity (vph)	270	515	546	286	591	564		380	2154	1164	530	1818
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	1.08	0.44	0.24	0.50	0.34	0.40		1.31	0.47	0.07	0.33	0.70

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: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.31
Intersection Signal Delay: 52.9 Intersection LOS: D
Intersection Capacity Utilization 98.8% ICU Level of Service F
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.
! Phase conflict between lane groups.

Splits and Phases: 1: Rt 59 & Ferry Road

Lane Group	SBR
v/c Ratio	0.11
Control Delay	2.9
Queue Delay	0.0
Total Delay	2.9
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	5
Queue Length 95th (ft)	30
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	1016
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.11

Intersection Summary

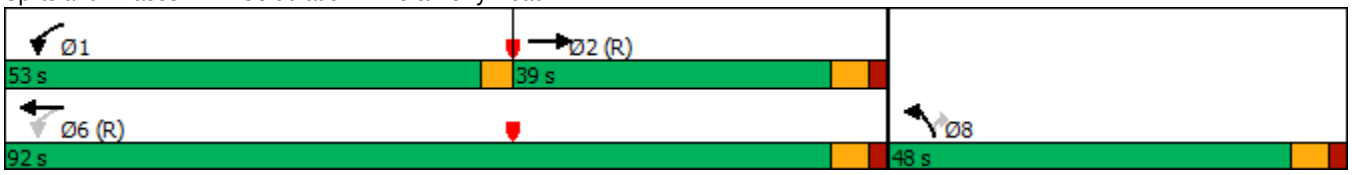
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	243	98	493	262	85	391
Future Volume (vph)	243	98	493	262	85	391
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	142		150	0
Storage Lanes		0	1		1	1
Taper Length (ft)			175		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.957					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3406	0	1805	3505	1805	1615
Flt Permitted			0.413		0.950	
Satd. Flow (perm)	3406	0	785	3505	1805	1615
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	41					430
Link Speed (mph)	45			45	35	
Link Distance (ft)	663			834	321	
Travel Time (s)	10.0			12.6	6.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	0%	3%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	375	0	542	288	93	430
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases			6			8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	22.0		8.0	22.0	22.0	22.0
Total Split (s)	39.0		53.0	92.0	48.0	48.0
Total Split (%)	27.9%		37.9%	65.7%	34.3%	34.3%
Yellow Time (s)	4.0		3.5	4.0	4.0	4.0
All-Red Time (s)	2.0		0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		3.5	6.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Recall Mode	C-Min		None	C-Min	Max	Max
Act Effct Green (s)	40.9		78.7	76.2	51.8	51.8
Actuated g/C Ratio	0.29		0.56	0.54	0.37	0.37

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
v/c Ratio	0.37		0.81	0.15	0.14	0.50
Control Delay	36.1		41.3	20.8	33.3	6.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	36.1		41.3	20.8	33.3	6.2
LOS	D		D	C	C	A
Approach Delay	36.1			34.2	11.0	
Approach LOS	D			C	B	
Queue Length 50th (ft)	126		320	70	58	9
Queue Length 95th (ft)	175		m273	m58	m108	90
Internal Link Dist (ft)	583			754	241	
Turn Bay Length (ft)			142		150	
Base Capacity (vph)	1024		801	2153	667	868
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.37		0.68	0.13	0.14	0.50

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 106 (76%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 27.6		Intersection LOS: C	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

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

Splits and Phases: 2: Celebration Drive & Ferry Road



Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	89	0	11	20	0	202	10	185	20	232	289	70
Future Vol, veh/h	89	0	11	20	0	202	10	185	20	232	289	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	2	0
Mvmt Flow	94	0	12	21	0	213	11	195	21	244	304	74

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1163	1067	341	1063	1094	206	378	0	0	216	0	0
Stage 1	829	829	-	228	228	-	-	-	-	-	-	-
Stage 2	334	238	-	835	866	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	173	224	706	203	216	840	1192	-	-	1366	-	-
Stage 1	368	388	-	779	719	-	-	-	-	-	-	-
Stage 2	684	712	-	365	373	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	111	182	706	171	176	840	1192	-	-	1366	-	-
Mov Cap-2 Maneuver	188	250	-	243	250	-	-	-	-	-	-	-
Stage 1	365	319	-	772	713	-	-	-	-	-	-	-
Stage 2	506	706	-	295	306	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	39.7	12.9	0.4	3.2
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1192	-	-	205	688	1366	-	-
HCM Lane V/C Ratio	0.009	-	-	0.513	0.34	0.179	-	-
HCM Control Delay (s)	8	-	-	39.7	12.9	8.2	-	-
HCM Lane LOS	A	-	-	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.6	1.5	0.7	-	-

Queue Tables

Table A
IL 59 WITH FERRY ROAD - 95th PERCENTILE QUEUES

Peak Hour	Condition	Operating Conditions by Approach											
		Eastbound			Westbound			Northbound			Southbound		
		L	T	R	L	T	R	L	T	R	L	T	R
Weekday Morning	Existing (Year 2019)	176’	508’	67’	83’	87’	111’	153’	821’	119’	469’	587’	20’
	Year 2026 Base (No-Build)	224’	557’	74’	129’	94’	163’	258’	903’	126’	631’	749’	32’
	Projected (Year 2026)	414’	606’	31’	207’	91’	113’	722’	877’	126’	631’	887’	40’
Weekday Evening	Existing (Year 2019)	95’	154’	74’	411’	485’	283’	269’	553’	18’	335’	893’	55’
	Year 2026 Base (No-Build)	172’	165’	78’	564’	531’	393’	312’	670’	26’	555’	1031’	84’
	Projected (Year 2026)	525’	210’	78’	680’	568’	423’	881’	636’	28’	545’	1133’	114’
Saturday Midday	Existing (Year 2019)	77’	94’	36’	106’	98’	87’	63’	337’	15’	71’	350’	12’
	Year 2026 Base (No-Build)	101’	102’	38’	122’	105’	140’	74’	372’	16’	75’	391’	16’
	Projected (Year 2026)	442’	154’	46’	137’	97’	132’	778’	367’	17’	84’	541’	30’