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MEMORANDUM

TO: Joseph Blakeman, PE
City of Milwaukee, Traffic Engineering

FROM: Andre Ost, P.E., PTOE

DATE: February 09, 2017

SUBJECT: Arlington Place Redevelopment
Milwaukee, Wisconsin

Introduction

Klein Development Inc. is proposing a 5 story residential development to be located at 1632-1648 N. Franklin Place, in the City of Milwaukee, WI. GRAEF has prepared this study to identify the traffic generated by the development, analyze the traffic impacts of the proposed development and identify any improvements for the study area intersections. This technical memorandum documents the procedures, findings and recommendations of the traffic impact study.

Arlington Place Redevelopment

The development is proposed to be located at 1632-1648 N. Franklin Place, south of E Brady Street on the east side of N Franklin Place and the west side of N Arlington Place as shown on Exhibit 1. The site was previously a Boys and Girls Club and Church, but is currently vacant. The 5 story building will contain 96 one and two bedroom units and is planned to begin construction in 2017. The building will provide 130 parking spaces that will be built underground and on the first floor. Access to the parking structure driveway will be located on N Arlington Place. A conceptual site plan of the development is shown on Exhibit 2.

Study Area

The study area for the traffic study includes the following intersections:

- E Brady Street & N Franklin Place
- E Brady Street & N Arlington Place
- N Warren Avenue / E Lyon Street & N Franklin Place
- N Warren Avenue & N Arlington Place

The existing intersection geometrics are shown on Exhibit 3. The planned geometrics are shown on Exhibits 4. It should be noted that the proposed parking structure driveway was not analyzed due to low volumes.

The study area roadways are described below:

E Brady Street is an east-west two-lane undivided roadway with a posted speed limit of 25 miles per hour (mph) through the study area. According to the Wisconsin Department of Transportation (WisDOT), the Year 2015 Annual Average Daily Traffic (AADT) along E Brady Street was 10,100 vehicles per day (vpd)

N Franklin Place is a north-south roadway with a posted speed limit of 25 mph. N Franklin Place is one-way southbound roadway (one-lane) between E Brady Street and E Pleasant Street. N Franklin Place is a two-way roadway (one lane in each direction) between E Pleasant Street and E Lyon Street. N Franklin Place is a one-way northbound (one lane) between N Warren / E Lyon Street and N Farwell Avenue.

N Arlington Place is a one-way southbound roadway (one-lane southbound) with a posted speed limit of 25 mph.

N Warren Avenue is a northeast-southwest two-lane roadway with a posted speed limit of 25 mph.

E Lyon Street is an east-west two-lane roadway with a posted speed limit of 25 mph.

Existing Traffic

In November of 2016, GRAEF conducted intersection turning movement traffic counts at the study area intersections. Based on the traffic count, the weekday morning peak hour was identified to be 7:15 to 8:15 am and the weekday evening peak hour was identified to be 5:00 to 6:00 pm. The existing (Year 2016) peak hour traffic volumes for the study area intersections are shown on Exhibit 5. The traffic counts are provided in Appendix 1.

Trip Generation

To address any potential future traffic impacts within the study area, it is necessary to identify the traffic expected to be generated by the proposed development. The expected traffic volumes generated by the Arlington Place Redevelopment are based on the size and type of proposed land uses, and on trip data published in the Institute of Transportation Engineer's (ITE's) *Trip Generation, 9th Edition (2012)*.

The trip generation for the proposed Arlington Place Redevelopment is shown in Exhibit 6. The proposed development is expected to generate 50 total vehicle trips (10 entering vehicles/40 exiting vehicles) during the weekday morning peak hour and 60 total vehicle trips (40 entering vehicles/20 exiting vehicles) during the weekday evening peak hour. Given the urban nature of the area it is expected that there would be a non-auto trips (e.g. transit, bicycle or walking). To be conservative there was no reduction made for non-auto trips as a part of this study.

Trip Distribution & Assignment

Since both N Franklin Place and N Arlington Place are one-way southbound roadways all development traffic must access the development from the north off of E Brady Street. Exiting the development all traffic must exit south towards N Warren Avenue. The following trip distribution for the development was based on the existing roadway network:

Entering

- 50 percent from the east on E Brady Street
- 50 percent from the west on E Brady Street

Exiting

- 30 percent to the northeast on N Warren Avenue
- 70 percent to the southwest on N Warren Avenue/E Lyon Street

The development trips were assigned to the study area intersections based on the above directional distribution. The new trips for the proposed development are shown on Exhibit 7. The development trips were added to the existing (Year 2016) traffic volumes (Exhibit 5) to develop the Year 2017 total traffic volumes, as shown on Exhibit 8.

Traffic Operational Analysis

Level of Service Definition

The study area intersections was analyzed using Synchro Version 9 software following procedures set forth in the *2010 Highway Capacity Manual* (HCM). The HCM analysis consists of vehicular operations only. Pedestrian were counted as a part of the project, however their impacts to operations were not able to be analyzed. Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS 'A', to very poor, represented by LOS 'F'. For analysis and design purposes, Level of Service (LOS) 'D' was used to define acceptable peak hour operating conditions. Descriptions of the various levels of service are presented below and summarized below:

LOS A is the highest level of service that can be achieved. Under this condition, intersection approaches appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation. At stop controlled intersections, average delays are less than 10 seconds.

LOS B represents stable operation. At stop controlled intersections, average delays are 10 to 15 seconds.

LOS C still represents stable operation, but periodic backups of a few vehicles may develop behind turning vehicles. Most drivers begin to feel restricted, but not objectionably so. At stop controlled intersections, average delays are 15 to 25 seconds.

LOS D represents increasing traffic restrictions as the intersection approaches instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but periodic clearance of long lines occurs, thus preventing excessive backups. At stop controlled intersections, average delays are 25 to 35 seconds.

LOS E represents the capacity of the intersection. At stop controlled intersections, average delays are 35 to 50 seconds.

LOS F represents jammed conditions where the intersection is over capacity and acceptable gaps for stop controlled intersections in the mainline traffic flow are minimal. At stop controlled intersections, average delays exceed 50 seconds.

Table 2
Intersection Level of Service (LOS) Designations

Level of Service (LOS)	Stop Control Average Delay per Vehicle (sec/veh)
A	<10.0
B	10.1 – 15.0
C	15.1 – 25.0
D	25.1 – 35.0
E	35.1 – 50.0
F	>50.0

Existing (Year 2016) Traffic Analysis with Existing Geometrics

The existing (Year 2016) traffic volumes are shown on Exhibit 5. The existing (Year 2016) traffic peak hour operating conditions with the existing geometrics are shown on Exhibit 9. With the existing (Year 2016) traffic volumes, all movements at the study area intersections are expected to operate acceptably at LOS B or better conditions with the existing geometrics. The existing (Year 2016) traffic analysis with existing geometrics is included in Appendix 2.

Year 2017 Total Traffic Analysis with Planned Geometrics

The Year 2017 total traffic volumes are shown on Exhibit 8. The Year 2017 total traffic peak hour operating conditions with planned geometrics are shown on Exhibit 10. With the Year 2017 total traffic volumes, all movements at the study area intersections are expected to operate acceptably at LOS B or better conditions with the planned geometrics. The Year 2017 total traffic analysis with planned geometrics is included in Appendix 3.

Conclusions and Recommendations

The Arlington Place Redevelopment is expected to generate 50 total vehicle trips (10 entering vehicles/40 exiting vehicles) during the weekday morning peak hour and 60 total vehicle trips (40 entering vehicles/20 exiting vehicles) during the weekday evening peak hour.

The additional traffic from the development on the study area intersections are expected to have minimal impact on the operations of the study area intersections. Level of Service (LOS) 'D' was used to define acceptable peak hour operating conditions. With the Arlington Place Redevelopment all study area intersections are expected to continue to operate acceptably, at LOS B or better conditions. Since the study areas intersections are expected to operate acceptably with the development traffic, no improvements are recommended with the project.

Exhibits

Appendix

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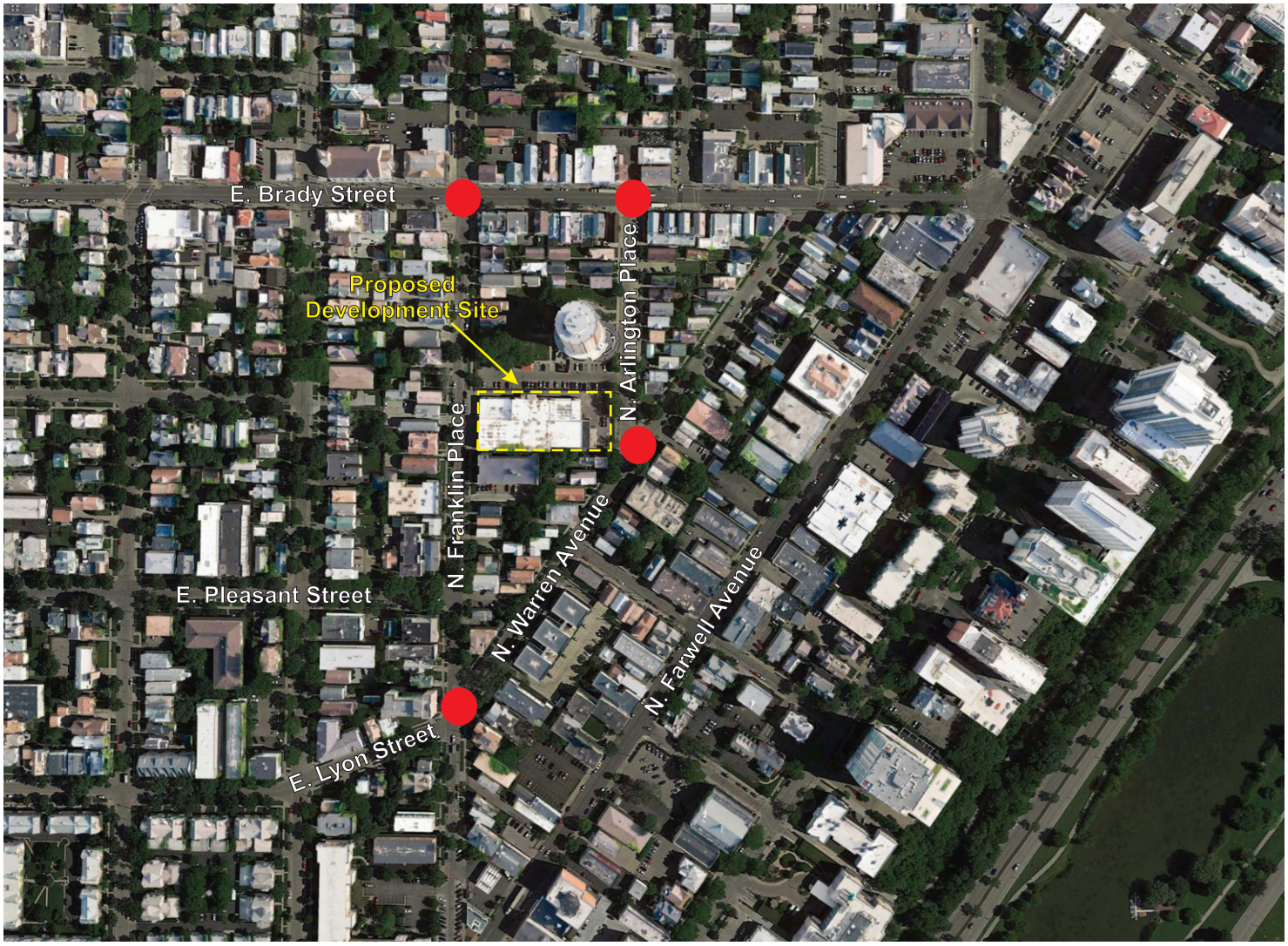
NORTH
NOT TO SCALE



STUDY AREA INTERSECTIONS

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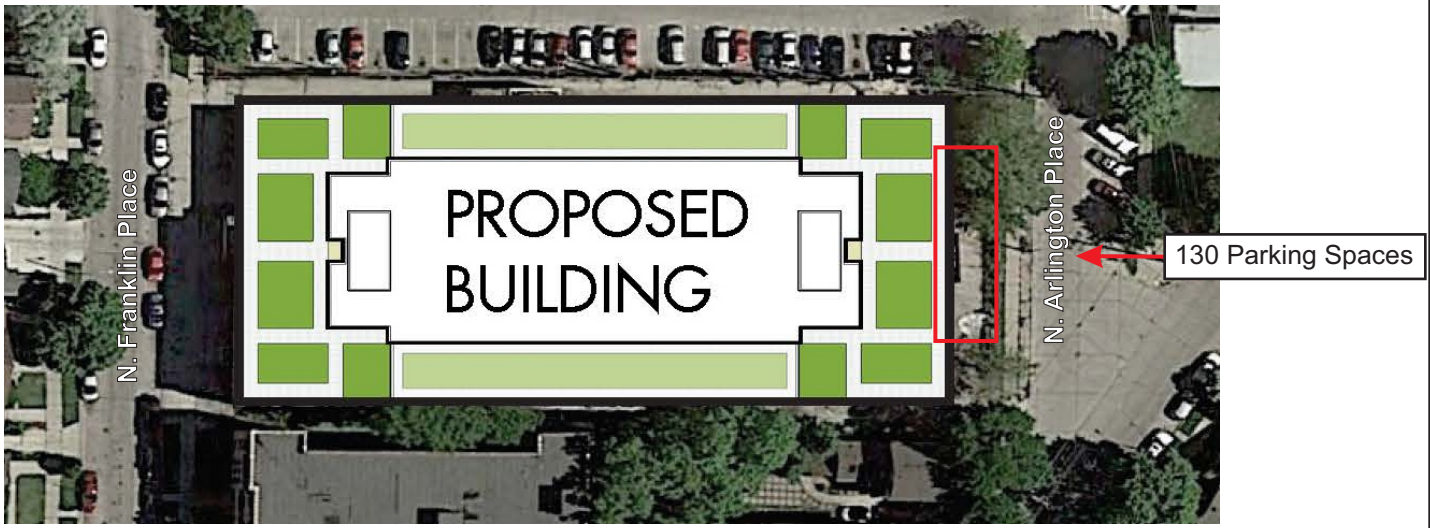
EXHIBIT 1
SITE LOCATION MAP
ARLINGTON PLACE REDEVELOPMENT
MILWAUKEE, WISCONSIN



Parking structure driveway
is on Arlington Place

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EXHIBIT 2
CONCEPTUAL SITE PLAN
ARLINGTON PLACE REDEVELOPMENT
MILWAUKEE, WISCONSIN

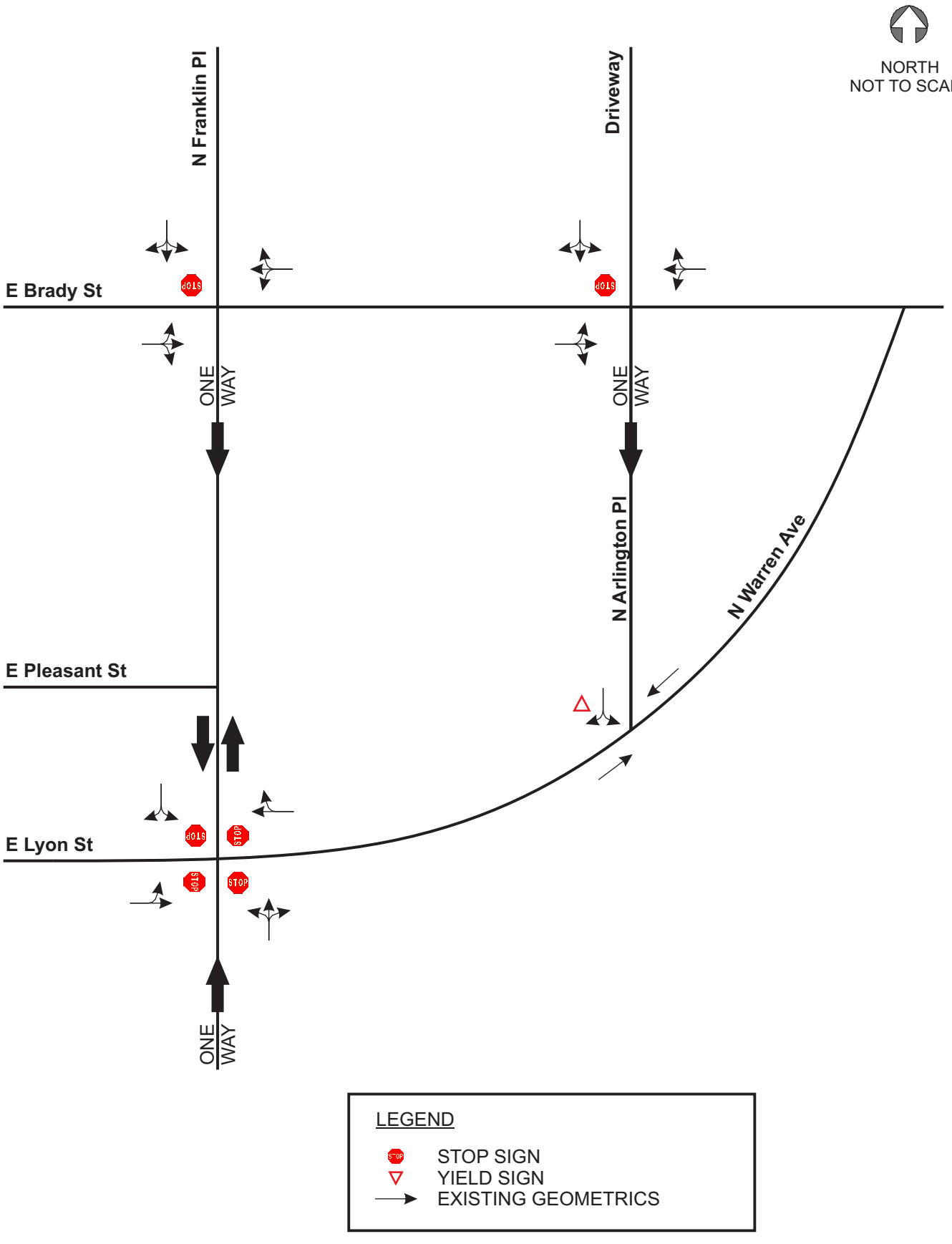

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EXHIBIT 3
EXISTING INTERSECTION GEOMETRICS
ARLINGTON PLACE REDEVELOPMENT
MILWAUKEE, WISCONSIN

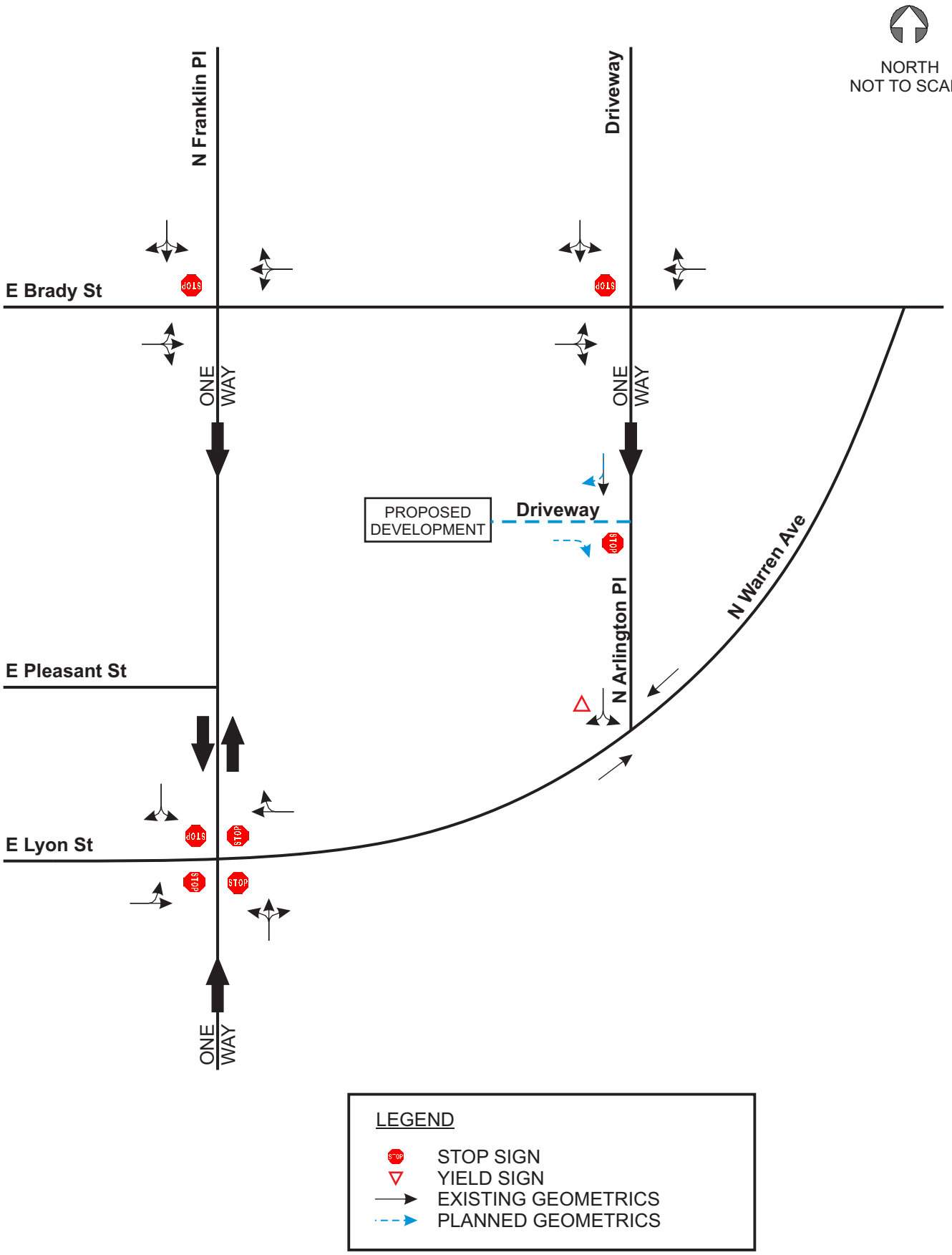

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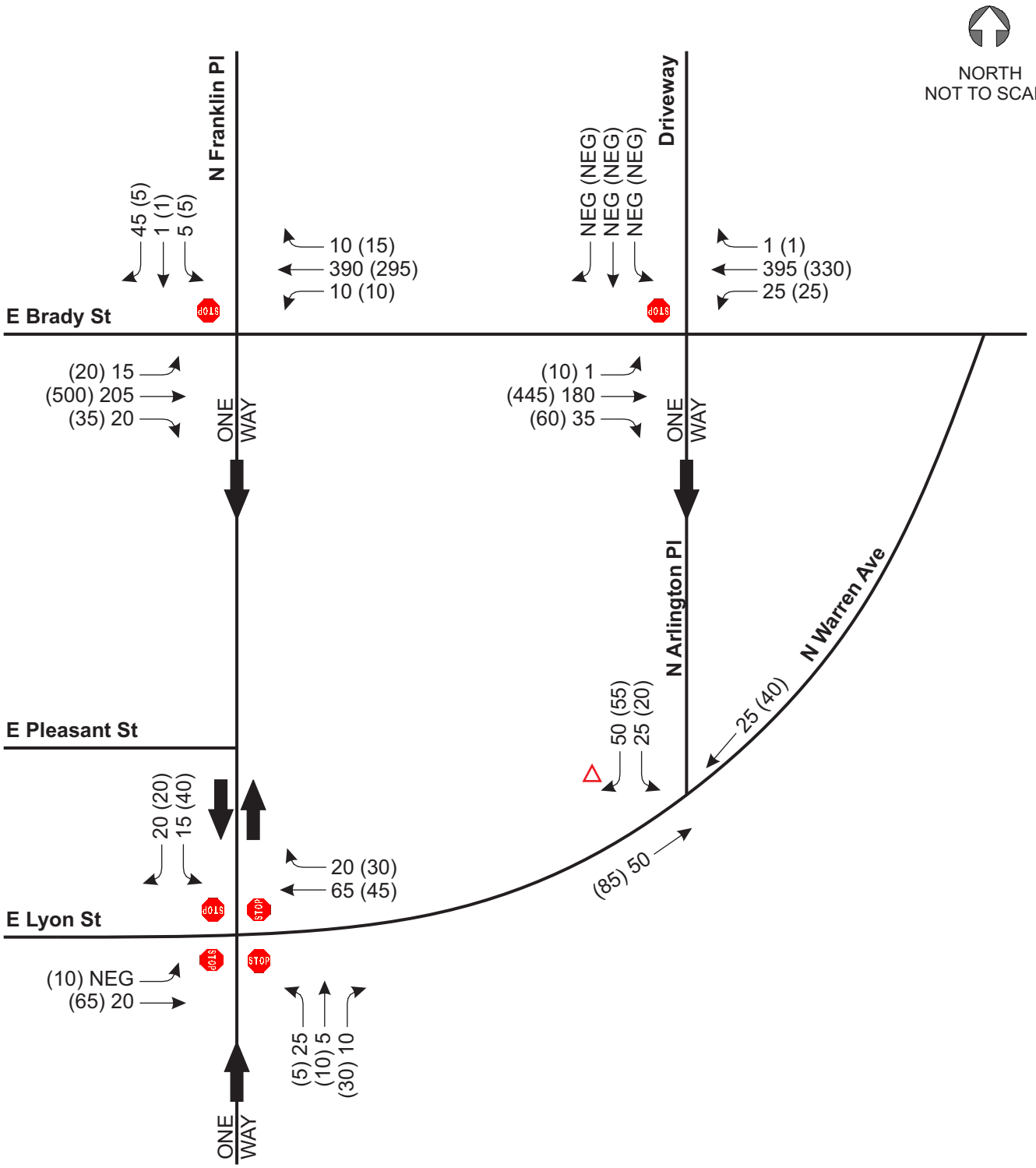
EXHIBIT 4
PLANNED GEOMETRICS
ARLINGTON PLACE REDEVELOPMENT
MILWAUKEE, WISCONSIN



LEGEND

STOP	STOP SIGN
▽	YIELD SIGN
XXX	WEEKDAY MORNING PEAK HOUR (7:15 - 8:15 AM) TRAFFIC VOLUMES
(XXX)	WEEKDAY EVENING PEAK HOUR (5:00 - 6:00 PM) TRAFFIC VOLUMES

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EXHIBIT 5
EXISTING (YEAR 2016) TRAFFIC VOLUMES
ARLINGTON PLACE REDEVELOPMENT
MILWAUKEE, WISCONSIN

Exhibit 8
Arlington Place Redevelopment Trip Generation

Land Use	ITE Land Use Code	Size	Daily Trips	Weekday AM Peak Hour Trips			Weekday PM Peak Hour Trips		
				In	Out	Total	In	Out	Total
Apartment	220	96 Dwelling Units	640 (6.65)	10 (20%)	40 (80%)	50 (0.51)	40 (65%)	20 (35%)	60 (0.62)
New Trips			**640**	**10**	**40**	**50**	**40**	**20**	**60**

Note: Trip generation rates per dwelling units and directional distribution are provided in parentheses.

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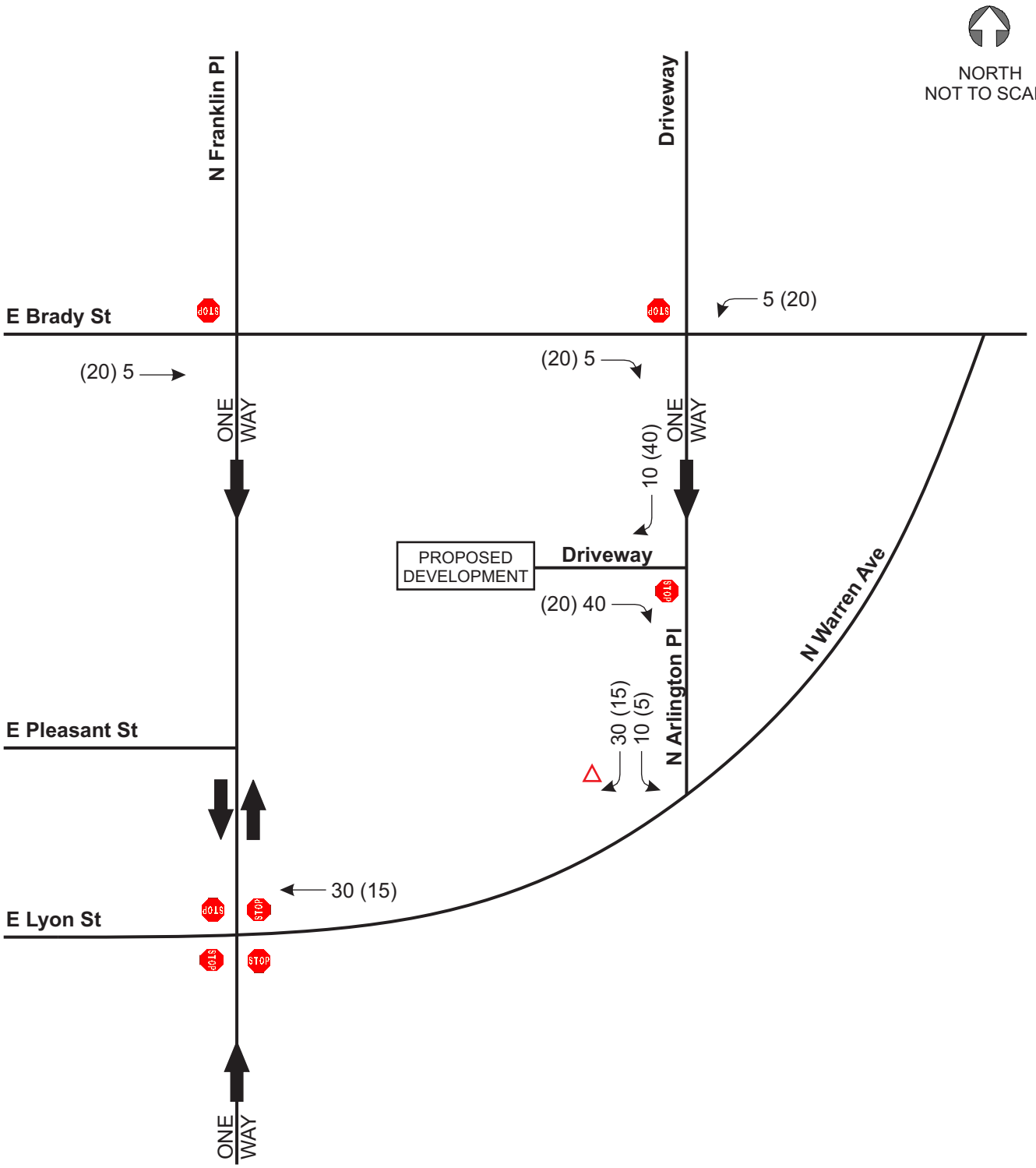
EXHIBIT 6
DEVELOPMENT TRIP GENERATION
ARLINGTON PLACE REDEVELOPMENT
MILWAUKEE, WISCONSIN



LEGEND

STOP	STOP SIGN
▽	YIELD SIGN
XXX	WEEKDAY MORNING PEAK HOUR (7:15 - 8:15 AM) TRAFFIC VOLUMES
(XXX)	WEEKDAY EVENING PEAK HOUR (5:00 - 6:00 PM) TRAFFIC VOLUMES

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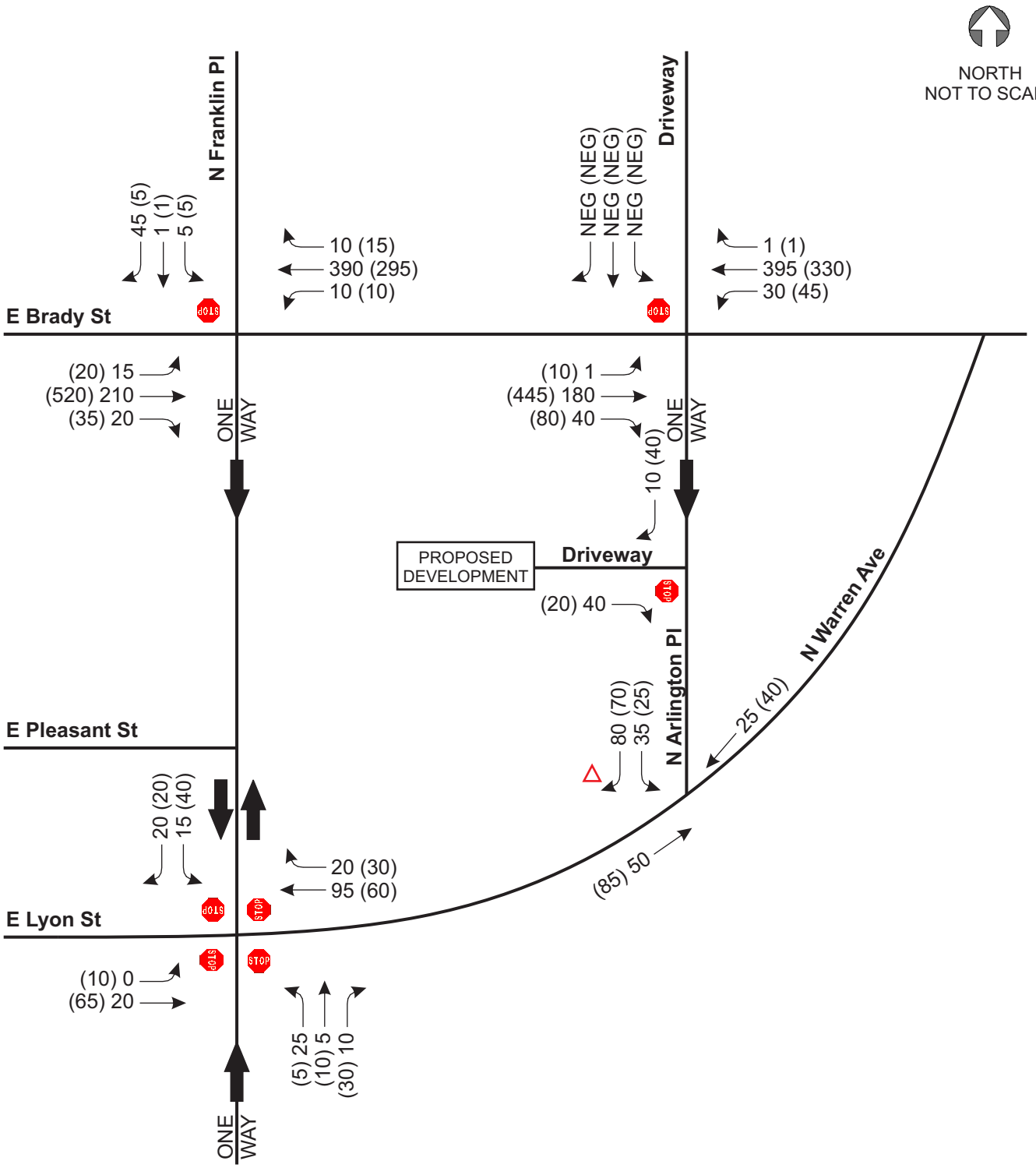
EXHIBIT 7
DEVELOPMENT TRIPS
ARLINGTON PLACE REDEVELOPMENT
MILWAUKEE, WISCONSIN



LEGEND

STOP	STOP SIGN
▽	YIELD SIGN
XXX	WEEKDAY MORNING PEAK HOUR (7:15 - 8:15 AM) TRAFFIC VOLUMES
(XXX)	WEEKDAY EVENING PEAK HOUR (5:00 - 6:00 PM) TRAFFIC VOLUMES

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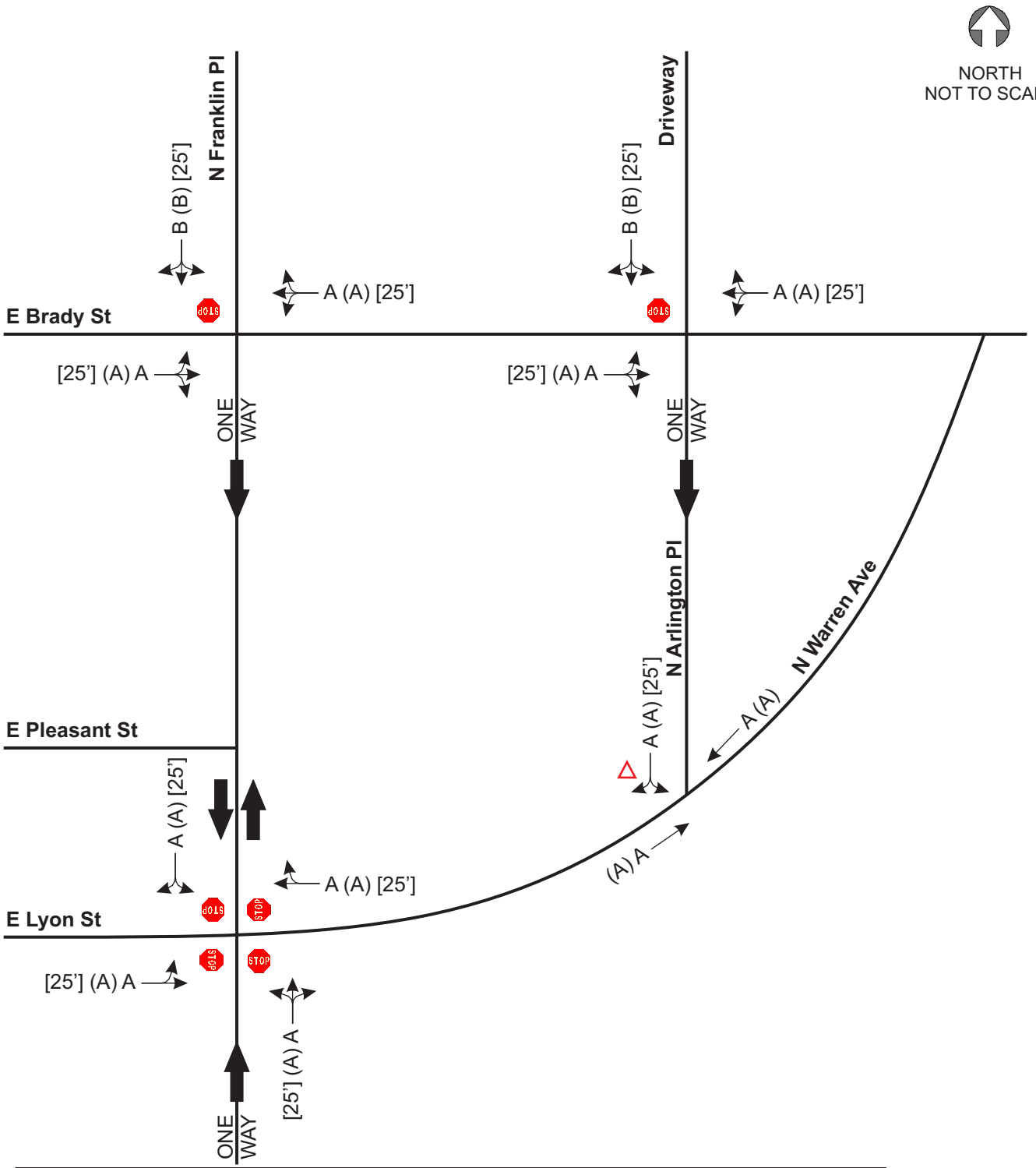
EXHIBIT 8
YEAR 2017 TOTAL TRAFFIC VOLUMES
ARLINGTON PLACE REDEVELOPMENT
MILWAUKEE, WISCONSIN



LEGEND

STOP	STOP SIGN
▽	YIELD SIGN
X	WEEKDAY MORNING PEAK HOUR (7:15 - 8:15 AM) LEVEL OF SERVICE
(X)	WEEKDAY EVENING PEAK HOUR (5:00 - 6:00 PM) LEVEL OF SERVICE
[XXX']	MAXIMUM 95TH PERCENTILE QUEUE LENGTH PER LANE (IN FEET)

NOTE: YIELD CONTROLLED INTERSECTION WAS ANALYZED AS A STOP CONTROLLED INTERSECTION

EXHIBIT 9
EXISTING (YEAR 2016) TRAFFIC OPERATIONS
WITH EXISTING GEOMETRICS
ARLINGTON PLACE REDEVELOPMENT
MILWAUKEE, WISCONSIN

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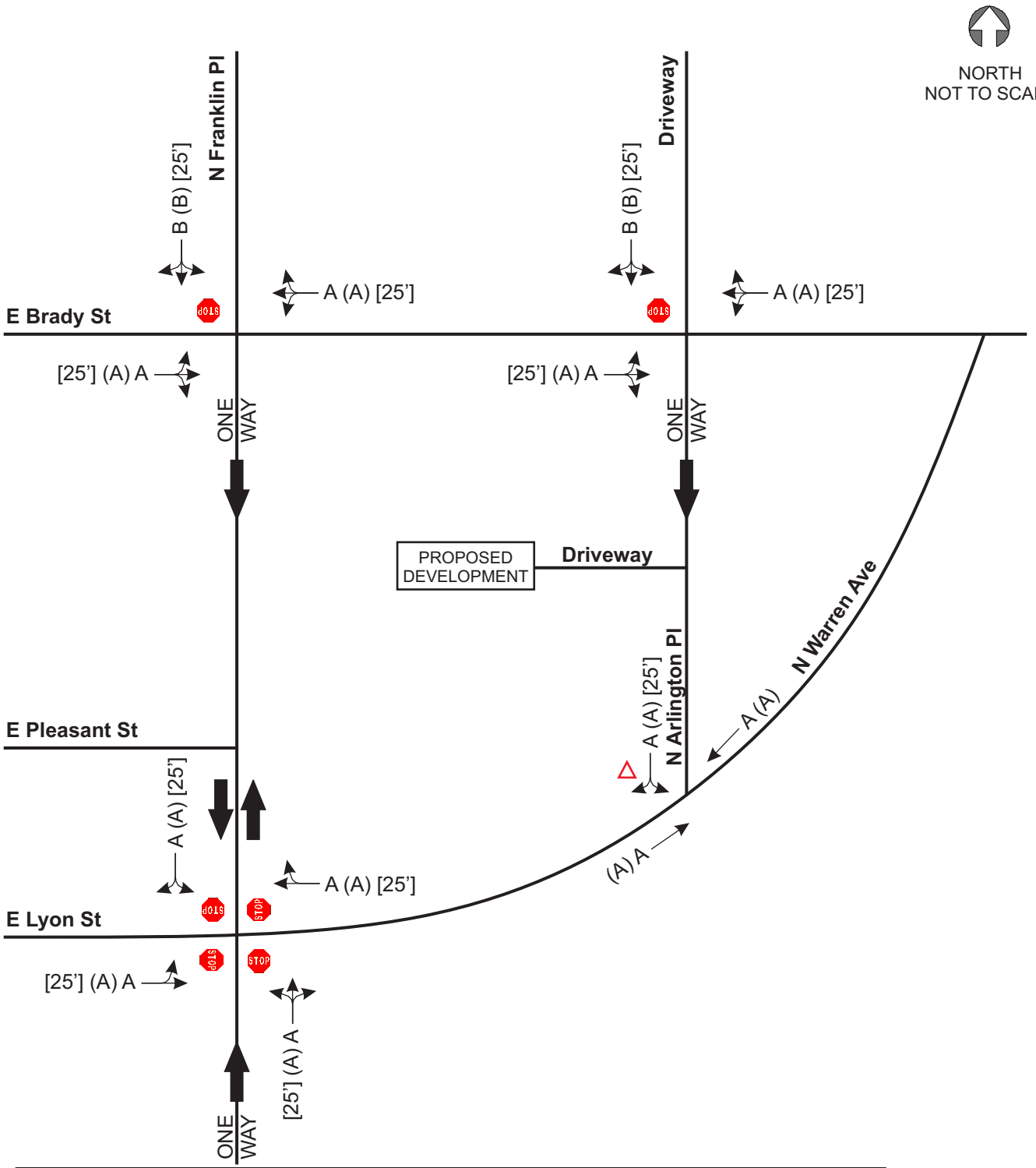

LEGEND

STOP	STOP SIGN
▽	YIELD SIGN
X	WEEKDAY MORNING PEAK HOUR (7:15 - 8:15 AM) LEVEL OF SERVICE
(X)	WEEKDAY EVENING PEAK HOUR (5:00 - 6:00 PM) LEVEL OF SERVICE
[XXX']	MAXIMUM 95TH PERCENTILE QUEUE LENGTH PER LANE (IN FEET)

NOTE: YIELD CONTROLLED INTERSECTION WAS ANALYZED AS A STOP CONTROLLED INTERSECTION

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EXHIBIT 10
YEAR 2017 TOTAL TRAFFIC OPERATIONS WITH PLANNED GEOMETRICS
ARLINGTON PLACE REDEVELOPMENT
MILWAUKEE, WISCONSIN

Appendix 1

Intersection Traffic Counts

Brady Street & Franklin Place
Weekday AM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Brady St & Franklin Pl_AM
Site Code :
Start Date : 11/8/2016
Page No : 1

Groups Printed- Cars - Heavy Vehicles

	Franklin Place From North					Brady Street From East					Franklin Place From South					Brady Street From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:00 AM	1	0	0	3	1	0	27	0	0	27	0	0	0	2	0	0	13	1	0	14	5	42	47
06:15 AM	0	0	0	2	0	1	25	0	3	26	0	0	0	3	0	0	19	1	0	20	8	46	54
06:30 AM	1	0	3	3	4	1	42	0	1	43	0	0	0	5	0	1	28	3	3	32	12	79	91
06:45 AM	2	0	3	20	5	0	58	0	1	58	0	0	0	5	0	2	53	0	7	55	33	118	151
Total	4	0	6	28	10	2	152	0	5	154	0	0	0	15	0	3	113	5	10	121	58	285	343
07:00 AM	2	3	2	10	7	0	71	1	5	72	0	0	0	7	0	1	43	1	1	45	23	124	147
07:15 AM	0	0	3	8	3	1	91	2	3	94	0	0	0	5	0	2	43	2	3	47	19	144	163
07:30 AM	0	1	11	11	12	3	102	2	3	107	0	0	0	4	0	4	63	3	19	70	37	189	226
07:45 AM	4	0	26	10	30	2	117	2	8	121	0	0	0	8	0	5	52	8	31	65	57	216	273
Total	6	4	42	39	52	6	381	7	19	394	0	0	0	24	0	12	201	14	54	227	136	673	809
08:00 AM	2	0	3	5	5	1	80	1	4	82	0	0	0	9	0	3	48	8	10	59	28	146	174
08:15 AM	1	0	2	7	3	0	72	2	6	74	0	0	0	6	0	2	47	5	1	54	20	131	151
08:30 AM	0	0	1	11	1	0	80	0	3	80	0	0	0	3	0	1	59	6	2	66	19	147	166
08:45 AM	1	0	4	12	5	0	49	1	3	50	0	0	0	5	0	0	70	4	0	74	20	129	149
Total	4	0	10	35	14	1	281	4	16	286	0	0	0	23	0	6	224	23	13	253	87	553	640
Grand Total	14	4	58	102	76	9	814	11	40	834	0	0	0	62	0	21	538	42	77	601	281	1511	1792
Apprch %	18.4	5.3	76.3			1.1	97.6	1.3			0	0	0			3.5	89.5	7					
Total %	0.9	0.3	3.8		5	0.6	53.9	0.7		55.2	0	0	0		0	1.4	35.6	2.8		39.8	15.7	84.3	
Cars	14	4	58		178	9	786	11		846	0	0	0		62	21	502	40		640	0	0	1726
% Cars	100	100	100	100	100	100	96.6	100	100	96.8	0	0	0	100	100	100	93.3	95.2	100	94.4	0	0	96.3
Heavy Vehicles	0	0	0		0	0	28	0		28	0	0	0		0	0	36	2		38	0	0	66
% Heavy Vehicles	0	0	0	0	0	0	3.4	0	0	3.2	0	0	0	0	0	0	6.7	4.8	0	5.6	0	0	3.7

Brady Street & Franklin Place
Weekday AM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Brady St & Franklin Pl_AM
Site Code :
Start Date : 11/8/2016

Groups Printed- Heavy Vehicles

	Franklin Place From North					Brady Street From East					Franklin Place From South					Brady Street From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
06:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
06:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	4	4
06:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	4	4
Total	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	8	0	0	8	0	13	13
07:00 AM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	2	0	0	2	0	9	9
07:15 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4
07:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	6	6
07:45 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	6	6
Total	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	10	0	0	10	0	25	25
08:00 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	9	9
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	5	5
08:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	8	8
08:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	2	0	4	0	6	6
Total	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	18	2	0	20	0	28	28
Grand Total	0	0	0	0	0	0	28	0	0	28	0	0	0	0	0	0	36	2	0	38	0	66	66
Apprch %	0	0	0			0	100	0			0	0	0			0	94.7	5.3					
Total %	0	0	0		0	0	42.4	0		42.4	0	0	0		0	0	54.5	3		57.6	0	100	

Brady Street & Franklin Place
Weekday PM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Brady St & Franklin Pl_PM
Site Code :
Start Date : 11/8/2016
Page No : 1

Groups Printed- Cars - Heavy Vehicles

	Franklin Place From North					Brady Street From East					Franklin Place From South					Brady Street From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:00 PM	1	0	20	25	21	3	69	2	9	74	0	0	1	17	1	5	89	8	29	102	80	198	278
03:15 PM	0	0	12	20	12	5	77	0	7	82	0	0	0	2	0	2	83	3	19	88	48	182	230
03:30 PM	0	0	4	11	4	3	70	1	5	74	0	0	0	5	0	2	89	3	2	94	23	172	195
03:45 PM	2	0	1	12	3	4	56	2	4	62	0	0	0	8	0	10	89	10	3	109	27	174	201
Total	3	0	37	68	40	15	272	5	25	292	0	0	1	32	1	19	350	24	53	393	178	726	904
04:00 PM	0	0	4	9	4	4	63	0	8	67	0	0	0	18	0	4	113	7	0	124	35	195	230
04:15 PM	1	0	0	18	1	4	65	3	3	72	0	0	0	10	0	7	112	6	2	125	33	198	231
04:30 PM	2	0	6	5	8	3	75	1	4	79	0	0	0	14	0	5	105	13	4	123	27	210	237
04:45 PM	0	0	4	14	4	2	74	0	11	76	0	0	0	20	0	3	111	7	2	121	47	201	248
Total	3	0	14	46	17	13	277	4	26	294	0	0	0	62	0	19	441	33	8	493	142	804	946
05:00 PM	2	0	1	10	3	1	71	2	3	74	0	0	0	10	0	9	125	9	1	143	24	220	244
05:15 PM	0	1	1	11	2	2	80	4	7	86	0	0	0	19	0	4	126	5	7	135	44	223	267
05:30 PM	1	0	2	11	3	4	77	6	3	87	0	0	0	19	0	4	128	12	8	144	41	234	275
05:45 PM	0	0	1	23	1	4	67	1	13	72	0	0	0	16	0	4	118	9	6	131	58	204	262
Total	3	1	5	55	9	11	295	13	26	319	0	0	0	64	0	21	497	35	22	553	167	881	1048
Grand Total	9	1	56	169	66	39	844	22	77	905	0	0	1	158	1	59	1288	92	83	1439	487	2411	2898
Apprch %	13.6	1.5	84.8			4.3	93.3	2.4			0	0	100			4.1	89.5	6.4					
Total %	0.4	0	2.3		2.7	1.6	35	0.9		37.5	0	0	0		0	2.4	53.4	3.8		59.7	16.8	83.2	
Cars	9	1	56		235	38	827	22		964	0	0	0		158	59	1273	92		1507	0	0	2864
% Cars	100	100	100	100	100	97.4	98	100	100	98.2	0	0	0	100	99.4	100	98.8	100	100	99	0	0	98.8
Heavy Vehicles	0	0	0		0	1	17	0		18	0	0	1		1	0	15	0		15	0	0	34
% Heavy Vehicles	0	0	0	0	0	2.6	2	0	0	1.8	0	0	100	0	0.6	0	1.2	0	0	1	0	0	1.2

Brady Street & Franklin Place
Weekday PM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Brady St & Franklin Pl_PM
Site Code :
Start Date : 11/8/2016
Page No : 1

Groups Printed- Heavy Vehicles

	Franklin Place From North					Brady Street From East					Franklin Place From South					Brady Street From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	1	0	0	1	0	4	4
03:15 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	3	3
03:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4
03:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
Total	0	0	0	0	0	1	7	0	0	8	0	0	1	0	1	0	4	0	0	4	0	13	13
04:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
04:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	4	4
04:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	4	4
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
Total	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	7	0	0	7	0	13	13
05:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
05:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	8	8
Grand Total	0	0	0	0	0	1	17	0	0	18	0	0	1	0	1	0	15	0	0	15	0	34	34
Apprch %	0	0	0			5.6	94.4	0			0	0	100			0	100	0					
Total %	0	0	0		0	2.9	50	0		52.9	0	0	2.9		2.9	0	44.1	0		44.1	0	100	

Brady Street & Arlington Place
Weekday AM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Brady St & Arlington Pl_AM
Site Code :
Start Date : 11/8/2016
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Groups Printed- Cars - Heavy Vehicle

	Arlington Place From North					Brady Street From East					Arlington Place From South					Brady Street From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:45 AM	0	0	0	0	0	7	60	1	3	68	0	0	0	9	0	0	32	21	9	53	21	121	142
Total	0	0	0	0	0	7	60	1	3	68	0	0	0	9	0	0	32	21	9	53	21	121	142
07:00 AM	0	0	0	0	0	5	71	0	1	76	0	0	0	15	0	0	25	19	8	44	24	120	144
07:15 AM	0	0	0	0	0	4	92	0	2	96	0	0	0	15	0	0	35	9	11	44	28	140	168
07:30 AM	0	0	0	0	0	6	104	1	2	111	0	0	0	17	0	0	48	8	15	56	34	167	201
07:45 AM	0	0	0	0	0	7	121	0	5	128	0	0	0	15	0	1	49	14	11	64	31	192	223
Total	0	0	0	0	0	22	388	1	10	411	0	0	0	62	0	1	157	50	45	208	117	619	736
08:00 AM	0	0	0	0	0	6	77	0	3	83	0	0	0	22	0	0	49	5	9	54	34	137	171
08:15 AM	0	0	0	0	0	7	75	0	3	82	0	0	0	13	0	0	42	8	12	50	28	132	160
08:30 AM	0	0	0	0	0	7	76	0	2	83	0	0	0	15	0	0	48	8	10	56	27	139	166
Grand Total	0	0	0	0	0	49	676	2	21	727	0	0	0	121	0	1	328	92	85	421	227	1148	1375
Apprch %	0	0	0			6.7	93	0.3			0	0	0			0.2	77.9	21.9					
Total %	0	0	0		0	4.3	58.9	0.2		63.3	0	0	0		0	0.1	28.6	8		36.7	16.5	83.5	
Cars	0	0	0		0	48	653	2		724	0	0	0		121	1	304	87		477	0	0	1322
% Cars	0	0	0	0	0	98	96.6	100	100	96.8	0	0	0	100	100	100	92.7	94.6	100	94.3	0	0	96.1
Heavy Vehicle	0	0	0		0	1	23	0		24	0	0	0		0	0	24	5		29	0	0	53
% Heavy Vehicle	0	0	0	0	0	2	3.4	0	0	3.2	0	0	0	0	0	0	7.3	5.4	0	5.7	0	0	3.9

Brady Street & Arlington Place
Weekday AM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Brady St & Arlington Pl_AM
Site Code :
Start Date : 11/8/2016
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Groups Printed- Heavy Vehicle

	Arlington Place From North					Brady Street From East					Arlington Place From South					Brady Street From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	3	3
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	3	3
07:00 AM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	3	0	0	3	0	10	10
07:15 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4
07:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	6	6
07:45 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	1	0	5	0	9	9
Total	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	0	12	1	0	13	0	29	29
08:00 AM	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	6	0	0	6	0	10	10
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	3	3
08:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	2	0	5	0	8	8
Grand Total	0	0	0	0	0	1	23	0	0	24	0	0	0	0	0	0	24	5	0	29	0	53	53
Apprch %	0	0	0			4.2	95.8	0			0	0	0			0	82.8	17.2					
Total %	0	0	0		0	1.9	43.4	0		45.3	0	0	0		0	0	45.3	9.4		54.7	0	100	

Brady Street & Arlington Place
Weekday PM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Brady St & Arlington Pl_PM
Site Code :
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Groups Printed- Cars - Heavy Vehicle

	Arlington Place From North					Brady Street From East					Arlington Place From South					Brady Street From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	4	65	0	6	69	0	0	0	32	0	1	99	11	8	111	46	180	226
04:15 PM	0	0	0	0	0	4	75	0	3	79	0	0	0	20	0	1	90	25	13	116	36	195	231
04:30 PM	0	0	0	0	0	5	77	0	4	82	0	0	0	11	0	2	91	10	10	103	25	185	210
04:45 PM	0	0	0	0	0	6	82	0	3	88	0	0	0	23	0	0	99	9	10	108	36	196	232
Total	0	0	0	0	0	19	299	0	16	318	0	0	0	86	0	4	379	55	41	438	143	756	899
05:00 PM	0	0	0	0	0	5	76	0	5	81	0	0	0	21	0	1	111	10	12	122	38	203	241
05:15 PM	0	0	0	0	0	6	86	0	5	92	0	0	0	41	0	1	121	15	10	137	56	229	285
05:30 PM	0	0	0	0	0	6	91	0	7	97	0	0	0	24	0	2	114	11	10	127	41	224	265
05:45 PM	0	0	0	0	0	5	74	1	5	80	0	0	0	17	0	3	98	23	7	124	29	204	233
Total	0	0	0	0	0	22	327	1	22	350	0	0	0	103	0	7	444	59	39	510	164	860	1024
Grand Total	0	0	0	0	0	41	626	1	38	668	0	0	0	189	0	11	823	114	80	948	307	1616	1923
Apprch %	0	0	0			6.1	93.7	0.1			0	0	0			1.2	86.8	12					
Total %	0	0	0		0	2.5	38.7	0.1		41.3	0	0	0		0	0.7	50.9	7.1		58.7	16	84	
Cars	0	0	0		0	41	615	1		695	0	0	0		189	11	811	114		1016	0	0	1900
% Cars	0	0	0	0	0	100	98.2	100	100	98.4	0	0	0	100	100	100	98.5	100	100	98.8	0	0	98.8
Heavy Vehicle	0	0	0		0	0	11	0		11	0	0	0		0	0	12	0		12	0	0	23
% Heavy Vehicle	0	0	0	0	0	0	1.8	0	0	1.6	0	0	0	0	0	0	1.5	0	0	1.2	0	0	1.2

Brady Street & Arlington Place
Weekday PM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Brady St & Arlington Pl_PM
Site Code :
Start Date : 11/8/2016
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Groups Printed- Heavy Vehicle

	Arlington Place From North					Brady Street From East					Arlington Place From South					Brady Street From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
04:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	4	4
04:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	5	5
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
Total	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	8	0	0	8	0	15	15
05:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
05:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	8	8
Grand Total	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	12	0	0	12	0	23	23
Apprch %	0	0	0			0	100	0			0	0	0			0	100	0					
Total %	0	0	0		0	0	47.8	0		47.8	0	0	0		0	0	52.2	0		52.2	0	100	

Arlington Place & Warren Avenue
Weekday AM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Arlington Pl & Warren Ave_AM
Site Code :
Start Date : 11/8/2016
Page No : 1

Groups Printed- Cars - Heavy Vehicle

	Warren Avenue From North						Arlington Place From East						Warren Avenue From South						Arlington Place From West								
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:45 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	8	0	0	8	0	11	0	13	0	24	0	35	35
Total	0	0	3	0	0	3	0	0	0	0	0	0	0	0	8	0	0	8	0	11	0	13	0	24	0	35	35
07:00 AM	0	0	7	0	1	7	0	0	0	0	0	0	0	1	9	0	3	10	0	9	0	13	0	22	4	39	43
07:15 AM	0	0	6	0	1	6	0	0	0	0	0	0	3	0	13	0	1	16	0	8	0	12	2	20	4	42	46
07:30 AM	0	0	6	0	1	6	0	0	0	0	0	0	1	0	11	0	0	12	0	1	0	10	4	11	5	29	34
07:45 AM	0	0	6	0	2	6	0	0	0	0	0	0	0	0	14	0	2	14	0	7	0	15	7	22	11	42	53
Total	0	0	25	0	5	25	0	0	0	0	0	0	4	1	47	0	6	52	0	25	0	50	13	75	24	152	176
08:00 AM	0	0	6	1	2	7	0	0	0	0	0	0	0	0	8	0	0	8	0	6	0	14	4	20	6	35	41
08:15 AM	0	0	5	0	1	5	0	0	0	0	0	0	0	0	7	0	0	7	0	6	0	11	3	17	4	29	33
08:30 AM	1	0	5	0	2	6	0	0	0	0	0	0	1	0	3	0	1	4	0	6	0	9	5	15	8	25	33
Grand Total	1	0	44	1	10	46	0	0	0	0	0	0	5	1	73	0	7	79	0	54	0	97	25	151	42	276	318
Apprch %	2.2	0	95.7	2.2			0	0	0	0			6.3	1.3	92.4	0			0	35.8	0	64.2					
Total %	0.4	0	15.9	0.4		16.7	0	0	0	0		0	1.8	0.4	26.4	0		28.6	0	19.6	0	35.1		54.7	13.2	86.8	
Cars	0	0	43	1		54	0	0	0	0		0	5	1	72	0		85	0	51	0	97		173	0	0	312
% Cars	0	0	97.7	100	100	96.4	0	0	0	0	0	0	100	100	98.6	0	100	98.8	0	94.4	0	100	100	98.3	0	0	98.1
Heavy Vehicle	1	0	1	0		2	0	0	0	0		0	0	0	1	0		1	0	3	0	0		3	0	0	6
% Heavy Vehicle	100	0	2.3	0	0	3.6	0	0	0	0	0	0	0	0	1.4	0	0	1.2	0	5.6	0	0	0	1.7	0	0	1.9

Arlington Place & Warren Avenue
Weekday AM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Arlington Pl & Warren Ave_AM
Site Code :
Start Date : 11/8/2016
Page No : 1

Groups Printed- Heavy Vehicle

	Warren Avenue From North						Arlington Place From East						Warren Avenue From South						Arlington Place From West								
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	0	2	2
08:30 AM	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	3	3
Grand Total	1	0	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	0	0	3	0	6	6
Apprch %	50	0	50	0			0	0	0	0			0	0	100	0			0	100	0	0					
Total %	16.7	0	16.7	0		33.3	0	0	0	0		0	0	0	16.7	0		16.7	0	50	0	0		50	0	100	

Arlington Place & Warren Avenue
Weekday PM Peak Traffic Count
Milwuakee, WI
2016-0410

File Name : Arlington Pl & Warren Ave_PM
Site Code :
Start Date : 11/8/2016
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Groups Printed- Cars - Heavy Vehicle

	Warren Avenue From North						Arlington Place From East						Warren Avenue From South						Arlington Place From West								
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	8	0	2	8	0	0	0	0	0	0	1	0	11	0	2	12	0	5	0	7	7	12	11	32	43
04:15 PM	0	0	8	0	5	8	0	0	0	0	0	0	1	1	23	0	0	25	0	6	0	23	3	29	8	62	70
04:30 PM	0	0	5	0	2	5	0	0	0	0	0	0	1	0	20	0	5	21	0	5	0	13	5	18	12	44	56
04:45 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	12	0	0	12	0	6	0	7	4	13	4	28	32
Total	0	0	24	0	9	24	0	0	0	0	0	0	3	1	66	0	7	70	0	22	0	50	19	72	35	166	201
05:00 PM	0	0	7	0	0	7	0	0	0	0	0	0	1	2	20	0	0	23	0	3	0	10	3	13	3	43	46
05:15 PM	0	0	10	0	0	10	0	0	0	0	0	0	0	0	26	0	0	26	0	5	0	15	11	20	11	56	67
05:30 PM	0	0	9	0	2	9	0	0	0	0	0	0	0	0	21	0	0	21	0	5	0	13	0	18	2	48	50
05:45 PM	0	0	12	0	0	12	0	0	0	0	0	0	0	1	16	0	0	17	0	5	0	18	4	23	4	52	56
Total	0	0	38	0	2	38	0	0	0	0	0	0	1	3	83	0	0	87	0	18	0	56	18	74	20	199	219
06:00 PM	0	0	5	0	0	5	0	0	0	0	0	0	0	1	16	0	0	17	0	7	0	10	6	17	6	39	45
Grand Total	0	0	67	0	11	67	0	0	0	0	0	0	4	5	165	0	7	174	0	47	0	116	43	163	61	404	465
Apprch %	0	0	100	0			0	0	0	0			2.3	2.9	94.8	0			0	28.8	0	71.2					
Total %	0	0	16.6	0		16.6	0	0	0	0		0	1	1.2	40.8	0		43.1	0	11.6	0	28.7		40.3	13.1	86.9	
Cars	0	0	67	0		78	0	0	0	0		0	4	5	164	0		180	0	47	0	116		206	0	0	464
% Cars	0	0	100	0	100	100	0	0	0	0	0	0	100	100	99.4	0	100	99.4	0	100	0	100	100	100	0	0	99.8
Heavy Vehicle	0	0	0	0		0	0	0	0	0		0	0	0	1	0		1	0	0	0	0		0	0	0	1
% Heavy Vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0.6	0	0	0	0	0	0	0	0	0.2

Arlington Place & Warren Avenue
Weekday PM Peak Traffic Count
Milwuakee, WI
2016-0410

File Name : Arlington Pl & Warren Ave_PM
Site Code :
Start Date : 11/8/2016
Page No : 1

Groups Printed- Heavy Vehicle

	Warren Avenue From North						Arlington Place From East						Warren Avenue From South						Arlington Place From West								
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1
Apprch %	0	0	0	0			0	0	0	0			0	0	100	0			0	0	0	0					
Total %	0	0	0	0		0	0	0	0	0		0	0	0	100	0		100	0	0	0	0		0	0	100	

Franklin Pl & Warren Ave & Lyon St
Weekday AM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Franklin Pl & Warren Ave & Lyon St_AM
Site Code :
Start Date : 11/8/2016
Page No : 1

Groups Printed- Cars - Heavy Vehicle

	Franklin Place From North						Warren Avenue From East						Franklin Place From South						Lyon Street From West								
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:45 AM	0	2	0	4	5	6	0	0	11	5	3	16	0	6	0	0	4	6	0	0	6	0	2	6	14	34	48
Total	0	2	0	4	5	6	0	0	11	5	3	16	0	6	0	0	4	6	0	0	6	0	2	6	14	34	48
07:00 AM	0	3	0	3	3	6	0	0	12	7	3	19	0	8	1	4	4	13	0	0	4	0	1	4	11	42	53
07:15 AM	0	3	0	4	2	7	1	0	18	8	1	27	0	4	1	0	7	5	1	0	4	0	2	5	12	44	56
07:30 AM	0	7	0	6	2	13	1	0	14	3	1	18	0	9	0	6	4	15	0	0	4	0	10	4	17	50	67
07:45 AM	0	2	0	3	6	5	0	0	18	5	2	23	0	7	1	2	4	10	0	0	7	0	5	7	17	45	62
Total	0	15	0	16	13	31	2	0	62	23	7	87	0	28	3	12	19	43	1	0	19	0	18	20	57	181	238
08:00 AM	0	2	0	4	1	6	0	0	15	4	1	19	0	4	1	3	7	8	0	1	2	0	4	3	13	36	49
08:15 AM	0	3	0	3	3	6	0	0	14	4	3	18	0	1	1	4	2	6	0	1	4	0	1	5	9	35	44
08:30 AM	0	2	0	2	10	4	0	0	14	2	4	16	0	4	1	0	5	5	0	0	5	0	3	5	22	30	52
Grand Total	0	24	0	29	32	53	2	0	116	38	18	156	0	43	6	19	37	68	1	2	36	0	28	39	115	316	431
Apprch %	0	45.3	0	54.7			1.3	0	74.4	24.4			0	63.2	8.8	27.9			2.6	5.1	92.3	0					
Total %	0	7.6	0	9.2		16.8	0.6	0	36.7	12		49.4	0	13.6	1.9	6		21.5	0.3	0.6	11.4	0		12.3	26.7	73.3	
Cars	0	24	0	29		85	2	0	116	38		174	0	41	6	19		103	1	2	36	0		67	0	0	429
% Cars	0	100	0	100	100	100	100	0	100	100	100	100	0	95.3	100	100	100	98.1	100	100	100	0	100	100	0	0	99.5
Heavy Vehicle	0	0	0	0		0	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	0	0	2
% Heavy Vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0	4.7	0	0	0	1.9	0	0	0	0	0	0	0	0	0.5

Franklin Pl & Warren Ave & Lyon St
Weekday AM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Franklin Pl & Warren Ave & Lyon St_AM
Site Code :
Start Date : 11/8/2016
Page No : 1

Groups Printed- Heavy Vehicle

	Franklin Place From North						Warren Avenue From East						Franklin Place From South						Lyon Street From West								
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2	2
Apprch %	0	0	0	0			0	0	0	0			0	100	0	0			0	0	0	0					
Total %	0	0	0	0		0	0	0	0	0		0	0	100	0	0		100	0	0	0	0		0	0	100	

Franklin Pl & Warren Ave & Lyon St
Weekday PM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Franklin Pl & Warren Ave & Lyon St_PM
Site Code :
Start Date : 11/8/2016
Page No : 1

Groups Printed- Cars - Heavy Vehicles

	Franklin Place From North						Warren Avenue From East						Franklin Place From South						Lyon Street From West								
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	10	0	5	8	15	0	0	6	12	5	18	0	0	3	8	5	11	0	0	9	0	2	9	20	53	73
04:15 PM	0	14	0	6	3	20	0	0	15	11	4	26	0	0	2	7	2	9	0	1	13	0	0	14	9	69	78
04:30 PM	0	7	0	6	8	13	0	0	12	5	7	17	0	0	4	8	6	12	0	0	13	0	0	13	21	55	76
04:45 PM	0	10	0	4	4	14	0	0	6	4	4	10	0	0	2	4	1	6	1	0	7	0	0	8	9	38	47
Total	0	41	0	21	23	62	0	0	39	32	20	71	0	0	11	27	14	38	1	1	42	0	2	44	59	215	274
05:00 PM	1	8	0	4	10	13	1	0	10	4	5	15	0	0	2	11	2	13	0	1	16	0	3	17	20	58	78
05:15 PM	0	7	0	5	8	12	1	0	13	9	0	23	0	0	4	6	2	10	0	0	15	0	0	15	10	60	70
05:30 PM	0	7	0	3	3	10	0	0	7	8	2	15	0	1	2	6	2	9	1	3	17	0	0	21	7	55	62
05:45 PM	0	15	0	5	9	20	1	0	10	7	2	18	0	1	3	7	5	11	1	1	17	0	0	19	16	68	84
Total	1	37	0	17	30	55	3	0	40	28	9	71	0	2	11	30	11	43	2	5	65	0	3	72	53	241	294
06:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3	2	3	0	0	3	0	1	3	3	7	10
Grand Total	1	79	0	38	53	118	3	0	79	60	29	142	0	2	22	60	27	84	3	6	110	0	6	119	115	463	578
Apprch %	0.8	66.9	0	32.2			2.1	0	55.6	42.3			0	2.4	26.2	71.4			2.5	5	92.4	0					
Total %	0.2	17.1	0	8.2		25.5	0.6	0	17.1	13		30.7	0	0.4	4.8	13		18.1	0.6	1.3	23.8	0		25.7	19.9	80.1	
Cars	1	79	0	38		171	3	0	79	60		171	0	2	22	59		110	3	6	110	0		125	0	0	577
% Cars	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	98.3	100	99.1	100	100	100	0	100	100	0	0	99.8
Heavy Vehicles	0	0	0	0		0	0	0	0	0		0	0	0	0	1		1	0	0	0	0		0	0	0	1
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7	0	0.9	0	0	0	0	0	0	0	0	0.2

Franklin Pl & Warren Ave & Lyon St
Weekday PM Peak Traffic Count
Milwaukee, WI
2016-0410

File Name : Franklin Pl & Warren Ave & Lyon St_PM
Site Code :
Start Date : 11/8/2016
Page No : 1

Groups Printed- Heavy Vehicles

	Franklin Place From North						Warren Avenue From East						Franklin Place From South						Lyon Street From West								
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	1
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	1
Apprch %	0	0	0	0			0	0	0	0			0	0	0	100			0	0	0	0					
Total %	0	0	0	0		0	0	0	0	0		0	0	0	0	100		100	0	0	0	0		0	0	100	

Appendix 2

Existing (Year 2016) Traffic Operational Analysis With Existing Geometrics

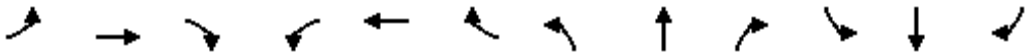
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	15	205	20	10	390	10	0	0	0	5	1	45
Future Vol, veh/h	15	205	20	10	390	10	0	0	0	5	1	45
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	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	6	6	6	3	3	3	2	2	2	2	2	2
Mvmt Flow	19	256	25	13	488	13	0	0	0	6	1	56

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	500	0	0	281	0	0	825	838	494
Stage 1	-	-	-	-	-	-	519	519	-
Stage 2	-	-	-	-	-	-	306	319	-
Critical Hdwy	4.16	-	-	4.13	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.254	-	-	2.227	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1044	-	-	1276	-	-	342	302	575
Stage 1	-	-	-	-	-	-	597	533	-
Stage 2	-	-	-	-	-	-	747	653	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1044	-	-	1276	-	-	330	0	575
Mov Cap-2 Maneuver	-	-	-	-	-	-	330	0	-
Stage 1	-	-	-	-	-	-	589	0	-
Stage 2	-	-	-	-	-	-	731	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0.2	12.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1044	-	-	1276	-	-	535
HCM Lane V/C Ratio	0.018	-	-	0.01	-	-	0.119
HCM Control Delay (s)	8.5	0	-	7.8	0	-	12.6
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	-	-	0	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	205	20	10	390	10	0	0	0	5	1	45
Future Volume (vph)	15	205	20	10	390	10	0	0	0	5	1	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.997						0.880	
Flt Protected		0.997			0.999						0.995	
Satd. Flow (prot)	0	1767	0	0	1837	0	0	0	0	0	1631	0
Flt Permitted		0.997			0.999						0.995	
Satd. Flow (perm)	0	1767	0	0	1837	0	0	0	0	0	1631	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		309			364			797			276	
Travel Time (s)		8.4			9.9			21.7			7.5	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	6%	6%	6%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	19	256	25	13	488	13	0	0	0	6	1	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	300	0	0	514	0	0	0	0	0	63	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

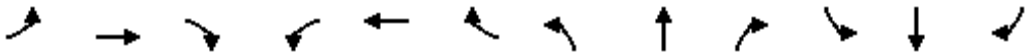
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	1	180	35	25	395	1	0	0	0	1	1	1
Future Vol, veh/h	1	180	35	25	395	1	0	0	0	1	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	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	7	7	3	3	2	2	2	2	2	2	2
Mvmt Flow	1	217	42	30	476	1	0	0	0	1	1	1

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	477	0	0	259	0	0	777	798	477
Stage 1	-	-	-	-	-	-	537	537	-
Stage 2	-	-	-	-	-	-	240	261	-
Critical Hdwy	4.12	-	-	4.13	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1085	-	-	1300	-	-	365	319	588
Stage 1	-	-	-	-	-	-	586	523	-
Stage 2	-	-	-	-	-	-	800	692	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1085	-	-	1300	-	-	353	0	588
Mov Cap-2 Maneuver	-	-	-	-	-	-	353	0	-
Stage 1	-	-	-	-	-	-	568	0	-
Stage 2	-	-	-	-	-	-	799	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.5	13.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1085	-	-	1300	-	-	441
HCM Lane V/C Ratio	0.001	-	-	0.023	-	-	0.008
HCM Control Delay (s)	8.3	0	-	7.8	0	-	13.2
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	-	-	0.1	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	180	35	25	395	1	0	0	0	1	1	1
Future Volume (vph)	1	180	35	25	395	1	0	0	0	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.978									0.955	
Flt Protected					0.997						0.984	
Satd. Flow (prot)	0	1737	0	0	1839	0	0	0	0	0	1750	0
Flt Permitted					0.997						0.984	
Satd. Flow (perm)	0	1737	0	0	1839	0	0	0	0	0	1750	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		364			359			580			122	
Travel Time (s)		9.9			9.8			15.8			3.3	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	2%	7%	7%	3%	3%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	1	217	42	30	476	1	0	0	0	1	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	260	0	0	507	0	0	0	0	0	3	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4.5

Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	25	50	0	50	25	0
Future Vol, veh/h	25	50	0	50	25	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	57	0	57	28	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	85	28	-	0	-	0
Stage 1	28	-	-	-	-	-
Stage 2	57	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	916	1047	0	-	-	0
Stage 1	995	-	0	-	-	0
Stage 2	966	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	916	1047	-	-	-	-
Mov Cap-2 Maneuver	916	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	966	-	-	-	-	-

Approach	SB	NE	SW
HCM Control Delay, s	8.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	SBLn1	SWT
Capacity (veh/h)	-	999	-
HCM Lane V/C Ratio	-	0.085	-
HCM Control Delay (s)	-	8.9	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	0.3	-

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	25	50	0	50	25	0
Future Volume (vph)	25	50	0	50	25	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.909					
Flt Protected	0.984					
Satd. Flow (prot)	1666	0	0	1863	1863	0
Flt Permitted	0.984					
Satd. Flow (perm)	1666	0	0	1863	1863	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	580			664	534	
Travel Time (s)	15.8			18.1	14.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	28	57	0	57	28	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	0	0	57	28	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 14.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	NEU	NEL	NET	NER
Lane Configurations												
Traffic Vol, veh/h	0	25	5	10	0	15	0	20	0	0	20	0
Future Vol, veh/h	0	25	5	10	0	15	0	20	0	0	20	0
Peak Hour Factor	0.92	0.88	0.88	0.88	0.92	0.88	0.88	0.88	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	0	28	6	11	0	17	0	23	0	0	23	0
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	NB	SB	NE
Opposing Approach	SB	NB	SW
Opposing Lanes	1	1	1
Conflicting Approach Left	NE	SW	SB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	SW	NE	NB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.4	7.2	7.3
HCM LOS	A	A	A

Lane	NELn1	NBLn1	SBLn1	SWLn1
Vol Left, %	0%	62%	43%	0%
Vol Thru, %	100%	12%	0%	76%
Vol Right, %	0%	25%	57%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	40	35	85
LT Vol	0	25	15	0
Through Vol	20	5	0	65
RT Vol	0	10	20	20
Lane Flow Rate	23	45	40	97
Geometry Grp	1	1	1	1
Degree of Util (X)	0.026	0.052	0.043	0.106
Departure Headway (Hd)	4.172	4.146	3.918	3.956
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	852	857	905	901
Service Time	2.229	2.204	1.979	2
HCM Lane V/C Ratio	0.027	0.053	0.044	0.108
HCM Control Delay	7.3	7.4	7.2	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SWU	SWL	SWT	SWR
Lane Configurations				
Traffic Vol, veh/h	0	0	65	20
Future Vol, veh/h	0	0	65	20
Peak Hour Factor	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	74	23
Number of Lanes	0	0	1	0

Approach	SW
Opposing Approach	NE
Opposing Lanes	1
Conflicting Approach Left	NB
Conflicting Lanes Left	1
Conflicting Approach Right	SB
Conflicting Lanes Right	1
HCM Control Delay	7.5
HCM LOS	A

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	25	5	10	15	0	20	0	20	0	0	65	20
Future Volume (vph)	25	5	10	15	0	20	0	20	0	0	65	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.967			0.922						0.968	
Flt Protected		0.970			0.979							
Satd. Flow (prot)	0	1747	0	0	1681	0	0	1845	0	0	1803	0
Flt Permitted		0.970			0.979							
Satd. Flow (perm)	0	1747	0	0	1681	0	0	1845	0	0	1803	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			245			170			664	
Travel Time (s)		13.5			6.7			4.6			18.1	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Adj. Flow (vph)	28	6	11	17	0	23	0	23	0	0	74	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	0	0	40	0	0	23	0	0	97	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 14.7%		ICU Level of Service A	
Analysis Period (min) 15			

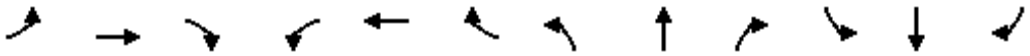
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	20	500	35	10	295	15	0	0	0	5	1	5
Future Vol, veh/h	20	500	35	10	295	15	0	0	0	5	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	532	37	11	314	16	0	0	0	5	1	5

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	330	0	0	569	0	0	936	955	322
Stage 1	-	-	-	-	-	-	343	343	-
Stage 2	-	-	-	-	-	-	593	612	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1229	-	-	1003	-	-	294	258	719
Stage 1	-	-	-	-	-	-	719	637	-
Stage 2	-	-	-	-	-	-	552	484	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1229	-	-	1003	-	-	283	0	719
Mov Cap-2 Maneuver	-	-	-	-	-	-	283	0	-
Stage 1	-	-	-	-	-	-	710	0	-
Stage 2	-	-	-	-	-	-	538	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0.3	14.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1229	-	-	1003	-	-	406
HCM Lane V/C Ratio	0.017	-	-	0.011	-	-	0.029
HCM Control Delay (s)	8	0	-	8.6	0	-	14.1
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	-	-	0	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	500	35	10	295	15	0	0	0	5	1	5
Future Volume (vph)	20	500	35	10	295	15	0	0	0	5	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.994						0.939	
Flt Protected		0.998			0.998						0.978	
Satd. Flow (prot)	0	1844	0	0	1848	0	0	0	0	0	1711	0
Flt Permitted		0.998			0.998						0.978	
Satd. Flow (perm)	0	1844	0	0	1848	0	0	0	0	0	1711	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		309			364			797			276	
Travel Time (s)		8.4			9.9			21.7			7.5	
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
Adj. Flow (vph)	21	532	37	11	314	16	0	0	0	5	1	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	590	0	0	341	0	0	0	0	0	11	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.0%		ICU Level of Service A	
Analysis Period (min) 15			

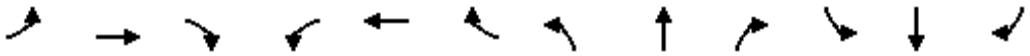
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	10	445	60	25	330	1	0	0	0	1	1	1
Future Vol, veh/h	10	445	60	25	330	1	0	0	0	1	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	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	473	64	27	351	1	0	0	0	1	1	1

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	352	0	0	537	0	0	932	964	352
Stage 1	-	-	-	-	-	-	405	405	-
Stage 2	-	-	-	-	-	-	527	559	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1207	-	-	1031	-	-	296	255	692
Stage 1	-	-	-	-	-	-	673	598	-
Stage 2	-	-	-	-	-	-	592	511	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1207	-	-	1031	-	-	283	0	692
Mov Cap-2 Maneuver	-	-	-	-	-	-	283	0	-
Stage 1	-	-	-	-	-	-	651	0	-
Stage 2	-	-	-	-	-	-	584	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0.6	14
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1207	-	-	1031	-	-	402
HCM Lane V/C Ratio	0.009	-	-	0.026	-	-	0.008
HCM Control Delay (s)	8	0	-	8.6	0	-	14
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	-	-	0.1	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	445	60	25	330	1	0	0	0	1	1	1
Future Volume (vph)	10	445	60	25	330	1	0	0	0	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984									0.955	
Flt Protected		0.999			0.996						0.984	
Satd. Flow (prot)	0	1831	0	0	1855	0	0	0	0	0	1750	0
Flt Permitted		0.999			0.996						0.984	
Satd. Flow (perm)	0	1831	0	0	1855	0	0	0	0	0	1750	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		364			359			580			123	
Travel Time (s)		9.9			9.8			15.8			3.4	
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
Adj. Flow (vph)	11	473	64	27	351	1	0	0	0	1	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	548	0	0	379	0	0	0	0	0	3	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.4

Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	20	55	0	85	40	0
Future Vol, veh/h	20	55	0	85	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	63	0	98	46	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	144	46	-	0	-	0
Stage 1	46	-	-	-	-	-
Stage 2	98	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	849	1023	0	-	-	0
Stage 1	976	-	0	-	-	0
Stage 2	926	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	849	1023	-	-	-	-
Mov Cap-2 Maneuver	849	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	SB	NE	SW
HCM Control Delay, s	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	SBLn1	SWT
Capacity (veh/h)	-	970	-
HCM Lane V/C Ratio	-	0.089	-
HCM Control Delay (s)	-	9.1	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	0.3	-

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	20	55	0	85	40	0
Future Volume (vph)	20	55	0	85	40	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.901					
Flt Protected	0.987					
Satd. Flow (prot)	1657	0	0	1863	1863	0
Flt Permitted	0.987					
Satd. Flow (perm)	1657	0	0	1863	1863	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	580			664	534	
Travel Time (s)	15.8			18.1	14.6	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	23	63	0	98	46	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	86	0	0	98	46	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	NEU	NEL	NET	NER
Lane Configurations												
Traffic Vol, veh/h	0	5	10	30	0	40	0	20	0	10	65	0
Future Vol, veh/h	0	5	10	30	0	40	0	20	0	10	65	0
Peak Hour Factor	0.92	0.88	0.88	0.88	0.92	0.88	0.88	0.88	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	0	6	11	34	0	45	0	23	0	11	74	0
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	NB	SB	NE
Opposing Approach	SB	NB	SW
Opposing Lanes	1	1	1
Conflicting Approach Left	NE	SW	SB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	SW	NE	NB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.2	7.7	7.8
HCM LOS	A	A	A

Lane	NELn1	NBLn1	SBLn1	SWLn1
Vol Left, %	13%	11%	67%	0%
Vol Thru, %	87%	22%	0%	60%
Vol Right, %	0%	67%	33%	40%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	75	45	60	75
LT Vol	10	5	40	0
Through Vol	65	10	0	45
RT Vol	0	30	20	30
Lane Flow Rate	85	51	68	85
Geometry Grp	1	1	1	1
Degree of Util (X)	0.101	0.057	0.08	0.094
Departure Headway (Hd)	4.251	4.005	4.202	3.966
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	833	899	839	891
Service Time	2.328	2.005	2.296	2.049
HCM Lane V/C Ratio	0.102	0.057	0.081	0.095
HCM Control Delay	7.8	7.2	7.7	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.2	0.3	0.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SWU	SWL	SWT	SWR
Lane Configurations				
Traffic Vol, veh/h	0	0	45	30
Future Vol, veh/h	0	0	45	30
Peak Hour Factor	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	51	34
Number of Lanes	0	0	1	0

Approach	SW
Opposing Approach	NE
Opposing Lanes	1
Conflicting Approach Left	NB
Conflicting Lanes Left	1
Conflicting Approach Right	SB
Conflicting Lanes Right	1
HCM Control Delay	7.5
HCM LOS	A

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	5	10	30	40	0	20	10	65	0	0	45	30
Future Volume (vph)	5	10	30	40	0	20	10	65	0	0	45	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.910			0.954						0.946	
Flt Protected		0.994			0.968			0.994				
Satd. Flow (prot)	0	1685	0	0	1720	0	0	1834	0	0	1762	0
Flt Permitted		0.994			0.968			0.994				
Satd. Flow (perm)	0	1685	0	0	1720	0	0	1834	0	0	1762	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			245			170			664	
Travel Time (s)		13.5			6.7			4.6			18.1	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Adj. Flow (vph)	6	11	34	45	0	23	11	74	0	0	51	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	51	0	0	68	0	0	85	0	0	85	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.4%		ICU Level of Service A	
Analysis Period (min) 15			

Appendix 3

Year 2017 Total Traffic Operational Analysis With Planned Geometrics

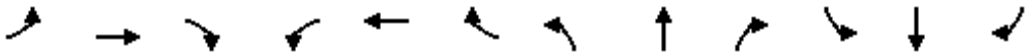
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	15	210	20	10	390	10	0	0	0	5	1	45
Future Vol, veh/h	15	210	20	10	390	10	0	0	0	5	1	45
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	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	6	6	6	3	3	3	2	2	2	2	2	2
Mvmt Flow	19	263	25	13	488	13	0	0	0	6	1	56

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	500	0	0	288	0	0	832	844	494
Stage 1	-	-	-	-	-	-	519	519	-
Stage 2	-	-	-	-	-	-	313	325	-
Critical Hdwy	4.16	-	-	4.13	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.254	-	-	2.227	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1044	-	-	1268	-	-	339	300	575
Stage 1	-	-	-	-	-	-	597	533	-
Stage 2	-	-	-	-	-	-	741	649	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1044	-	-	1268	-	-	327	0	575
Mov Cap-2 Maneuver	-	-	-	-	-	-	327	0	-
Stage 1	-	-	-	-	-	-	589	0	-
Stage 2	-	-	-	-	-	-	725	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0.2	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1044	-	-	1268	-	-	534
HCM Lane V/C Ratio	0.018	-	-	0.01	-	-	0.119
HCM Control Delay (s)	8.5	0	-	7.9	0	-	12.7
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	-	-	0	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	210	20	10	390	10	0	0	0	5	1	45
Future Volume (vph)	15	210	20	10	390	10	0	0	0	5	1	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.997						0.880	
Flt Protected		0.997			0.999						0.995	
Satd. Flow (prot)	0	1767	0	0	1837	0	0	0	0	0	1631	0
Flt Permitted		0.997			0.999						0.995	
Satd. Flow (perm)	0	1767	0	0	1837	0	0	0	0	0	1631	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		309			364			797			276	
Travel Time (s)		8.4			9.9			21.7			7.5	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	6%	6%	6%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	19	263	25	13	488	13	0	0	0	6	1	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	307	0	0	514	0	0	0	0	0	63	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

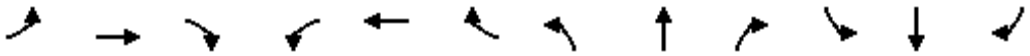
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	1	180	40	30	395	1	0	0	0	1	1	1
Future Vol, veh/h	1	180	40	30	395	1	0	0	0	1	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	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	7	7	3	3	2	2	2	2	2	2	2
Mvmt Flow	1	217	48	36	476	1	0	0	0	1	1	1

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	477	0	0	265	0	0	792	816	477
Stage 1	-	-	-	-	-	-	549	549	-
Stage 2	-	-	-	-	-	-	243	267	-
Critical Hdwy	4.12	-	-	4.13	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1085	-	-	1293	-	-	358	311	588
Stage 1	-	-	-	-	-	-	579	516	-
Stage 2	-	-	-	-	-	-	797	688	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1085	-	-	1293	-	-	344	0	588
Mov Cap-2 Maneuver	-	-	-	-	-	-	344	0	-
Stage 1	-	-	-	-	-	-	557	0	-
Stage 2	-	-	-	-	-	-	796	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.6	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1085	-	-	1293	-	-	434
HCM Lane V/C Ratio	0.001	-	-	0.028	-	-	0.008
HCM Control Delay (s)	8.3	0	-	7.9	0	-	13.4
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	-	-	0.1	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	180	40	30	395	1	0	0	0	1	1	1
Future Volume (vph)	1	180	40	30	395	1	0	0	0	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.976									0.955	
Flt Protected					0.997						0.984	
Satd. Flow (prot)	0	1733	0	0	1839	0	0	0	0	0	1750	0
Flt Permitted					0.997						0.984	
Satd. Flow (perm)	0	1733	0	0	1839	0	0	0	0	0	1750	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		364			359			580			91	
Travel Time (s)		9.9			9.8			15.8			2.5	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	2%	7%	7%	3%	3%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	1	217	48	36	476	1	0	0	0	1	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	266	0	0	513	0	0	0	0	0	3	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	5.5

Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	35	80	0	50	25	0
Future Vol, veh/h	35	80	0	50	25	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	91	0	57	28	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	85	28	-	0	-	0
Stage 1	28	-	-	-	-	-
Stage 2	57	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	916	1047	0	-	-	0
Stage 1	995	-	0	-	-	0
Stage 2	966	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	916	1047	-	-	-	-
Mov Cap-2 Maneuver	916	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	966	-	-	-	-	-

Approach	SB	NE	SW
HCM Control Delay, s	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	SBLn1	SWT
Capacity (veh/h)	-	1003	-
HCM Lane V/C Ratio	-	0.13	-
HCM Control Delay (s)	-	9.1	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	0.4	-

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	35	80	0	50	25	0
Future Volume (vph)	35	80	0	50	25	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.906					
Flt Protected	0.985					
Satd. Flow (prot)	1662	0	0	1863	1863	0
Flt Permitted	0.985					
Satd. Flow (perm)	1662	0	0	1863	1863	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	580			664	534	
Travel Time (s)	15.8			18.1	14.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	40	91	0	57	28	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	131	0	0	57	28	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	NEU	NEL	NET	NER
Lane Configurations												
Traffic Vol, veh/h	0	25	5	10	0	15	0	20	0	0	20	0
Future Vol, veh/h	0	25	5	10	0	15	0	20	0	0	20	0
Peak Hour Factor	0.92	0.88	0.88	0.88	0.92	0.88	0.88	0.88	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	0	28	6	11	0	17	0	23	0	0	23	0
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	NB	SB	NE
Opposing Approach	SB	NB	SW
Opposing Lanes	1	1	1
Conflicting Approach Left	NE	SW	SB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	SW	NE	NB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.5	7.2	7.4
HCM LOS	A	A	A

Lane	NELn1	NBLn1	SBLn1	SWLn1
Vol Left, %	0%	62%	43%	0%
Vol Thru, %	100%	12%	0%	83%
Vol Right, %	0%	25%	57%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	40	35	115
LT Vol	0	25	15	0
Through Vol	20	5	0	95
RT Vol	0	10	20	20
Lane Flow Rate	23	45	40	131
Geometry Grp	1	1	1	1
Degree of Util (X)	0.027	0.053	0.044	0.145
Departure Headway (Hd)	4.198	4.205	3.977	3.993
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	844	841	887	893
Service Time	2.267	2.284	2.059	2.042
HCM Lane V/C Ratio	0.027	0.054	0.045	0.147
HCM Control Delay	7.4	7.5	7.2	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.5

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SWU	SWL	SWT	SWR
Lane Configurations				
Traffic Vol, veh/h	0	0	95	20
Future Vol, veh/h	0	0	95	20
Peak Hour Factor	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	108	23
Number of Lanes	0	0	1	0

Approach	SW
Opposing Approach	NE
Opposing Lanes	1
Conflicting Approach Left	NB
Conflicting Lanes Left	1
Conflicting Approach Right	SB
Conflicting Lanes Right	1
HCM Control Delay	7.7
HCM LOS	A

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	25	5	10	15	0	20	0	20	0	0	95	20
Future Volume (vph)	25	5	10	15	0	20	0	20	0	0	95	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.967			0.922						0.976	
Flt Protected		0.970			0.979							
Satd. Flow (prot)	0	1747	0	0	1681	0	0	1845	0	0	1818	0
Flt Permitted		0.970			0.979							
Satd. Flow (perm)	0	1747	0	0	1681	0	0	1845	0	0	1818	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			245			170			664	
Travel Time (s)		13.5			6.7			4.6			18.1	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Adj. Flow (vph)	28	6	11	17	0	23	0	23	0	0	108	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	0	0	40	0	0	23	0	0	131	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.3%		ICU Level of Service A	
Analysis Period (min) 15			

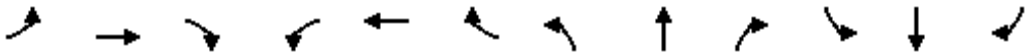
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	20	520	35	10	295	15	0	0	0	5	1	5
Future Vol, veh/h	20	520	35	10	295	15	0	0	0	5	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	553	37	11	314	16	0	0	0	5	1	5

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	330	0	0	590	0	0	957	976	322
Stage 1	-	-	-	-	-	-	343	343	-
Stage 2	-	-	-	-	-	-	614	633	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1229	-	-	985	-	-	286	251	719
Stage 1	-	-	-	-	-	-	719	637	-
Stage 2	-	-	-	-	-	-	540	473	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1229	-	-	985	-	-	275	0	719
Mov Cap-2 Maneuver	-	-	-	-	-	-	275	0	-
Stage 1	-	-	-	-	-	-	709	0	-
Stage 2	-	-	-	-	-	-	526	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0.3	14.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1229	-	-	985	-	-	398
HCM Lane V/C Ratio	0.017	-	-	0.011	-	-	0.029
HCM Control Delay (s)	8	0	-	8.7	0	-	14.3
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	-	-	0	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	520	35	10	295	15	0	0	0	5	1	5
Future Volume (vph)	20	520	35	10	295	15	0	0	0	5	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.994						0.939	
Flt Protected		0.998			0.998						0.978	
Satd. Flow (prot)	0	1844	0	0	1848	0	0	0	0	0	1711	0
Flt Permitted		0.998			0.998						0.978	
Satd. Flow (perm)	0	1844	0	0	1848	0	0	0	0	0	1711	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		309			364			797			276	
Travel Time (s)		8.4			9.9			21.7			7.5	
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
Adj. Flow (vph)	21	553	37	11	314	16	0	0	0	5	1	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	611	0	0	341	0	0	0	0	0	11	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.1%		ICU Level of Service A	
Analysis Period (min) 15			

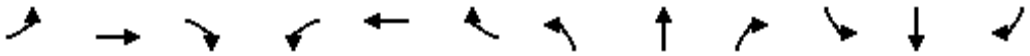
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	10	445	80	45	330	1	0	0	0	1	1	1
Future Vol, veh/h	10	445	80	45	330	1	0	0	0	1	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	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	473	85	48	351	1	0	0	0	1	1	1

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	352	0	0	559	0	0	984	1027	352
Stage 1	-	-	-	-	-	-	447	447	-
Stage 2	-	-	-	-	-	-	537	580	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1207	-	-	1012	-	-	275	234	692
Stage 1	-	-	-	-	-	-	644	573	-
Stage 2	-	-	-	-	-	-	586	500	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1207	-	-	1012	-	-	255	0	692
Mov Cap-2 Maneuver	-	-	-	-	-	-	255	0	-
Stage 1	-	-	-	-	-	-	606	0	-
Stage 2	-	-	-	-	-	-	578	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	1	14.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1207	-	-	1012	-	-	373
HCM Lane V/C Ratio	0.009	-	-	0.047	-	-	0.009
HCM Control Delay (s)	8	0	-	8.7	0	-	14.7
HCM Lane LOS	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	-	-	0.1	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	445	80	45	330	1	0	0	0	1	1	1
Future Volume (vph)	10	445	80	45	330	1	0	0	0	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.980									0.955	
Flt Protected		0.999			0.994						0.984	
Satd. Flow (prot)	0	1824	0	0	1852	0	0	0	0	0	1750	0
Flt Permitted		0.999			0.994						0.984	
Satd. Flow (perm)	0	1824	0	0	1852	0	0	0	0	0	1750	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		364			359			580			113	
Travel Time (s)		9.9			9.8			15.8			3.1	
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
Adj. Flow (vph)	11	473	85	48	351	1	0	0	0	1	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	569	0	0	400	0	0	0	0	0	3	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4

Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	25	70	0	85	40	0
Future Vol, veh/h	25	70	0	85	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	80	0	98	46	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	144	46	-	0	-	0
Stage 1	46	-	-	-	-	-
Stage 2	98	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	849	1023	0	-	-	0
Stage 1	976	-	0	-	-	0
Stage 2	926	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	849	1023	-	-	-	-
Mov Cap-2 Maneuver	849	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	SB	NE	SW
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	SBLn1	SWT
Capacity (veh/h)	-	971	-
HCM Lane V/C Ratio	-	0.112	-
HCM Control Delay (s)	-	9.2	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	0.4	-

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	25	70	0	85	40	0
Future Volume (vph)	25	70	0	85	40	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.901					
Flt Protected	0.987					
Satd. Flow (prot)	1657	0	0	1863	1863	0
Flt Permitted	0.987					
Satd. Flow (perm)	1657	0	0	1863	1863	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	580			664	534	
Travel Time (s)	15.8			18.1	14.6	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	29	80	0	98	46	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	0	0	98	46	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	NEU	NEL	NET	NER
Lane Configurations												
Traffic Vol, veh/h	0	5	10	30	0	40	0	20	0	10	65	0
Future Vol, veh/h	0	5	10	30	0	40	0	20	0	10	65	0
Peak Hour Factor	0.92	0.88	0.88	0.88	0.92	0.88	0.88	0.88	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	0	6	11	34	0	45	0	23	0	11	74	0
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	NB	SB	NE
Opposing Approach	SB	NB	SW
Opposing Lanes	1	1	1
Conflicting Approach Left	NE	SW	SB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	SW	NE	NB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.3	7.7	7.8
HCM LOS	A	A	A

Lane	NELn1	NBLn1	SBLn1	SWLn1
Vol Left, %	13%	11%	67%	0%
Vol Thru, %	87%	22%	0%	67%
Vol Right, %	0%	67%	33%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	75	45	60	90
LT Vol	10	5	40	0
Through Vol	65	10	0	60
RT Vol	0	30	20	30
Lane Flow Rate	85	51	68	102
Geometry Grp	1	1	1	1
Degree of Util (X)	0.101	0.057	0.082	0.114
Departure Headway (Hd)	4.264	4.043	4.333	4.006
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	829	891	832	882
Service Time	2.349	2.045	2.334	2.093
HCM Lane V/C Ratio	0.103	0.057	0.082	0.116
HCM Control Delay	7.8	7.3	7.7	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.2	0.3	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SWU	SWL	SWT	SWR
Lane Configurations				
Traffic Vol, veh/h	0	0	60	30
Future Vol, veh/h	0	0	60	30
Peak Hour Factor	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	68	34
Number of Lanes	0	0	1	0

Approach	SW
Opposing Approach	NE
Opposing Lanes	1
Conflicting Approach Left	NB
Conflicting Lanes Left	1
Conflicting Approach Right	SB
Conflicting Lanes Right	1
HCM Control Delay	7.6
HCM LOS	A

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	5	10	30	40	0	20	10	65	0	0	60	30
Future Volume (vph)	5	10	30	40	0	20	10	65	0	0	60	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.910			0.954						0.955	
Flt Protected		0.994			0.968			0.994				
Satd. Flow (prot)	0	1685	0	0	1720	0	0	1834	0	0	1779	0
Flt Permitted		0.994			0.968			0.994				
Satd. Flow (perm)	0	1685	0	0	1720	0	0	1834	0	0	1779	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			245			170			664	
Travel Time (s)		13.5			6.7			4.6			18.1	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Adj. Flow (vph)	6	11	34	45	0	23	11	74	0	0	68	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	51	0	0	68	0	0	85	0	0	102	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.4%		ICU Level of Service A	
Analysis Period (min) 15			