Traffic Impact Study
Proposed Senior Housing Development

Arlington Heights, Illinois

Prepared For:

Trammell Crow Company

KLOA

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

October 27, 2020

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a senior housing development to be located in Arlington Heights, Illinois. The site, which is currently occupied by Arlington Executive Court, is located in the southeast quadrant of the intersection of Arlington Heights Road with Seegers Road. As proposed, the development will contain a senior living building providing 93 independent living units, 58 assisted living units, and 24 memory care units with 193 off-street parking spaces similar to existing conditions. Access to the proposed development will be provided via one restricted access drive off Arlington Heights Road, one full movement access drive off Seegers Road, and one full movement access drive off Tonne 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, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed 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:

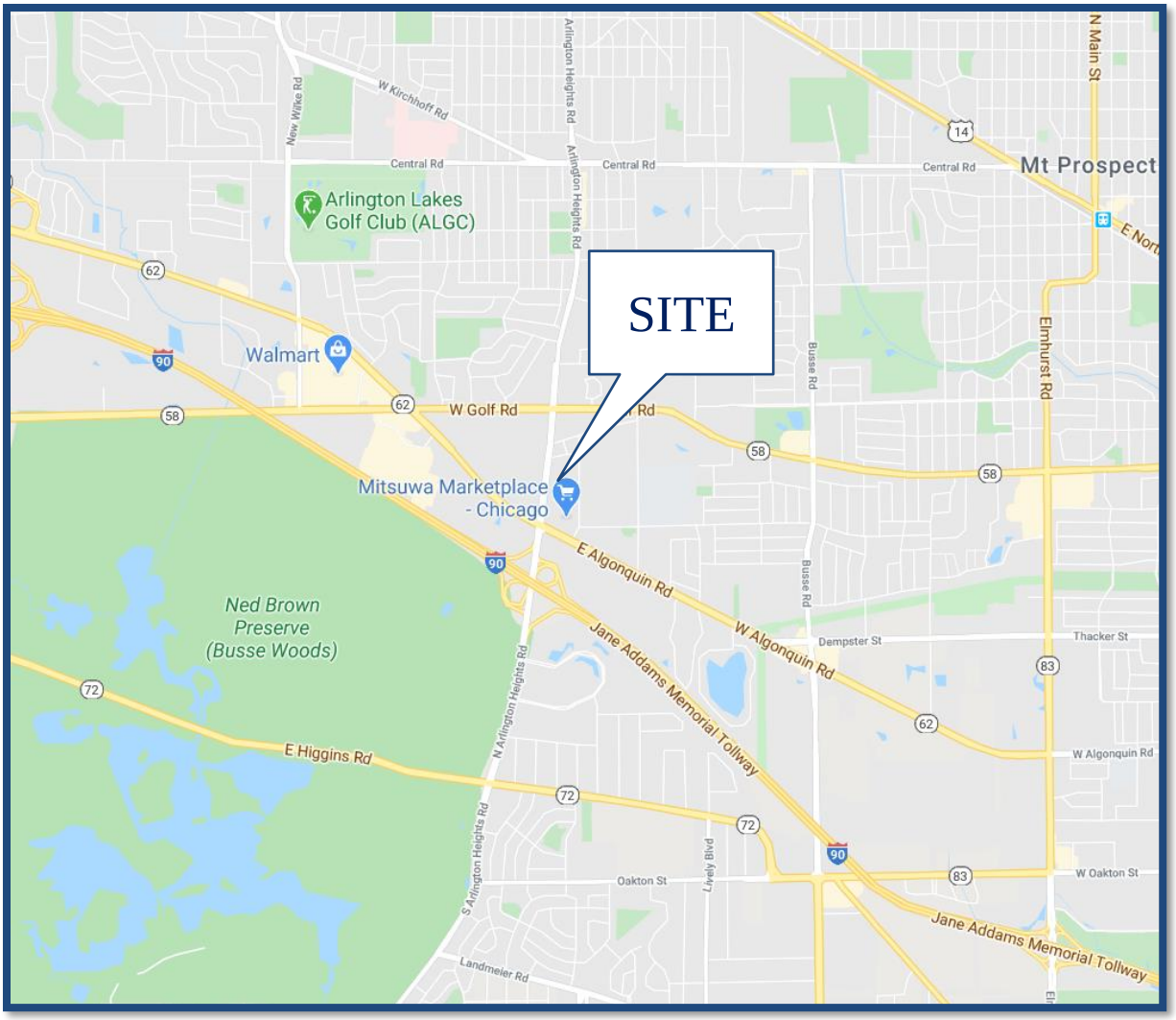
- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning and weekday evening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

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

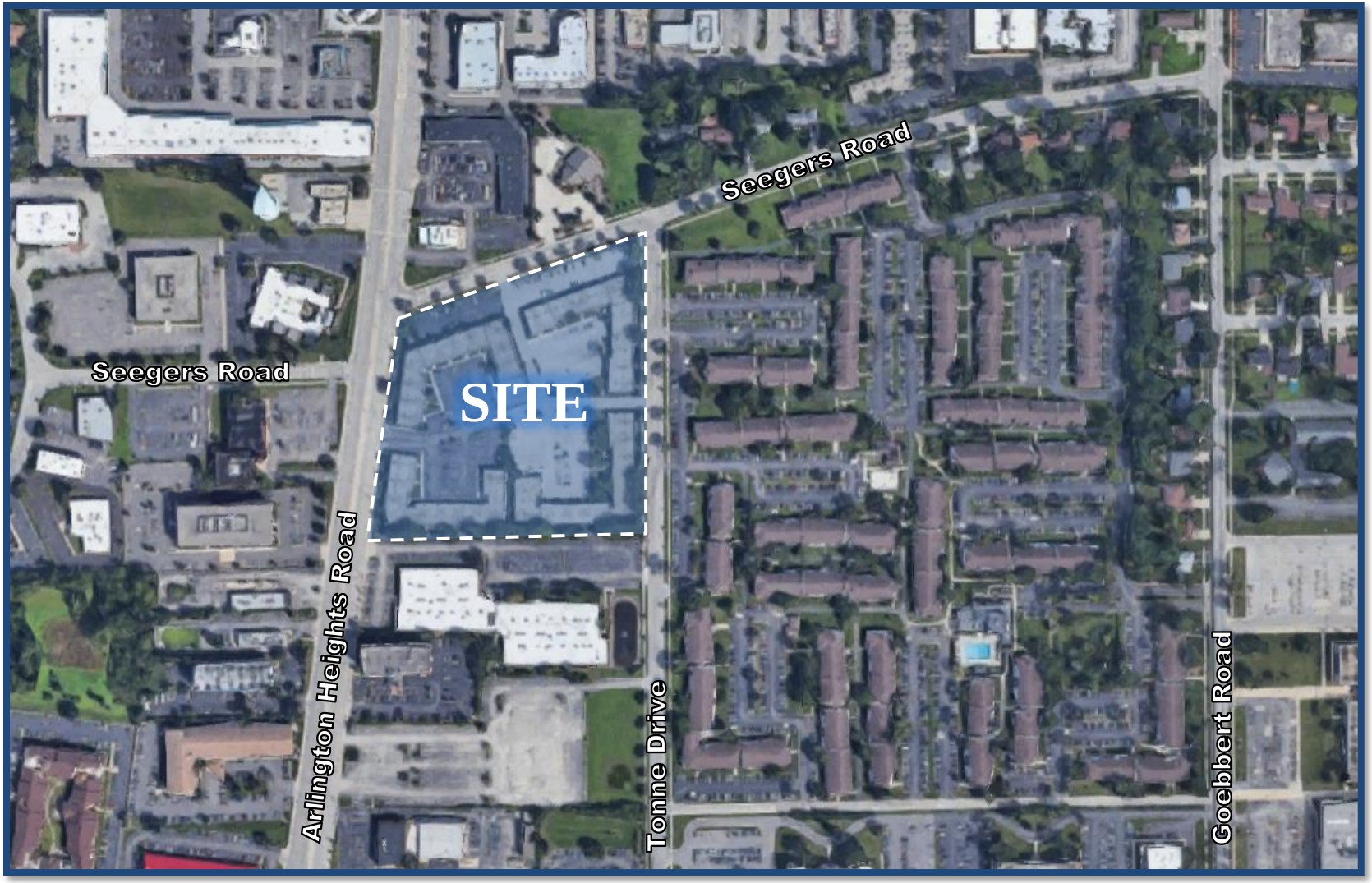
1. Existing Conditions – Analyze the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. No-Build Conditions – Analyze the capacity of the roadway system using the background traffic volumes that include the existing traffic volumes and traffic to be generated by the proposed medical office building to be located in the northwest quadrant of the intersection of Seegers Road with Goebbert Road as well as ambient area growth not attributable to any particular development.

3. Projected Conditions – Analyze the capacity of the future roadway system using the projected traffic volumes that include the background traffic volumes and the traffic estimated to be generated by the proposed development.



Site Location **Figure 1**



Aerial View of Site **Figure 2**

2. Existing Conditions

The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

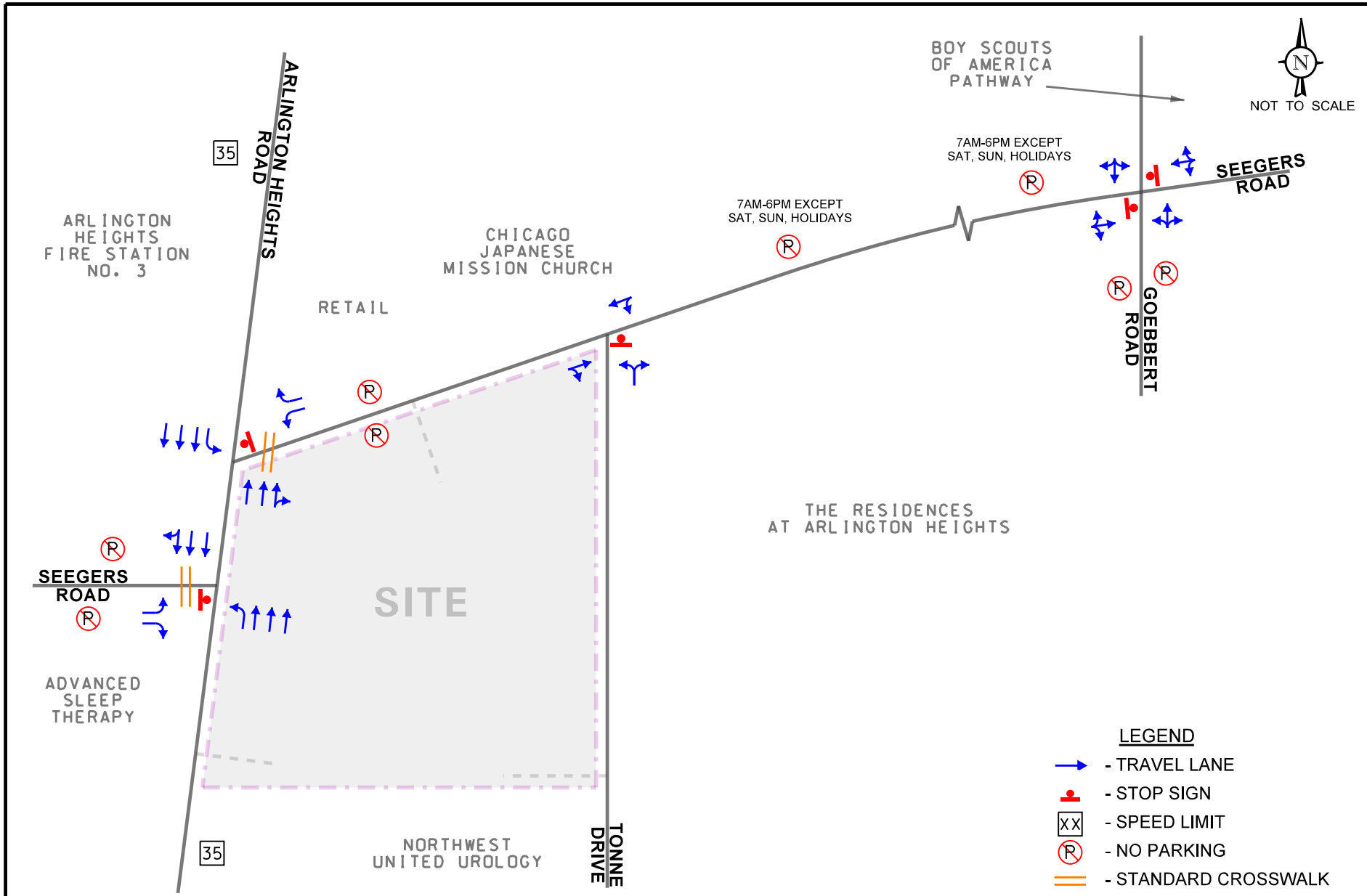
The site, which is currently occupied by Arlington Executive Court, is located in the southeast quadrant of the intersection of Arlington Heights Road with Seegers Road. Land uses in the vicinity of the site include Chicago Japanese Mission Church and Jonnie's Beef to the north, The Residences at Arlington Heights to the east, Northwest United Urology to the south, and Arlington Heights Fire Station and Converge Cornerstone Fund to the west.

Existing Roadway System Characteristics

The characteristics of the existing roadways near the development are described below and illustrated in **Figure 3**.

Arlington Heights Road is a north-south minor arterial that generally provides three lanes in each direction in the vicinity of the site. At its unsignalized intersection with the east leg of Seegers Road, Arlington Heights Road provides two through lanes and a combined through/right-turn lane on the southbound approach. The northbound approach provides three through lanes and an exclusive left-turn lane. At its unsignalized intersection with the west leg of Seegers Road, Arlington Heights Road provides an exclusive left-turn lane and three through lanes on the southbound approach. The northbound approach provides two through lanes and a combined through/right-turn lane. Arlington Heights Road is under the jurisdiction of the Illinois Department of Transportation (IDOT), is not classified as a Strategic Regional Arterial (SRA), carries an Annual Average Daily Traffic (AADT) volume of 32,300 vehicles (IDOT 2018), and has a posted speed limit of 35 miles per hour.

Seegers Road is an east-west local road that provides one lane in each direction in the vicinity of the site and has an offset at Arlington Heights Road. At its unsignalized intersection with Arlington Heights Road, Seegers Road provides an exclusive left-turn lane and an exclusive right-turn lane on both approaches under stop sign control. In addition, standard style crosswalks are provided on the east and west legs of these intersections. At its unsignalized intersection with Tonne Drive, Seegers Road provides a combined through/right-turn lane on the eastbound approach and a combined through/left-turn lane on the westbound approach. At its unsignalized intersection with Goebbert Road, Seegers Road provides a combined left-turn/through/right-turn lane on both approaches under stop sign control. Parking is generally not permitted on both sides of the road except on Saturdays, Sundays, and holidays. Seegers Road is under the jurisdiction of the Village of Arlington Heights.



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Existing Roadway Characteristics

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Figure: 3

Tonne Drive is a north-south local road that provides one lane in each direction in the vicinity of the site. At its unsignalized intersection with Seegers Road, Tonne Drive provides a combined left-turn/right-turn lane on the northbound approach under stop sign control. Tonne Drive is under the jurisdiction of the Village of Arlington Heights.

Goebbert Road is a north-south local roadway that generally provides one lane in each direction in the vicinity of the site. At its unsignalized intersection with Seegers Road, Goebbert Road provides a combined left-turn/through/right-turn lane on both approaches. Parking is generally not permitted on both sides of the road. Goebbert Road is under the jurisdiction of the Village of Arlington Heights.

Existing Traffic Volumes

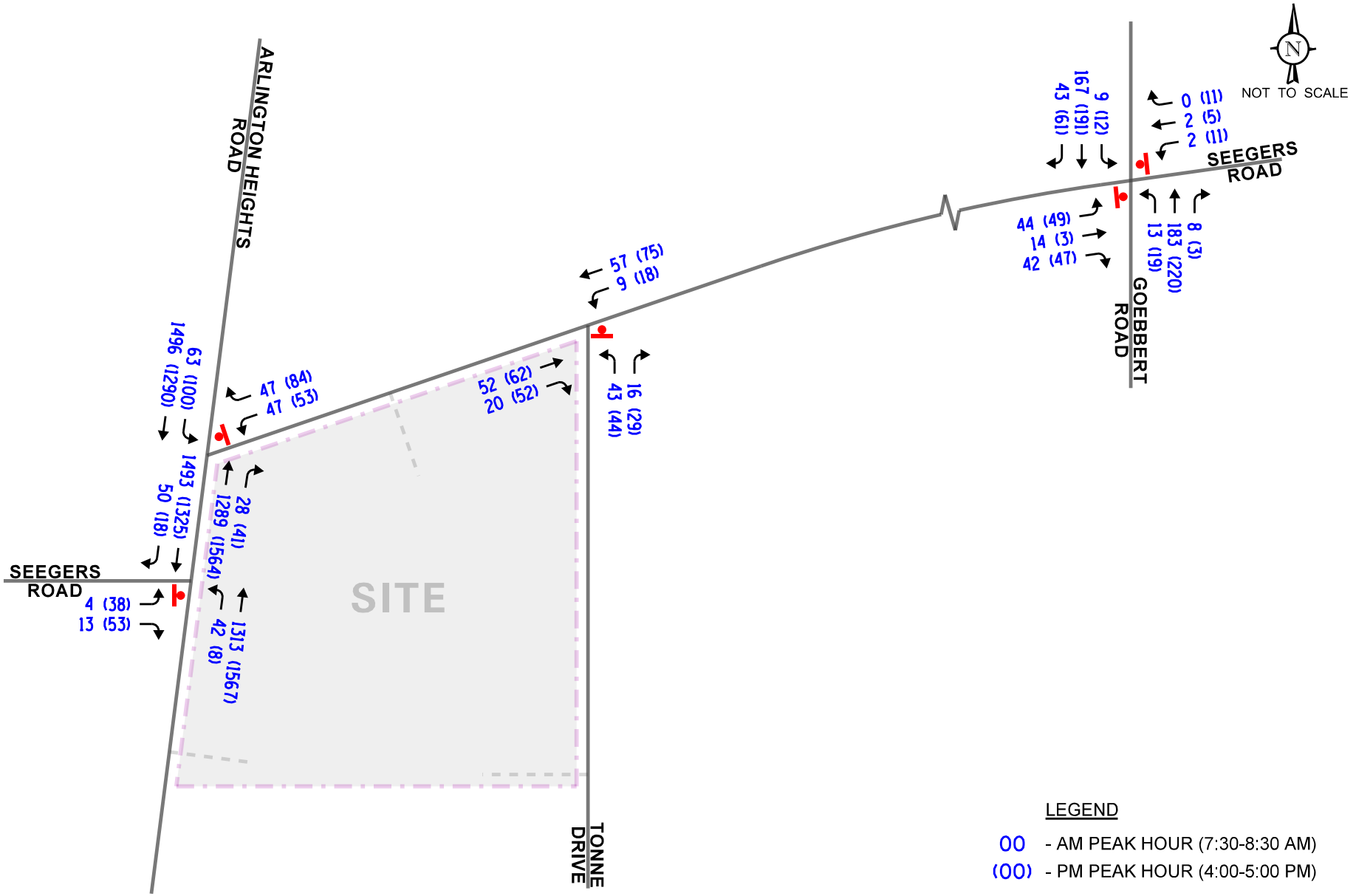
In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts using Miovision Scout Video Collection Units on Tuesday, August 4, 2020 during the weekday morning (7:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:00 P.M.) peak periods at the following intersections:

- Arlington Heights Road with Seegers Road (both legs)
- Seegers Road with Tonne Drive

Based on the results of the traffic counts, the weekday morning peak hour of traffic occurs from 7:30 A.M. to 8:30 A.M. and the evening peak hour of traffic occurs from 4:00 P.M. to 5:00 P.M. In addition, traffic counts previously conducted by Gewalt Hamilton Associates, LLC in December 2019 at the intersection of Seegers Road with Goebbert Road were also utilized.

Additionally, it is important to note that the traffic counts were evaluated to determine if any adjustment was needed to account for any variation in typical traffic volumes due to the ongoing Covid-19 pandemic. Traffic counts were conducted for a 24-hour period along Arlington Heights Road and the results indicated that the daily traffic volumes on Arlington Heights Road were 4.4 percent lower when compared to the AADT traffic volumes collected by IDOT. Furthermore, when compared to the traffic counts at Seegers Road with Goebbert Road, Seegers Road traffic was found to be similar. However, recent traffic counts conducted on Golf Road between Arlington Heights Road and Seegers Road indicate that morning peak hour counts were 40 percent lower and evening peak hour counts were 15 percent lower when compared to pre COVID-19 traffic count data. As such, the traffic volumes along Arlington Heights Road were increased by 40 percent and 15 percent, respectively.

Figure 4 illustrates the existing peak hour traffic volumes adjusted as discussed above. Copies of the traffic count summary sheets are included in the Appendix.



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Existing Traffic Volumes

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Figure: 4

Crash Analysis

KLOA, Inc. obtained crash data[1] from IDOT for the most recent available five years (2014 to 2018) for the intersections of Arlington Heights Road with Seegers Road, Seegers Road with Tonne Drive, and Seegers Road with Goebbert Road. The crash data for these intersections are summarized in **Tables 1 through 3**, respectively. A review of the crash data indicated that no fatalities were reported at any of these intersections.

Table 1
ARLINGTON HEIGHTS ROAD WITH SEEGERS ROAD – CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2014	0	1	0	0	2	0	3
2015	0	0	0	0	6	0	6
2016	0	0	2	0	4	0	6
2017	0	0	1	0	3	0	4
2018	0	0	1	1	8	0	10
Total	**0**	**1**	**4**	**1**	**23**	**0**	**29**
Average	**0**	**<1.0**	**<1.0**	**<1.0**	**4.6**	**0**	**5.8**

[1] IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

Table 2
SEEGERS ROAD WITH TONNE DRIVE – CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2014	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0
2016	0	0	0	0	3	0	3
2017	0	0	0	0	0	1	1
2018	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**3**	**1**	**4**
Average	**0**	**0**	**0**	**0**	**<1.0**	**<1.0**	**<1.0**

Table 3
SEEGERS ROAD WITH GOEBBERT ROAD – CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2014	0	0	0	0	1	0	1
2015	0	0	1	0	0	0	1
2016	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0
2018	0	1	1	0	3	0	5
Total	**0**	**1**	**2**	**0**	**4**	**0**	**7**
Average	**0**	**<1.0**	**<1.0**	**0**	**<1.0**	**0**	**1.4**

3. Traffic Characteristics of the Proposed Development

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

Proposed Site and Development Plan

As proposed, the development will contain a senior living building providing 93 independent living units, 58 assisted living units, and 24 memory care units with 193 off-street parking spaces. Access to the proposed development will be provided via the following:

- A proposed restricted access drive off Arlington Heights Road located approximately 325 feet south of Seegers Road. This access drive, which will be physically restricted to right turns only and will replace an existing full movement access drive, will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

- An existing full movement access drive off Seegers Road located approximately 270 feet east of Arlington Heights Road. This access drive provides one inbound lane and one outbound lane with outbound movements under stop sign control.

- A proposed full movement access drive off Tonne Drive located approximately 580 feet south of Seegers Road. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

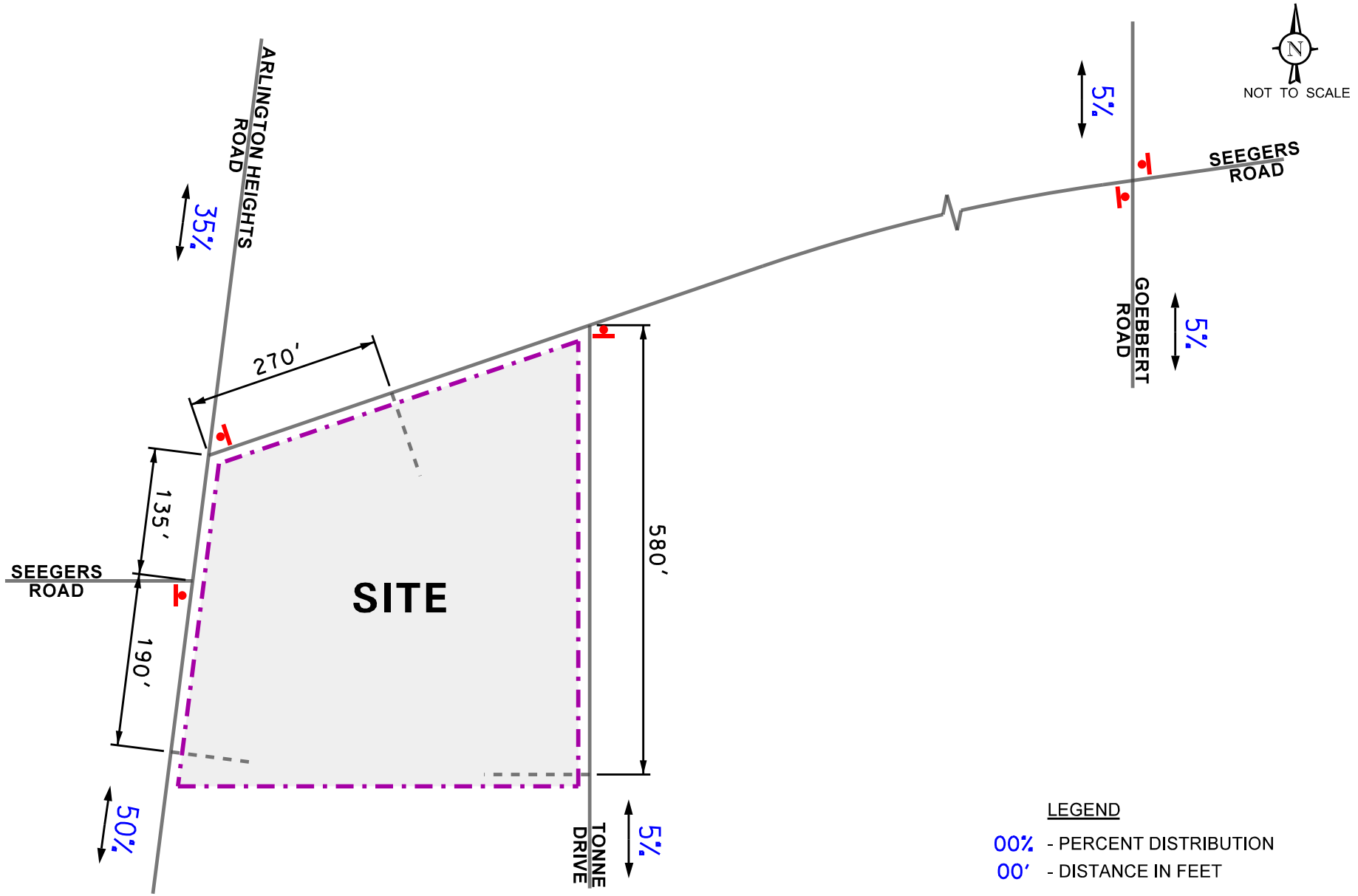
A site plan depicting the proposed development layout and access is included in the Appendix.

Directional Distribution

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

Peak Hour Traffic Volumes

The number of peak hour vehicle trips estimated to be generated by the proposed development was based on vehicle trip generation rates contained in *Trip Generation Manual*, 10th Edition, published by the Institute of Transportation Engineers (ITE). **Table 4** shows the site-generated traffic volumes for the proposed development. Copies of the trip generation graphs are included in the Appendix. It is important to note that the site is currently occupied by the approximate 101,000 square-foot Arlington Executive Court. **Table 5** shows the trip generation comparison between the current use and the proposed senior housing development.



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Estimated Directional Distribution

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Figure: 5

Table 4
PROJECTED SITE-GENERATED TRAFFIC VOLUMES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Two-Way Trips
		In	Out	Total	In	Out	Total	
252	Independent Living (93 units)	6	12	18	14	11	25	348
254	Assisted Living (58 beds)	7	4	11	6	9	15	151
254	Memory Care (24 beds)	3	2	5	2	4	6	62
	Total	**16**	**18**	**34**	**22**	**24**	**46**	**561**

Trip Generation Comparison

As previously indicated, the site is currently occupied by the approximate 101,000 square-foot Arlington Executive Court. **Table 5** shows the trip generation comparison between the current use and the proposed senior housing development.

Table 5
TRIP GENERATION COMPARISON

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Two-Way Trips
		In	Out	Total	In	Out	Total	
252/ 254	Proposed Senior Housing Development	16	18	34	22	24	46	561
710	Arlington Executive Court (101,000 s.f.)	104	17	121	18	97	115	1,071
	Difference	**-88**	**+1**	**-87**	**+4**	**-73**	**-69**	**-510**

As can be seen in Table 5, the proposed senior development will generate less traffic than the Arlington Executive Court. As such, the traffic to be generated by the proposed senior housing development will have a limited impact on the roadway system.

4. Projected Traffic Conditions

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

Development Traffic Assignment

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

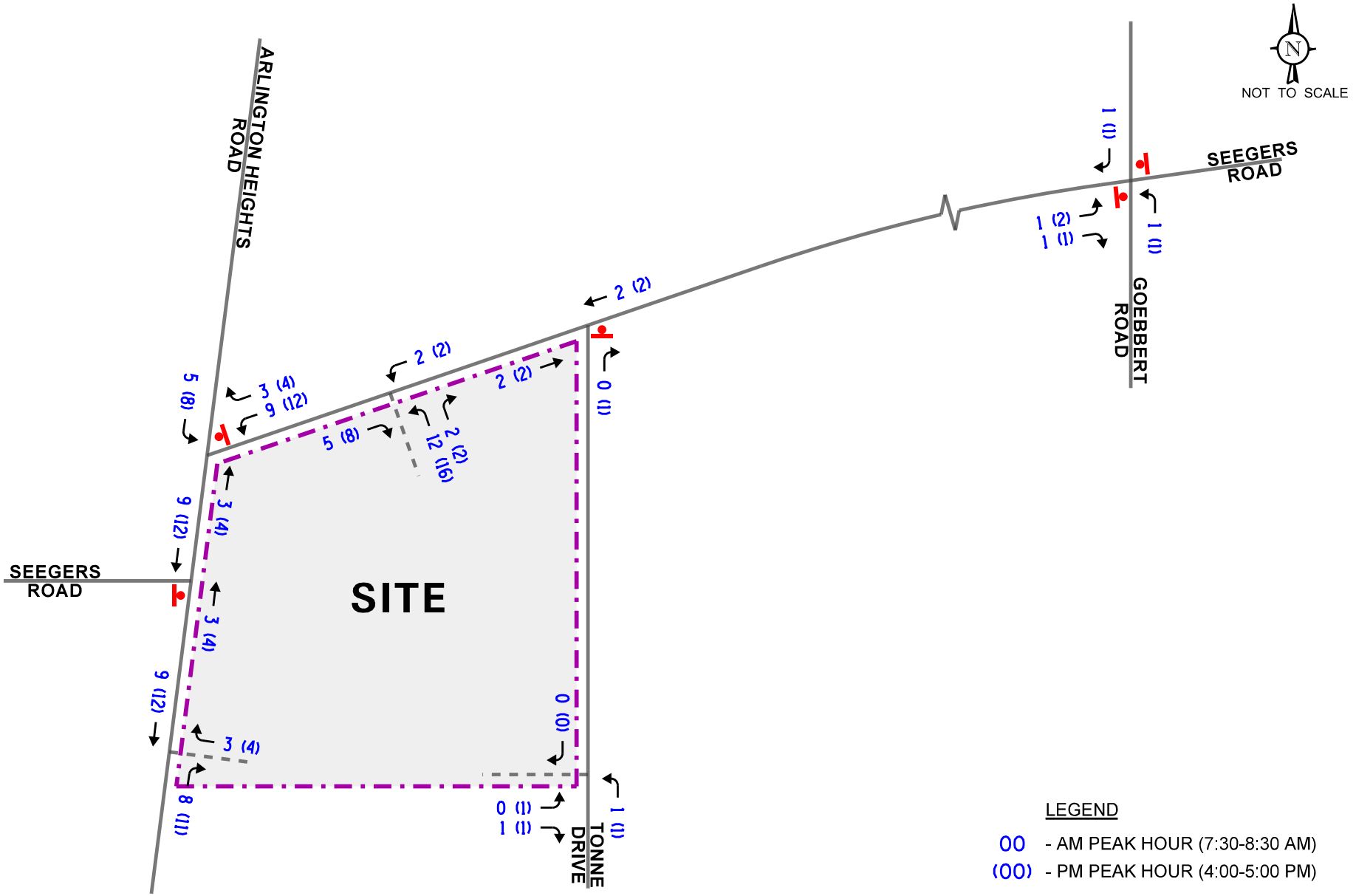
Background Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on 2050 Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated August 3rd, 2020, the existing traffic volumes were increased by an annually compounded growth rate for five years (one-year buildout plus five years) totaling 2.4 percent to represent Year 2026 no-build conditions. Additionally, the traffic volumes projected to be generated by the proposed medical office building to be located in the northwest quadrant of the intersection of Seegers Road with Goebbert Road and the proposed mixed-use development to occupy the northeast quadrant of the intersection of Golf Road with Arlington Heights Road were included in the background volumes.

Figure 7 shows the Year 2026 no-build traffic volumes. A copy of the CMAP 2050 projections letter is included in the Appendix.

Total Projected Traffic Volumes

Total projected traffic volumes include the Year 2026 no-build traffic volumes (Figure 7) and the traffic estimated to be generated by the proposed development (Figure 6). **Figure 8** shows the Year 2026 total projected traffic volumes.



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Estimated Site-Generated Traffic Volumes

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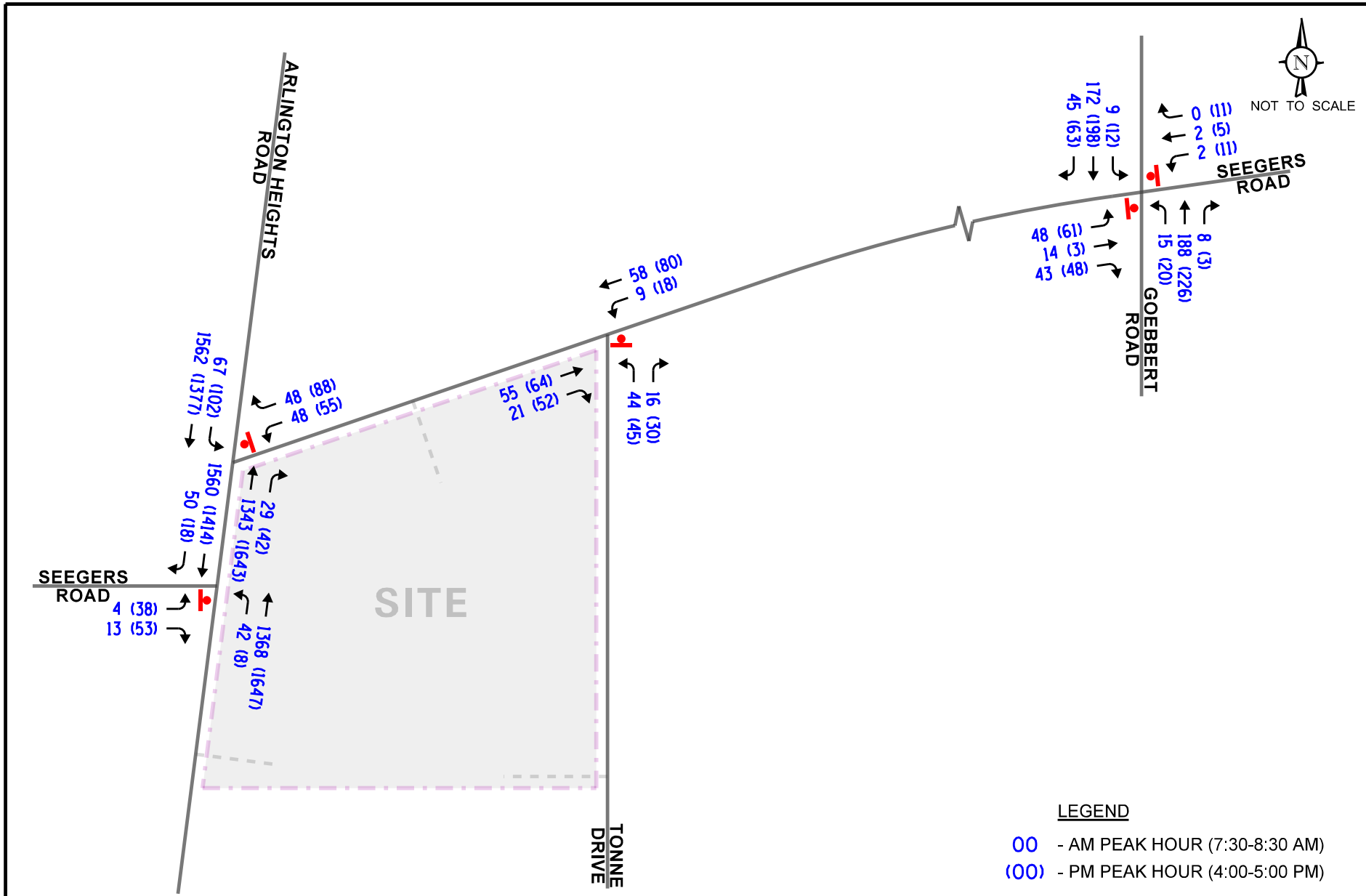
Figure: 6



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Arlington Heights, Illinois

Year 2026 No-Build Traffic Volumes

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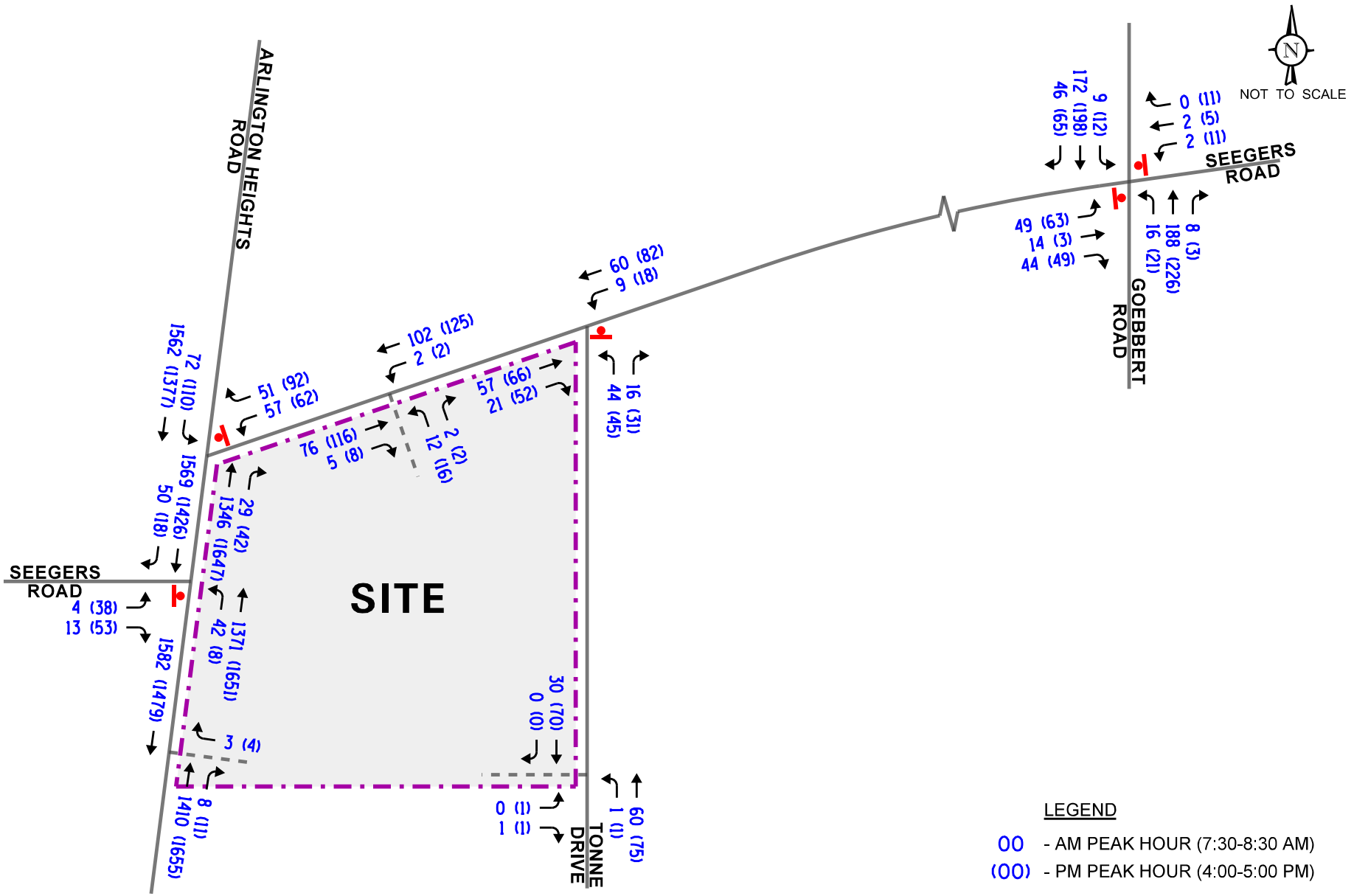
Figure: 7



Proposed Senior Housing Development
Arlington Heights, Illinois

Year 2026 Total Projected Traffic Volumes

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Figure: 8

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and weekday evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access 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 and weekday evening peak hours for the existing conditions, Year 2026 no-build conditions, and Year 2026 total projected conditions.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM),* 6th Edition and analyzed using Synchro/SimTraffic 10 computer software.

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 conditions, Year 2026 no-build conditions, and Year 2026 total projected conditions are presented in **Tables 6** through **8.** A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 6
CAPACITY ANALYSIS RESULTS (UNSIGNALIZED)
EXISTING CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Arlington Heights Road with the East Leg of Seegers Road				
• Westbound Approach	F	56.6	F	99+
○ Westbound Left Turns	F	95.4	F	99+
○ Westbound Right Turns	C	17.8	C	24.1
• Southbound Left Turns	C	24.7	E	45.6
Arlington Heights Road with the West Leg of Seegers Road				
• Eastbound Approach	D	28.9	D	30.3
○ Eastbound Left Turns	F	61.4	E	47.7
○ Eastbound Right Turns	C	18.9	C	17.8
• Northbound Left Turns	D	29.7	C	19.4
Tonne Drive with Seegers Road				
• Northbound Approach	A	9.7	A	9.9
• Westbound Left Turns	A	7.5	A	7.6
Goebbert Road with Seegers Road				
• Eastbound Approach	B	12.1	B	13.0
• Westbound Approach	B	12.7	B	12.5
• Northbound Left Turns	A	7.7	A	7.8
• Southbound Left Turns	A	7.6	A	7.7

LOS = Level of Service
Delay is measured in seconds.

Table 7
CAPACITY ANALYSIS RESULTS (UNSIGNALIZED)
YEAR 2026 NO-BUILD CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Arlington Heights Road with the East Leg of Seegers Road				
• Westbound Approach	F	70.4	F	99+
○ Westbound Left Turns	F	99+	F	99+
○ Westbound Right Turns	C	18.6	D	26.2
• Southbound Left Turns	D	27.0	F	55.5
Arlington Heights Road with the West Leg of Seegers Road				
• Eastbound Approach	D	31.4	D	34.6
○ Eastbound Left Turns	F	69.5	F	56.6
○ Eastbound Right Turns	C	19.7	C	18.9
• Northbound Left Turns	D	32.5	C	21.0
Tonne Drive with Seegers Road				
• Northbound Approach	A	9.7	B	10.0
• Westbound Left Turns	A	7.5	A	7.6
Goebbert Road with Seegers Road				
• Eastbound Approach	B	12.4	B	13.8
• Westbound Approach	B	12.9	B	12.7
• Northbound Left Turns	A	7.7	A	7.8
• Southbound Left Turns	A	7.7	A	7.7

LOS = Level of Service
Delay is measured in seconds.

Table 8
CAPACITY ANALYSIS RESULTS (UNSIGNALIZED)
YEAR 2026 PROJECTED CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Arlington Heights Road with the East Leg of Seegers Road				
• Westbound Approach	F	91.8	F	99+
○ Westbound Left Turns	F	99+	F	99+
○ Westbound Right Turns	C	18.8	D	26.9
• Southbound Left Turns	D	27.5	F	58.7
Arlington Heights Road with the West Leg of Seegers Road				
• Eastbound Approach	D	31.8	E	35.4
○ Eastbound Left Turns	F	70.7	F	58.1
○ Eastbound Right Turns	C	19.8	C	19.1
• Northbound Left Turns	D	32.9	C	21.2
Tonne Drive with Seegers Road				
• Northbound Approach	A	9.7	B	10.0
• Westbound Left Turns	A	7.5	A	7.6
Goebbert Road with Seegers Road				
• Eastbound Approach	B	12.4	B	13.9
• Westbound Approach	B	12.9	B	12.7
• Northbound Left Turns	A	7.7	A	7.8
• Southbound Left Turns	A	7.7	A	7.7
Arlington Heights Road with Proposed Restricted Access Drive				
• Westbound Approach	C	16.8	C	19.4
Seegers Road with Proposed Full Movement Access Drive				
• Northbound Approach	A	9.5	A	9.9
• Westbound Left Turns	A	7.4	A	7.5
Tonne Drive with Proposed Full Movement Access Drive				
• Eastbound Approach	A	8.4	A	9.0
• Northbound Left Turns	A	7.3	A	7.3

LOS = Level of Service. Delay is measured in seconds.

Discussion and Recommendations

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

Arlington Heights with the East Leg of Seegers Road

The results of the capacity analysis indicate that the southbound left-turn movement is operating at Level of Service (LOS) C during the weekday morning peak hour and LOS E during the weekday evening peak hour. In addition, the westbound approach currently operates at LOS F during the weekday morning and evening peak hours. This is normal and expected when a minor road intersects a major road such as Arlington Heights Road.

Under Year 2026 no-build conditions, the southbound left-turn movement is projected to operate at LOS D during the weekday morning peak hour and continue to operate at LOS F during the weekday evening peak hour with increases in delay of approximately two seconds and 10 seconds, respectively. In addition, the westbound approach will continue to operate at the same existing levels of service.

Under Year 2026 total projected conditions, the westbound approach will continue to operate at the same levels of service during the weekday morning and evening peak hours and will experience 95th percentile queues of approximately four vehicles and eight vehicles, respectively and, as such, will not extend to or beyond the proposed access drive. The southbound left-turn movement will continue to operate at LOS D during the weekday morning peak hour and LOS F during the weekday evening peak hour with increases in delay of approximately three seconds or less. In addition, the southbound left-turn movement will experience 95th percentile queues of approximately one vehicle and four vehicles during the weekday morning and evening peak hours, respectively, which can be accommodated by the existing exclusive southbound left-turn lane. It should also be noted that the proximity of this intersection to the existing traffic signal at the intersection of Arlington Heights Road with Golf Road (approximately 760 feet) will create additional gaps in the Arlington Heights Road traffic stream, which will allow for turning movements to/from Seegers Road to occur more efficiently. Additionally, when compared to the projected traffic volumes that will travel through this intersection, the proposed development will increase traffic by less than one percent during the peak hours. This minimal increase indicates that the projected traffic to be generated by the proposed development will not have a significant impact on the overall operations of the intersection.

Arlington Heights with the West Leg of Seegers Road

The results of the capacity analysis indicate that the eastbound approach and the northbound left-turn movement are operating at an acceptable LOS D or better during the weekday morning and evening peak hours.

Under Year 2026 no-build conditions, the eastbound approach is projected to continue to operate at LOS D during the weekday morning and evening peak hours with increases in delay of approximately four seconds or less. Additionally, the northbound left-turn movement will continue to operate at LOS D or better during both peak hours with increases in delay of approximately three seconds or less.

Under Year 2026 total projected conditions, the eastbound approach will operate at LOS D during the weekday morning peak hour and LOS E during the weekday evening peak hour with increases in delay of approximately one second during both peak hours. The northbound left-turn movement will operate at the same levels of service during the weekday morning and evening peak hours with increases in delay of less than one second. The northbound left-turn movement will experience 95th percentile queues of one to two vehicles during both peak hours. Therefore, no intersection or roadway traffic control improvements will be required in conjunction with the proposed development.

Tonne Drive with Seegers Road

The results of the capacity analysis indicate that the northbound approach and the westbound left-turn movement are operating at LOS A during the weekday morning and evening peak hours.

Under Year 2026 no-build conditions, the northbound approach will operate at LOS A during the weekday morning peak hour and LOS B during the weekday evening peak hour with increases in delay of less than one second. Additionally, the westbound left-turn movement will continue to operate at LOS A with increases in delay of less than one second.

Under Year 2026 total projected conditions, the northbound approach and the westbound left-turn movement will operate at the same levels of service with increases in delay of less than one second. Therefore, no intersection or roadway traffic control improvements will be required in conjunction with the proposed development.

Seegers Road with Goebbert Road

The results of the capacity analysis indicate that the eastbound and westbound approaches currently operate at LOS B during the weekday morning and evening peak hours. In addition, the northbound and southbound left-turn movements are operating at LOS A during both peak hours.

Under Year 2026 no-build conditions, all approaches will continue to operate at the same existing levels of service during both peak hours with increases in delay of less than one second.

Under Year 2026 total projected conditions, all approaches will continue to operate at the same levels of service during both peak hours with increases in delay of less than one second over no-build conditions. Therefore, no intersection or roadway traffic control improvements will be required in conjunction with the proposed development.

Arlington Heights Road with Proposed Restricted Access Drive

The results of the capacity analysis indicate that the outbound movements from the site onto Arlington Heights Road will operate at LOS C during the weekday morning and evening peak hours with 95th percentile queues of one to two vehicles. When the total projected traffic volumes are compared to the right-turn lane warrant guidelines published in Chapter 36 of the IDOT *Bureau of Design and Environment* (BDE) Manual, Figure 36-3.B, an exclusive northbound right-turn lane serving the proposed access drive will not be warranted. A copy of Figure 36-3.B is included in the Appendix. As such, the proposed access drive will be sufficient to accommodate the traffic projected to be generated by the proposed development.

Seegers Road with Proposed Full Movement Access Drive

The results of the capacity analysis indicate that the outbound movements will operate at LOS A during the weekday morning and evening peak hours with 95th percentile queues of one to two vehicles during both peak hours. In addition, the westbound left-turn movement will operate at LOS A during both peak hours with 95th percentile queues of one to two vehicles. As such, the proposed access drive will be sufficient to accommodate the traffic projected to be generated by the proposed development.

Tonne Drive with Proposed Full Movement Access Drive

The results of the capacity analysis indicate that the outbound movements will operate at LOS A during the weekday morning and evening peak hours with 95th percentile queues of one to two vehicles during both peak hours. In addition, the northbound left-turn movement will operate at LOS A during both peak hours with 95th percentile queues of one to two vehicles. As such, the proposed access drive will be sufficient to accommodate the traffic projected to be generated by the proposed development.

Parking Analysis

The following section summarizes the results and findings of a parking analysis completed for the proposed senior housing development in order to determine the adequacy of the proposed parking supply.

Proposed Parking

As previously stated, the proposed development calls for a senior housing facility with 93 independent living units, 58 assisted living units, and 24 memory care units. A total of 193 off-street parking spaces will be provided on site. Based on the number of parking spaces and units, the parking supply translates to a parking ratio of approximately 1.10 spaces per unit.

ITE Parking Demand

In order to determine the anticipated parking needs of the proposed development, a review of the 5th Edition of the *Parking Generation Manual* published by ITE was completed. Based on the ITE data, the following is the projected peak parking demand for the development:

- Senior Housing – Attached
  - Average - 0.61 spaces per unit
  - 85th Percentile - 0.67 spaces per unit

- Assisted Living/Memory Care
  - Average - 0.40 spaces per unit
  - 85th Percentile - 0.53 spaces per unit

- Total Demand
  - Average – 90 parking spaces, resulting in a surplus of 103 parking spaces
  - 85th percentile – 106 parking spaces, resulting in a surplus of 87 parking spaces

Given the above, the proposed parking supply will be adequate in accommodating the parking needs of the proposed development.

Village of Arlington Heights

Based on the Village of Arlington Heights Zoning Ordinance, the 93 independent living units and 58 assisted living units should provide a parking ratio of one space per unit and the 24 memory care units should provide a parking ratio of one space per two beds. As such, the proposed senior development is required to provide 163 parking spaces, resulting in a surplus of 30 parking spaces. As such, the off-street parking spaces will be adequate in accommodating the parking demand of the residents, employees, and visitors.

6. Conclusion

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

- The proposed development will generate a low volume of trips during the weekday morning and evening peak hours and will have a low traffic impact on the surrounding roadway network.

- The results of the capacity analysis indicate that the proposed development traffic will not have a significant impact on the area roadways.

- The development-generated traffic will only add less than one percent of the traffic projected to be traversing the intersection of Arlington Heights Road with the east leg of Seegers Road.

- The proposed access drives will be adequate in accommodating site traffic and will ensure that a flexible access system is provided.

- The proposed restricted access drive on Arlington Heights Road will replace an existing full movement access drive and, as such, will reduce traffic conflicts and improve traffic flow.

- Based on the BDE Manual, an exclusive northbound right-turn lane serving the proposed access drive on Arlington Heights Road is not warranted.

- The proposed parking supply of 193 off-street parking spaces will be adequate in accommodating the parking demand of the residents, employees, and visitors.

Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
ITE Trip Generation Worksheets
CMAP 2050 Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets
Turn Lane Warrants

Traffic Count Summary Sheets

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Arlington Heights Road with Seegers Road
Site Code:
Start Date: 08/04/2020

Turning Movement Data

Start Time	Seegers Road Westbound					Arlington Heights Road Northbound					Arlington Heights Road Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	0	7	11	0	18	0	181	7	0	188	0	12	194	0	206	412
7:15 AM	0	12	12	2	24	0	201	4	0	205	0	18	226	0	244	473
7:30 AM	0	13	9	0	22	0	219	3	0	222	0	12	287	0	299	543
7:45 AM	0	13	17	0	30	0	225	9	0	234	0	19	270	0	289	553
Hourly Total	0	45	49	2	94	0	826	23	0	849	0	61	977	0	1038	1981
8:00 AM	0	11	8	1	19	0	225	7	0	232	1	12	240	0	253	504
8:15 AM	0	8	11	0	19	0	206	8	0	214	0	16	227	0	243	476
8:30 AM	0	5	15	0	20	0	216	6	0	222	0	13	190	0	203	445
8:45 AM	0	15	15	0	30	0	211	9	0	220	1	27	226	0	254	504
Hourly Total	0	39	49	1	88	0	858	30	0	888	2	68	883	0	953	1929
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	10	26	2	36	0	307	10	0	317	1	26	295	0	322	675
4:15 PM	0	20	19	0	39	0	313	10	0	323	1	19	277	0	297	659
4:30 PM	0	10	20	0	30	0	341	8	0	349	0	20	258	0	278	657
4:45 PM	0	11	15	0	26	0	342	11	0	353	0	29	245	0	274	653
Hourly Total	0	51	80	2	131	0	1303	39	0	1342	2	94	1075	0	1171	2644
5:00 PM	0	4	23	0	27	0	305	10	0	315	0	27	264	0	291	633
5:15 PM	0	12	14	0	26	0	347	18	0	365	0	27	258	0	285	676
5:30 PM	0	8	22	0	30	0	308	12	0	320	0	25	239	0	264	614
5:45 PM	0	9	18	0	27	0	287	12	0	299	2	14	221	0	237	563
Hourly Total	0	33	77	0	110	0	1247	52	0	1299	2	93	982	0	1077	2486
Grand Total	0	168	255	5	423	0	4234	144	0	4378	6	316	3917	0	4239	9040
Approach %	0.0	39.7	60.3	-	-	0.0	96.7	3.3	-	-	0.1	7.5	92.4	-	-	-
Total %	0.0	1.9	2.8	-	4.7	0.0	46.8	1.6	-	48.4	0.1	3.5	43.3	-	46.9	-
Lights	0	161	254	-	415	0	4087	142	-	4229	6	307	3819	-	4132	8776
% Lights	-	95.8	99.6	-	98.1	-	96.5	98.6	-	96.6	100.0	97.2	97.5	-	97.5	97.1
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	6	1	-	7	0	88	1	-	89	0	8	60	-	68	164
% Single-Unit Trucks	-	3.6	0.4	-	1.7	-	2.1	0.7	-	2.0	0.0	2.5	1.5	-	1.6	1.8
Articulated Trucks	0	1	0	-	1	0	59	1	-	60	0	0	36	-	36	97
% Articulated Trucks	-	0.6	0.0	-	0.2	-	1.4	0.7	-	1.4	0.0	0.0	0.9	-	0.8	1.1
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	1	2	-	3	3
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.3	0.1	-	0.1	0.0
Pedestrians	-	-	-	5	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
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Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Arlington Heights Road with Seegers Road
Site Code:
Start Date: 08/04/2020

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Seegers Road Westbound					Arlington Heights Road Northbound					Arlington Heights Road Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:30 AM	0	13	9	0	22	0	219	3	0	222	0	12	287	0	299	543
7:45 AM	0	13	17	0	30	0	225	9	0	234	0	19	270	0	289	553
8:00 AM	0	11	8	1	19	0	225	7	0	232	1	12	240	0	253	504
8:15 AM	0	8	11	0	19	0	206	8	0	214	0	16	227	0	243	476
Total	0	45	45	1	90	0	875	27	0	902	1	59	1024	0	1084	2076
Approach %	0.0	50.0	50.0	-	-	0.0	97.0	3.0	-	-	0.1	5.4	94.5	-	-	-
Total %	0.0	2.2	2.2	-	4.3	0.0	42.1	1.3	-	43.4	0.0	2.8	49.3	-	52.2	-
PHF	0.000	0.865	0.662	-	0.750	0.000	0.972	0.750	-	0.964	0.250	0.776	0.892	-	0.906	0.939
Lights	0	43	45	-	88	0	814	27	-	841	1	58	993	-	1052	1981
% Lights	-	95.6	100.0	-	97.8	-	93.0	100.0	-	93.2	100.0	98.3	97.0	-	97.0	95.4
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	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	2	0	-	2	0	33	0	-	33	0	1	18	-	19	54
% Single-Unit Trucks	-	4.4	0.0	-	2.2	-	3.8	0.0	-	3.7	0.0	1.7	1.8	-	1.8	2.6
Articulated Trucks	0	0	0	-	0	0	28	0	-	28	0	0	13	-	13	41
% Articulated Trucks	-	0.0	0.0	-	0.0	-	3.2	0.0	-	3.1	0.0	0.0	1.3	-	1.2	2.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Arlington Heights Road with Seegers Road
Site Code:
Start Date: 08/04/2020

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Seegers Road Westbound					Arlington Heights Road Northbound					Arlington Heights Road Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
4:00 PM	0	10	26	2	36	0	307	10	0	317	1	26	295	0	322	675
4:15 PM	0	20	19	0	39	0	313	10	0	323	1	19	277	0	297	659
4:30 PM	0	10	20	0	30	0	341	8	0	349	0	20	258	0	278	657
4:45 PM	0	11	15	0	26	0	342	11	0	353	0	29	245	0	274	653
Total	0	51	80	2	131	0	1303	39	0	1342	2	94	1075	0	1171	2644
Approach %	0.0	38.9	61.1	-	-	0.0	97.1	2.9	-	-	0.2	8.0	91.8	-	-	-
Total %	0.0	1.9	3.0	-	5.0	0.0	49.3	1.5	-	50.8	0.1	3.6	40.7	-	44.3	-
PHF	0.000	0.638	0.769	-	0.840	0.000	0.952	0.886	-	0.950	0.500	0.810	0.911	-	0.909	0.979
Lights	0	50	79	-	129	0	1278	39	-	1317	2	90	1054	-	1146	2592
% Lights	-	98.0	98.8	-	98.5	-	98.1	100.0	-	98.1	100.0	95.7	98.0	-	97.9	98.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	1	1	-	2	0	17	0	-	17	0	4	16	-	20	39
% Single-Unit Trucks	-	2.0	1.3	-	1.5	-	1.3	0.0	-	1.3	0.0	4.3	1.5	-	1.7	1.5
Articulated Trucks	0	0	0	-	0	0	8	0	-	8	0	0	5	-	5	13
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.6	0.0	-	0.6	0.0	0.0	0.5	-	0.4	0.5
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	2	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Seegers Road with Tonne Drive
Site Code:
Start Date: 08/04/2020

Turning Movement Data

Start Time	Seegers Road Eastbound					Seegers Road Westbound					Tonne Drive Northbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:00 AM	0	17	3	0	20	0	5	8	1	13	0	10	5	1	15	48
7:15 AM	0	10	5	0	15	0	4	17	1	21	0	8	4	0	12	48
7:30 AM	0	8	4	0	12	0	3	16	0	19	0	9	3	0	12	43
7:45 AM	0	16	4	0	20	0	3	16	0	19	0	16	7	0	23	62
Hourly Total	0	51	16	0	67	0	15	57	2	72	0	43	19	1	62	201
8:00 AM	0	13	5	0	18	0	2	12	0	14	0	8	1	0	9	41
8:15 AM	0	13	6	0	19	0	1	12	0	13	0	9	4	1	13	45
8:30 AM	0	10	4	0	14	0	5	6	0	11	0	15	1	1	16	41
8:45 AM	1	19	9	0	29	0	0	19	1	19	0	9	2	0	11	59
Hourly Total	1	55	24	0	80	0	8	49	1	57	0	41	8	2	49	186
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	15	10	0	25	0	6	18	0	24	0	14	13	0	27	76
4:15 PM	0	13	13	0	26	0	3	18	0	21	0	13	4	0	17	64
4:30 PM	0	9	13	0	22	0	2	19	0	21	0	6	5	1	11	54
4:45 PM	0	22	16	0	38	0	6	17	0	23	0	11	6	0	17	78
Hourly Total	0	59	52	0	111	0	17	72	0	89	0	44	28	1	72	272
5:00 PM	0	19	20	0	39	0	5	17	1	22	0	16	6	0	22	83
5:15 PM	0	25	14	0	39	0	0	17	0	17	0	9	14	0	23	79
5:30 PM	0	20	14	0	34	0	1	15	0	16	0	14	3	0	17	67
5:45 PM	0	17	8	1	25	0	12	11	1	23	0	13	12	0	25	73
Hourly Total	0	81	56	1	137	0	18	60	2	78	0	52	35	0	87	302
Grand Total	1	246	148	1	395	0	58	238	5	296	0	180	90	4	270	961
Approach %	0.3	62.3	37.5	-	-	0.0	19.6	80.4	-	-	0.0	66.7	33.3	-	-	-
Total %	0.1	25.6	15.4	-	41.1	0.0	6.0	24.8	-	30.8	0.0	18.7	9.4	-	28.1	-
Lights	1	240	142	-	383	0	55	230	-	285	0	173	81	-	254	922
% Lights	100.0	97.6	95.9	-	97.0	-	94.8	96.6	-	96.3	-	96.1	90.0	-	94.1	95.9
Buses	0	0	0	-	0	0	2	0	-	2	0	0	0	-	0	2
% Buses	0.0	0.0	0.0	-	0.0	-	3.4	0.0	-	0.7	-	0.0	0.0	-	0.0	0.2
Single-Unit Trucks	0	6	0	-	6	0	1	5	-	6	0	0	0	-	0	12
% Single-Unit Trucks	0.0	2.4	0.0	-	1.5	-	1.7	2.1	-	2.0	-	0.0	0.0	-	0.0	1.2
Articulated Trucks	0	0	1	-	1	0	0	1	-	1	0	0	3	-	3	5
% Articulated Trucks	0.0	0.0	0.7	-	0.3	-	0.0	0.4	-	0.3	-	0.0	3.3	-	1.1	0.5
Bicycles on Road	0	0	5	-	5	0	0	2	-	2	0	7	6	-	13	20
% Bicycles on Road	0.0	0.0	3.4	-	1.3	-	0.0	0.8	-	0.7	-	3.9	6.7	-	4.8	2.1
Pedestrians	-	-	-	1	-	-	-	-	5	-	-	-	-	4	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Seegers Road with Tonne Drive
Site Code:
Start Date: 08/04/2020

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Seegers Road Eastbound					Seegers Road Westbound					Tonne Drive Northbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:30 AM	0	8	4	0	12	0	3	16	0	19	0	9	3	0	12	43
7:45 AM	0	16	4	0	20	0	3	16	0	19	0	16	7	0	23	62
8:00 AM	0	13	5	0	18	0	2	12	0	14	0	8	1	0	9	41
8:15 AM	0	13	6	0	19	0	1	12	0	13	0	9	4	1	13	45
Total	0	50	19	0	69	0	9	56	0	65	0	42	15	1	57	191
Approach %	0.0	72.5	27.5	-	-	0.0	13.8	86.2	-	-	0.0	73.7	26.3	-	-	-
Total %	0.0	26.2	9.9	-	36.1	0.0	4.7	29.3	-	34.0	0.0	22.0	7.9	-	29.8	-
PHF	0.000	0.781	0.792	-	0.863	0.000	0.750	0.875	-	0.855	0.000	0.656	0.536	-	0.620	0.770
Lights	0	48	19	-	67	0	8	53	-	61	0	41	15	-	56	184
% Lights	-	96.0	100.0	-	97.1	-	88.9	94.6	-	93.8	-	97.6	100.0	-	98.2	96.3
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	2	0	-	2	0	1	2	-	3	0	0	0	-	0	5
% Single-Unit Trucks	-	4.0	0.0	-	2.9	-	11.1	3.6	-	4.6	-	0.0	0.0	-	0.0	2.6
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	1	-	1	0	1	0	-	1	2
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	1.8	-	1.5	-	2.4	0.0	-	1.8	1.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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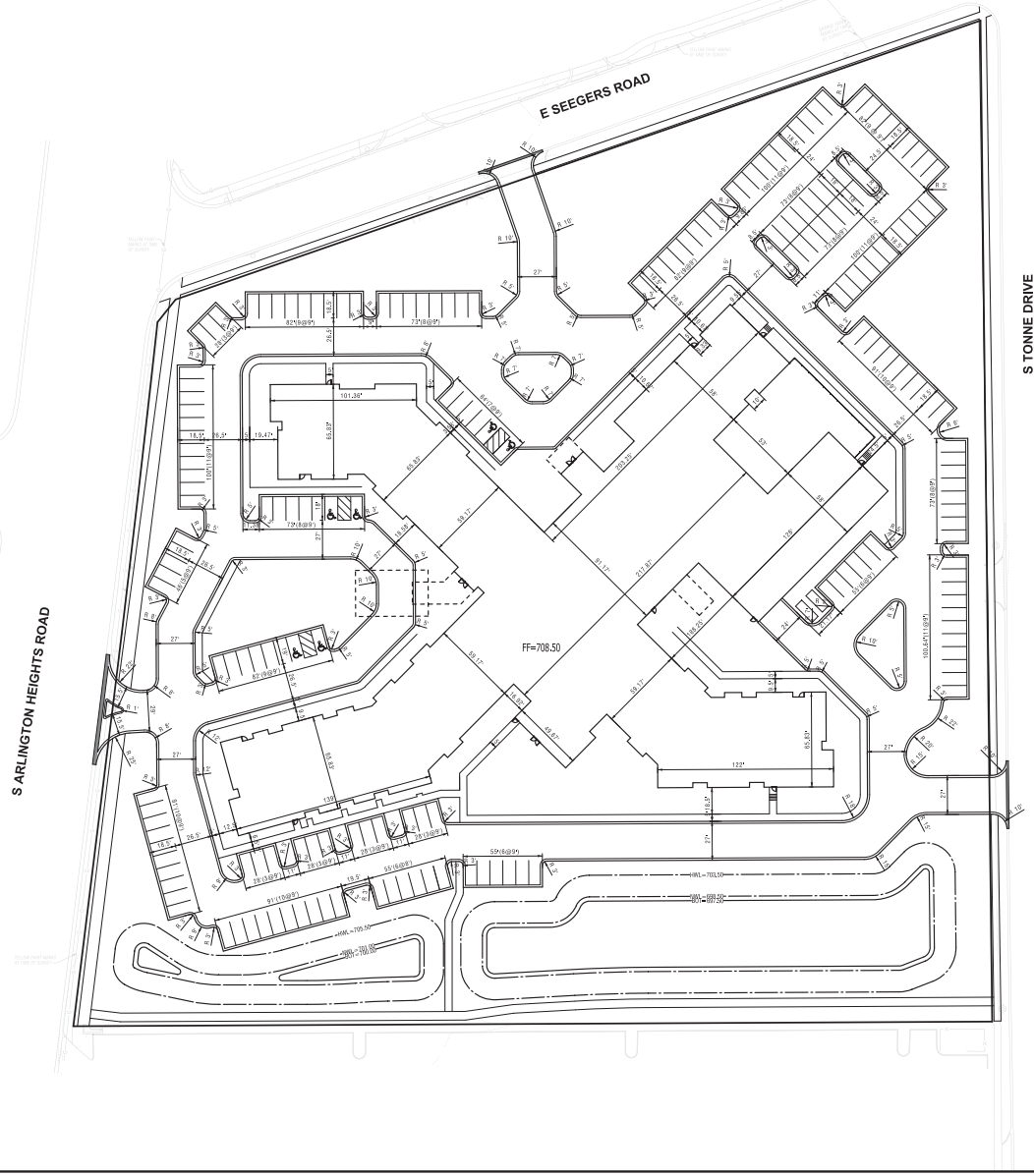
(847)518-9990

Count Name: Seegers Road with Tonne Drive
Site Code:
Start Date: 08/04/2020

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Seegers Road Eastbound					Seegers Road Westbound					Tonne Drive Northbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:00 PM	0	15	10	0	25	0	6	18	0	24	0	14	13	0	27	76
4:15 PM	0	13	13	0	26	0	3	18	0	21	0	13	4	0	17	64
4:30 PM	0	9	13	0	22	0	2	19	0	21	0	6	5	1	11	54
4:45 PM	0	22	16	0	38	0	6	17	0	23	0	11	6	0	17	78
Total	0	59	52	0	111	0	17	72	0	89	0	44	28	1	72	272
Approach %	0.0	53.2	46.8	-	-	0.0	19.1	80.9	-	-	0.0	61.1	38.9	-	-	-
Total %	0.0	21.7	19.1	-	40.8	0.0	6.3	26.5	-	32.7	0.0	16.2	10.3	-	26.5	-
PHF	0.000	0.670	0.813	-	0.730	0.000	0.708	0.947	-	0.927	0.000	0.786	0.538	-	0.667	0.872
Lights	0	56	50	-	106	0	16	71	-	87	0	42	25	-	67	260
% Lights	-	94.9	96.2	-	95.5	-	94.1	98.6	-	97.8	-	95.5	89.3	-	93.1	95.6
Buses	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Buses	-	0.0	0.0	-	0.0	-	5.9	0.0	-	1.1	-	0.0	0.0	-	0.0	0.4
Single-Unit Trucks	0	3	0	-	3	0	0	1	-	1	0	0	0	-	0	4
% Single-Unit Trucks	-	5.1	0.0	-	2.7	-	0.0	1.4	-	1.1	-	0.0	0.0	-	0.0	1.5
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	3	-	3	3
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	10.7	-	4.2	1.1
Bicycles on Road	0	0	2	-	2	0	0	0	-	0	0	2	0	-	2	4
% Bicycles on Road	-	0.0	3.8	-	1.8	-	0.0	0.0	-	0.0	-	4.5	0.0	-	2.8	1.5
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Preliminary Site Plan



SCALE 1" = 40'
0 40 80

SITE DATA:

PROPERTY AREA = 8.21 AC.
BUILDING AREA = 72,374 SF.
FAR= 57.2%
AUTO PARKING PROVIDED = 186 STALLS
ADA PARKING PROVIDED = 6 STALLS
TOTAL PARKING PROVIDED = 192 STALLS

NOTES:

1. ALL DIMENSIONS ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURBS AND GUTTERS ARE STANDARD REVERSED PITCH UNLESS OTHERWISE NOTED.
3. SEE SHEET GN FOR PAVEMENT SECTION DETAILS.
4. ALL PAVEMENT MARKINGS SHALL BE PAINT.
5. ALL ACCESSIBLE PARKING SPACE SIGNAGE SHALL CONFORM TO ILLINOIS ACCESSIBILITY CODE.
6. SEE ARCHITECTURAL DRAWINGS FOR DESIGN AND DETAILS OF THE BUILDING.

LEGEND

- HEAVY DUTY PAVEMENT
- STANDARD DUTY PAVEMENT
- CONCRETE SIDEWALK
- DECORATIVE PAVEMENT - SEE LANDSCAPE PLAN
- DEPRESSED CURB & GUTTER

DRAFT
FOR REVIEW
PURPOSES ONLY
10/27/2020

NO.	DATE	REMARKS

NO.	DATE	REMARKS

PRELIMINARY GEOMETRIC PLAN

ARLINGTON HEIGHTS SENIOR
ARLINGTON HEIGHTS, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4400 Fax: (847) 696-4065

SPACECO INC.

FILENAME: 11144-P-GM
DATE: 08/19/20
JOB NO. 11144
SHEET P-GM
3 OF 4

N:\Projects\11144\PRELIM\11144-P-GM.dgn Default User=wbeeman

ITE Trip Generation Worksheets

Senior Adult Housing - Attached
(252)

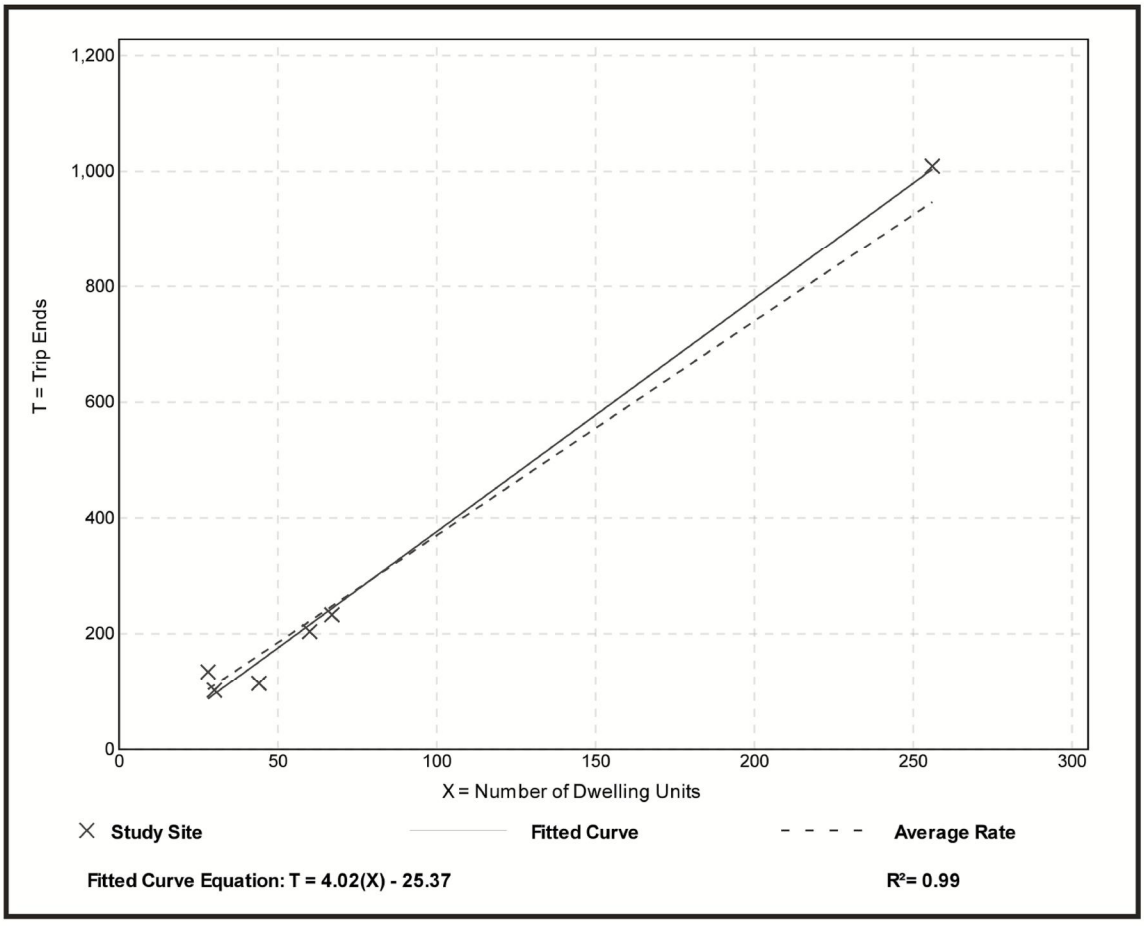
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 6
Avg. Num. of Dwelling Units: 81
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
3.70	2.59 - 4.79	0.53

Data Plot and Equation



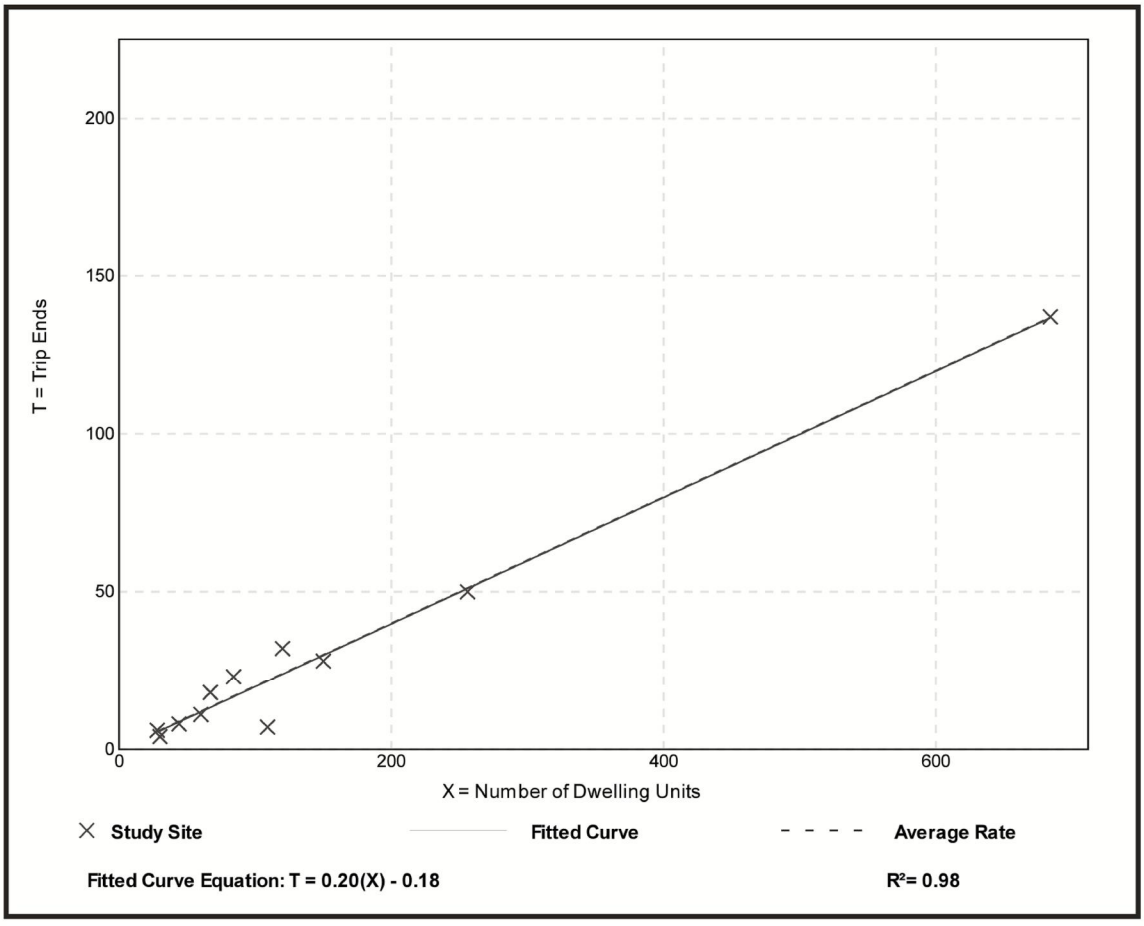
Senior Adult Housing - Attached
(252)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg. Num. of Dwelling Units: 148
Directional Distribution: 35% entering, 65% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.20	0.06 - 0.27	0.05

Data Plot and Equation



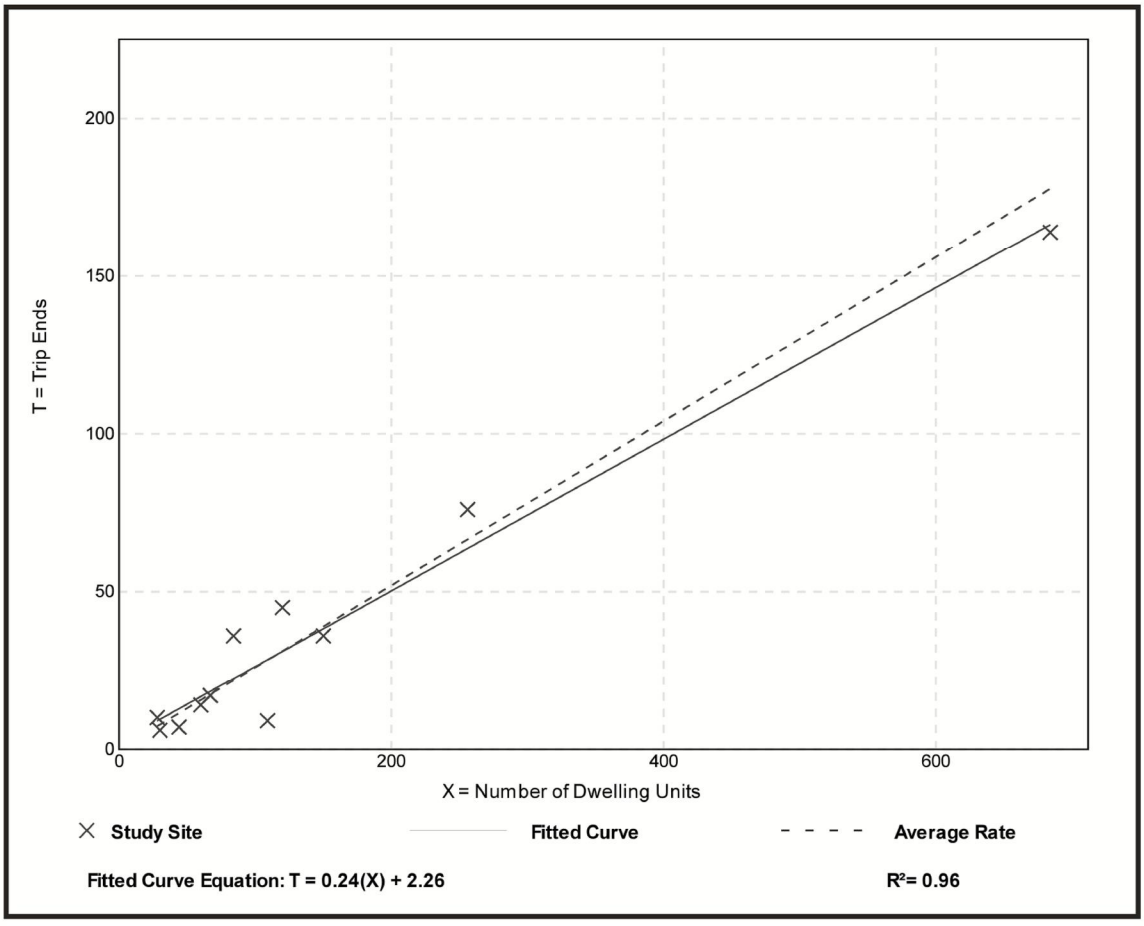
Senior Adult Housing - Attached
(252)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg. Num. of Dwelling Units: 148
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.26	0.08 - 0.43	0.08

Data Plot and Equation



Assisted Living
(254)

Vehicle Trip Ends vs: **Beds**
On a: **Weekday**

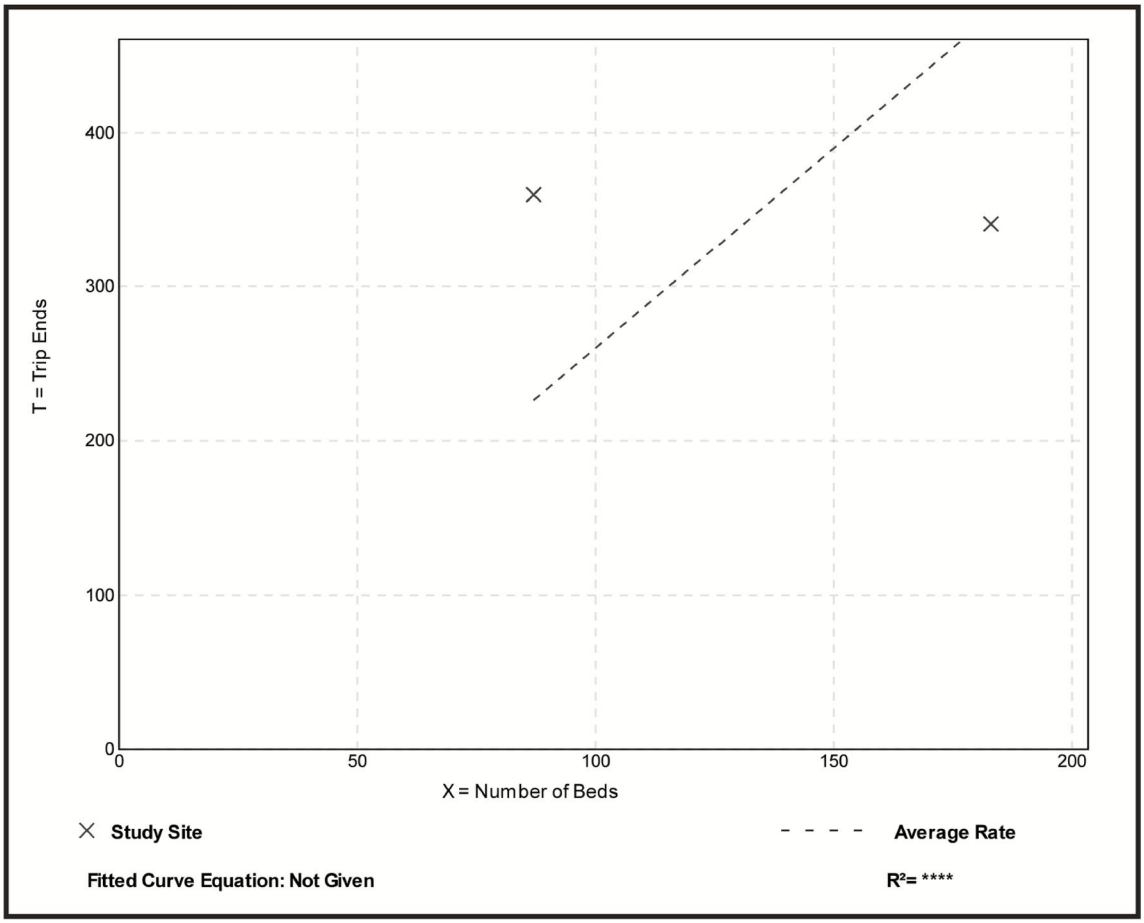
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
Avg. Num. of Beds: 135
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
2.60	1.86 - 4.14	*

Data Plot and Equation

Caution – Small Sample Size



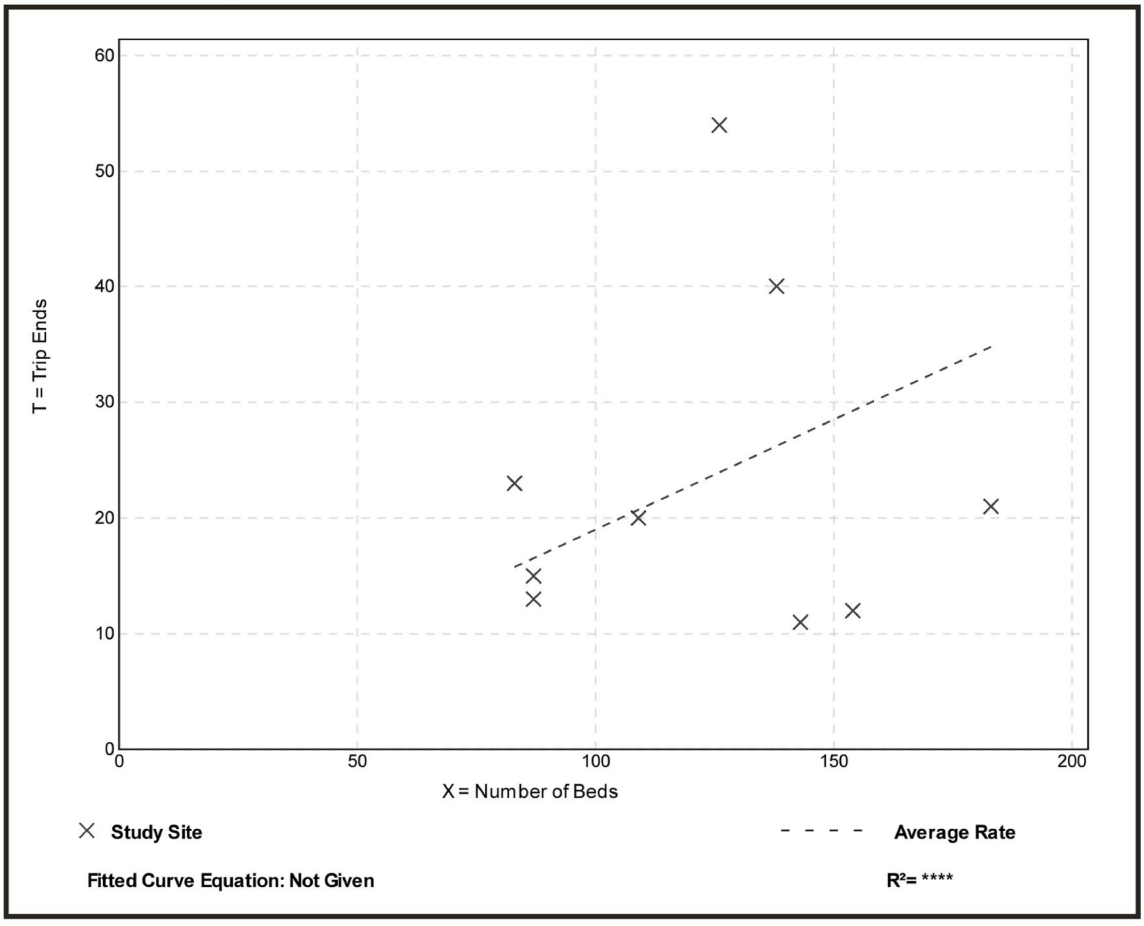
Assisted Living
(254)

Vehicle Trip Ends vs: **Beds**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 9
Avg. Num. of Beds: 123
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.19	0.08 - 0.43	0.12

Data Plot and Equation



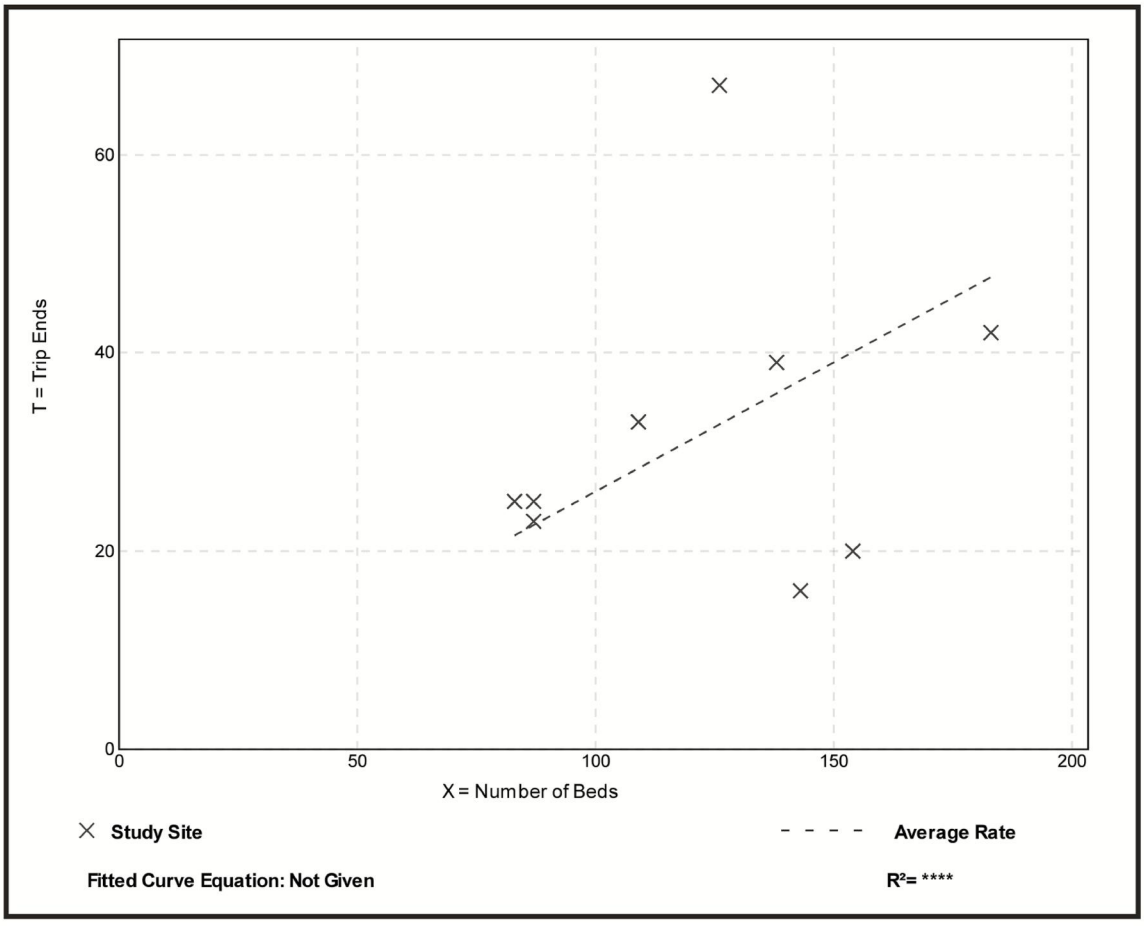
Assisted Living
(254)

Vehicle Trip Ends vs: **Beds**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 9
Avg. Num. of Beds: 123
Directional Distribution: 38% entering, 62% exiting

Vehicle Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.26	0.11 - 0.53	0.13

Data Plot and Equation



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

August 5, 2020

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

Subject: Arlington Heights Road - Golf Road - Algonquin Road
IDOT

Dear Ms. Purguette:

In response to a request made on your behalf and dated August 3, 2020, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current Volumes	Year 2050 ADT
Arlington Hts Rd north of Golf Rd	30,400	34,400
Arlington Hts Rd from Golf Rd to Algonquin Rd	32,300	36,500
Arlington Hts Rd south of Algonquin Rd	32,400	36,600
Algonquin Rd west of Arlington Hts Rd	26,200	29,600
Algonquin Rd east of Arlington Hts Rd	29,600	33,500
Golf Rd west of Arlington Hts Rd	28,300	32,000
Golf Rd fr Arlington Hts Rd to Goebbert Rd	27,800	31,500
Golf Rd east of Goebbert Rd	25,900	29,300

Traffic projections are developed using existing ADT data provided in the request letter and the results from the March 2020 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)
\2020_TrafficForecast\ck-79-20\ck-79-20.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*, 2010.

Capacity Analysis Summary Sheets

Existing Weekday Morning Peak Hour Conditions

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	47	47	1289	28	63	1496
Future Vol, veh/h	47	47	1289	28	63	1496
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	70	0	-	-	115	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	4	0	7	0	2	3
Mvmt Flow	50	50	1371	30	67	1591

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2157	702	0	0	1402	0
Stage 1	1387	-	-	-	-	-
Stage 2	770	-	-	-	-	-
Critical Hdwy	5.78	7.1	-	-	5.34	-
Critical Hdwy Stg 1	6.68	-	-	-	-	-
Critical Hdwy Stg 2	6.08	-	-	-	-	-
Follow-up Hdwy	3.84	3.9	-	-	3.12	-
Pot Cap-1 Maneuver	75	330	-	-	249	-
Stage 1	137	-	-	-	-	-
Stage 2	374	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	55	330	-	-	249	-
Mov Cap-2 Maneuver	85	-	-	-	-	-
Stage 1	100	-	-	-	-	-
Stage 2	374	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	56.6	0	1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	85	330	249	-
HCM Lane V/C Ratio	-	-	0.588	0.152	0.269	-
HCM Control Delay (s)	-	-	95.4	17.8	24.7	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	2.7	0.5	1.1	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	13	42	1313	1493	50
Future Vol, veh/h	4	13	42	1313	1493	50
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	0	135	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	7	3	2
Mvmt Flow	4	14	45	1397	1588	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2264	821	1641	0	-	0
Stage 1	1615	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	67	273	190	-	-	-
Stage 1	100	-	-	-	-	-
Stage 2	439	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	51	273	190	-	-	-
Mov Cap-2 Maneuver	68	-	-	-	-	-
Stage 1	76	-	-	-	-	-
Stage 2	439	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.9	0.9	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	190	-	68	273	-	-
HCM Lane V/C Ratio	0.235	-	0.063	0.051	-	-
HCM Control Delay (s)	29.7	-	61.4	18.9	-	-
HCM Lane LOS	D	-	F	C	-	-
HCM 95th %tile Q(veh)	0.9	-	0.2	0.2	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	52	20	9	57	43	16
Future Vol, veh/h	52	20	9	57	43	16
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	0	11	3	0	0
Mvmt Flow	68	26	12	74	56	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	95	0	180	82
Stage 1	-	-	-	-	82	-
Stage 2	-	-	-	-	98	-
Critical Hdwy	-	-	4.21	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.299	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1444	-	814	983
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	931	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1443	-	806	982
Mov Cap-2 Maneuver	-	-	-	-	806	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	931	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	847	-	-	1443	-
HCM Lane V/C Ratio	0.09	-	-	0.008	-
HCM Control Delay (s)	9.7	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	44	14	42	2	2	0	13	183	8	9	167	43
Future Vol, veh/h	44	14	42	2	2	0	13	183	8	9	167	43
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	15	44	2	2	0	14	193	8	9	176	45

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	443	446	199	471	464	197	221	0	0	201	0	0
Stage 1	217	217	-	225	225	-	-	-	-	-	-	-
Stage 2	226	229	-	246	239	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	525	507	842	503	495	844	1348	-	-	1371	-	-
Stage 1	785	723	-	778	718	-	-	-	-	-	-	-
Stage 2	777	715	-	758	708	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	516	497	842	459	485	844	1348	-	-	1371	-	-
Mov Cap-2 Maneuver	516	497	-	459	485	-	-	-	-	-	-	-
Stage 1	776	717	-	769	709	-	-	-	-	-	-	-
Stage 2	765	706	-	698	702	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.1	12.7	0.5	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1348	-	-	612	472	1371	-	-
HCM Lane V/C Ratio	0.01	-	-	0.172	0.009	0.007	-	-
HCM Control Delay (s)	7.7	0	-	12.1	12.7	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0	0	-	-

Capacity Analysis Summary Sheets

Existing Weekday Evening Peak Hour Conditions

Intersection	
Int Delay, s/veh	9.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	53	84	1564	41	100	1290
Future Vol, veh/h	53	84	1564	41	100	1290
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	70	0	-	-	115	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	1	2	0	4	2
Mvmt Flow	54	86	1596	42	102	1316

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2349	821	0	0	1640	0
Stage 1	1619	-	-	-	-	-
Stage 2	730	-	-	-	-	-
Critical Hdwy	5.74	7.12	-	-	5.38	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.91	-	-	3.14	-
Pot Cap-1 Maneuver	61	274	-	-	186	-
Stage 1	100	-	-	-	-	-
Stage 2	398	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 28	273	-	-	186	-
Mov Cap-2 Maneuver	~ 40	-	-	-	-	-
Stage 1	~ 45	-	-	-	-	-
Stage 2	398	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	177.8	0	3.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	40	273	186	-
HCM Lane V/C Ratio	-	-	1.352	0.314	0.549	-
HCM Control Delay (s)	-	-	$ 421.3	24.1	45.6	-
HCM Lane LOS	-	-	F	C	E	-
HCM 95th %tile Q(veh)	-	-	5.5	1.3	2.9	-

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

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	53	8	1567	1325	18
Future Vol, veh/h	38	53	8	1567	1325	18
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	0	135	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	54	8	1599	1352	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2017	685	1370	0	-	0
Stage 1	1361	-	-	-	-	-
Stage 2	656	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	92	335	258	-	-	-
Stage 1	145	-	-	-	-	-
Stage 2	435	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	89	335	258	-	-	-
Mov Cap-2 Maneuver	122	-	-	-	-	-
Stage 1	141	-	-	-	-	-
Stage 2	435	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.3	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	258	-	122	335	-	-
HCM Lane V/C Ratio	0.032	-	0.318	0.161	-	-
HCM Control Delay (s)	19.4	-	47.7	17.8	-	-
HCM Lane LOS	C	-	E	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.2	0.6	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	62	52	18	75	44	29
Future Vol, veh/h	62	52	18	75	44	29
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	5	0	6	1	0	11
Mvmt Flow	71	60	21	86	51	33

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	132	0	230	102
Stage 1	-	-	-	-	102	-
Stage 2	-	-	-	-	128	-
Critical Hdwy	-	-	4.16	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.399
Pot Cap-1 Maneuver	-	-	1429	-	763	929
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	903	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1428	-	751	928
Mov Cap-2 Maneuver	-	-	-	-	751	-
Stage 1	-	-	-	-	912	-
Stage 2	-	-	-	-	903	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	813	-	-	1428	-
HCM Lane V/C Ratio	0.103	-	-	0.014	-
HCM Control Delay (s)	9.9	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	49	3	47	11	5	11	19	220	3	12	191	61
Future Vol, veh/h	49	3	47	11	5	11	19	220	3	12	191	61
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	3	49	12	5	12	20	232	3	13	201	64

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	541	534	233	559	565	234	265	0	0	235	0	0
Stage 1	259	259	-	274	274	-	-	-	-	-	-	-
Stage 2	282	275	-	285	291	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	452	452	806	440	434	805	1299	-	-	1332	-	-
Stage 1	746	694	-	732	683	-	-	-	-	-	-	-
Stage 2	725	683	-	722	672	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	431	438	806	401	421	805	1299	-	-	1332	-	-
Mov Cap-2 Maneuver	431	438	-	401	421	-	-	-	-	-	-	-
Stage 1	733	686	-	719	671	-	-	-	-	-	-	-
Stage 2	696	671	-	666	664	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13	12.5	0.6	0.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1299	-	-	554	510	1332	-	-
HCM Lane V/C Ratio	0.015	-	-	0.188	0.056	0.009	-	-
HCM Control Delay (s)	7.8	0	-	13	12.5	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0	-	-

Capacity Analysis Summary Sheets

No-Build Weekday Morning Peak Hour Conditions

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	48	1343	29	66	1562
Future Vol, veh/h	48	48	1343	29	66	1562
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	70	0	-	-	115	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	4	0	7	0	2	3
Mvmt Flow	51	51	1429	31	70	1662

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2251	731	0	0	1461	0
Stage 1	1446	-	-	-	-	-
Stage 2	805	-	-	-	-	-
Critical Hdwy	5.78	7.1	-	-	5.34	-
Critical Hdwy Stg 1	6.68	-	-	-	-	-
Critical Hdwy Stg 2	6.08	-	-	-	-	-
Follow-up Hdwy	3.84	3.9	-	-	3.12	-
Pot Cap-1 Maneuver	67	316	-	-	233	-
Stage 1	126	-	-	-	-	-
Stage 2	359	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 47	316	-	-	233	-
Mov Cap-2 Maneuver	75	-	-	-	-	-
Stage 1	88	-	-	-	-	-
Stage 2	359	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	70.4	0	1.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	75	316	233	-
HCM Lane V/C Ratio	-	-	0.681	0.162	0.301	-
HCM Control Delay (s)	-	-	122.1	18.6	27	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	3.1	0.6	1.2	-

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

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	13	42	1368	1560	50
Future Vol, veh/h	4	13	42	1368	1560	50
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	0	135	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	7	3	2
Mvmt Flow	4	14	45	1455	1660	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2359	857	1713	0	-	0
Stage 1	1687	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	60	258	175	-	-	-
Stage 1	90	-	-	-	-	-
Stage 2	427	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	45	258	175	-	-	-
Mov Cap-2 Maneuver	60	-	-	-	-	-
Stage 1	67	-	-	-	-	-
Stage 2	427	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	31.4	1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	175	-	60	258	-	-
HCM Lane V/C Ratio	0.255	-	0.071	0.054	-	-
HCM Control Delay (s)	32.5	-	69.5	19.7	-	-
HCM Lane LOS	D	-	F	C	-	-
HCM 95th %tile Q(veh)	1	-	0.2	0.2	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	55	21	9	58	44	16
Future Vol, veh/h	55	21	9	58	44	16
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	0	11	3	0	0
Mvmt Flow	71	27	12	75	57	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	99	0	185	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	99	-
Critical Hdwy	-	-	4.21	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.299	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1439	-	809	978
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1438	-	801	977
Mov Cap-2 Maneuver	-	-	-	-	801	-
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	841	-	-	1438	-
HCM Lane V/C Ratio	0.093	-	-	0.008	-
HCM Control Delay (s)	9.7	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	48	14	43	2	2	0	15	188	8	9	172	45
Future Vol, veh/h	48	14	43	2	2	0	15	188	8	9	172	45
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	15	45	2	2	0	16	198	8	9	181	47

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	458	461	205	487	480	202	228	0	0	206	0	0
Stage 1	223	223	-	234	234	-	-	-	-	-	-	-
Stage 2	235	238	-	253	246	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	513	497	836	491	485	839	1340	-	-	1365	-	-
Stage 1	780	719	-	769	711	-	-	-	-	-	-	-
Stage 2	768	708	-	751	703	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	503	486	836	446	474	839	1340	-	-	1365	-	-
Mov Cap-2 Maneuver	503	486	-	446	474	-	-	-	-	-	-	-
Stage 1	769	713	-	758	701	-	-	-	-	-	-	-
Stage 2	755	698	-	690	697	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	12.9	0.5	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1340	-	-	598	460	1365	-	-
HCM Lane V/C Ratio	0.012	-	-	0.185	0.009	0.007	-	-
HCM Control Delay (s)	7.7	0	-	12.4	12.9	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0	0	-	-

Capacity Analysis Summary Sheets

No-Build Weekday Evening Peak Hour Conditions

Intersection	
Int Delay, s/veh	13.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	88	1643	42	102	1377
Future Vol, veh/h	55	88	1643	42	102	1377
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	70	0	-	-	115	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	1	2	0	4	2
Mvmt Flow	56	90	1677	43	104	1405

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2471	862	0	0	1722	0
Stage 1	1701	-	-	-	-	-
Stage 2	770	-	-	-	-	-
Critical Hdwy	5.74	7.12	-	-	5.38	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.91	-	-	3.14	-
Pot Cap-1 Maneuver	~ 52	258	-	-	169	-
Stage 1	88	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 20	258	-	-	169	-
Mov Cap-2 Maneuver	~ 30	-	-	-	-	-
Stage 1	~ 34	-	-	-	-	-
Stage 2	379	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	283.2	0	3.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	30	258	169	-
HCM Lane V/C Ratio	-	-	1.871	0.348	0.616	-
HCM Control Delay (s)	-	-	$ 694.3	26.2	55.5	-
HCM Lane LOS	-	-	F	D	F	-
HCM 95th %tile Q(veh)	-	-	6.5	1.5	3.4	-

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

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	53	8	1647	1414	18
Future Vol, veh/h	38	53	8	1647	1414	18
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	0	135	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	54	8	1681	1443	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2140	731	1461	0	-	0
Stage 1	1452	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	79	312	233	-	-	-
Stage 1	127	-	-	-	-	-
Stage 2	419	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	76	312	233	-	-	-
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	123	-	-	-	-	-
Stage 2	419	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	34.6	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	233	-	107	312	-	-
HCM Lane V/C Ratio	0.035	-	0.362	0.173	-	-
HCM Control Delay (s)	21	-	56.6	18.9	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.5	0.6	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	64	52	18	80	45	30
Future Vol, veh/h	64	52	18	80	45	30
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	5	0	6	1	0	11
Mvmt Flow	74	60	21	92	52	34

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	135	0	239	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	134	-
Critical Hdwy	-	-	4.16	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.399
Pot Cap-1 Maneuver	-	-	1425	-	754	925
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	897	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1424	-	741	924
Mov Cap-2 Maneuver	-	-	-	-	741	-
Stage 1	-	-	-	-	908	-
Stage 2	-	-	-	-	897	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	805	-	-	1424	-
HCM Lane V/C Ratio	0.107	-	-	0.015	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	61	3	48	11	5	11	21	226	3	12	198	63
Future Vol, veh/h	61	3	48	11	5	11	21	226	3	12	198	63
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	64	3	51	12	5	12	22	238	3	13	208	66

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	559	552	241	578	584	240	274	0	0	241	0	0
Stage 1	267	267	-	284	284	-	-	-	-	-	-	-
Stage 2	292	285	-	294	300	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	440	442	798	427	423	799	1289	-	-	1326	-	-
Stage 1	738	688	-	723	676	-	-	-	-	-	-	-
Stage 2	716	676	-	714	666	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	419	428	798	388	409	799	1289	-	-	1326	-	-
Mov Cap-2 Maneuver	419	428	-	388	409	-	-	-	-	-	-	-
Stage 1	723	680	-	709	662	-	-	-	-	-	-	-
Stage 2	686	662	-	658	658	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.8	12.7	0.7	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1289	-	-	526	497	1326	-	-
HCM Lane V/C Ratio	0.017	-	-	0.224	0.057	0.01	-	-
HCM Control Delay (s)	7.8	0	-	13.8	12.7	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	0.2	0	-	-

Capacity Analysis Summary Sheets

Projected Weekday Morning Peak Hour Conditions

Intersection	
Int Delay, s/veh	3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	57	51	1346	29	69	1562
Future Vol, veh/h	57	51	1346	29	69	1562
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	70	0	-	-	115	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	4	0	7	0	2	3
Mvmt Flow	61	54	1432	31	73	1662

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2260	733	0	0	1464	0
Stage 1	1449	-	-	-	-	-
Stage 2	811	-	-	-	-	-
Critical Hdwy	5.78	7.1	-	-	5.34	-
Critical Hdwy Stg 1	6.68	-	-	-	-	-
Critical Hdwy Stg 2	6.08	-	-	-	-	-
Follow-up Hdwy	3.84	3.9	-	-	3.12	-
Pot Cap-1 Maneuver	66	315	-	-	232	-
Stage 1	125	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 45	315	-	-	232	-
Mov Cap-2 Maneuver	73	-	-	-	-	-
Stage 1	86	-	-	-	-	-
Stage 2	356	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	91.8	0	1.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	73	315	232	-
HCM Lane V/C Ratio	-	-	0.831	0.172	0.316	-
HCM Control Delay (s)	-	-	157.2	18.8	27.5	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	4.1	0.6	1.3	-

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

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	13	42	1371	1569	50
Future Vol, veh/h	4	13	42	1371	1569	50
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	0	135	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	7	3	2
Mvmt Flow	4	14	45	1459	1669	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2370	861	1722	0	-	0
Stage 1	1696	-	-	-	-	-
Stage 2	674	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	59	257	173	-	-	-
Stage 1	89	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	44	257	173	-	-	-
Mov Cap-2 Maneuver	59	-	-	-	-	-
Stage 1	66	-	-	-	-	-
Stage 2	426	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	31.8	1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	173	-	59	257	-	-
HCM Lane V/C Ratio	0.258	-	0.072	0.054	-	-
HCM Control Delay (s)	32.9	-	70.7	19.8	-	-
HCM Lane LOS	D	-	F	C	-	-
HCM 95th %tile Q(veh)	1	-	0.2	0.2	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	57	21	9	60	44	16
Future Vol, veh/h	57	21	9	60	44	16
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	0	11	3	0	0
Mvmt Flow	74	27	12	78	57	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	102	0	191	89
Stage 1	-	-	-	-	89	-
Stage 2	-	-	-	-	102	-
Critical Hdwy	-	-	4.21	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.299	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1436	-	803	975
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	927	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1435	-	795	974
Mov Cap-2 Maneuver	-	-	-	-	795	-
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	927	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	836	-	-	1435	-
HCM Lane V/C Ratio	0.093	-	-	0.008	-
HCM Control Delay (s)	9.7	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	49	14	44	2	2	0	16	188	8	9	172	46
Future Vol, veh/h	49	14	44	2	2	0	16	188	8	9	172	46
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	15	46	2	2	0	17	198	8	9	181	48

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	460	463	205	490	483	202	229	0	0	206	0	0
Stage 1	223	223	-	236	236	-	-	-	-	-	-	-
Stage 2	237	240	-	254	247	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	512	496	836	489	483	839	1339	-	-	1365	-	-
Stage 1	780	719	-	767	710	-	-	-	-	-	-	-
Stage 2	766	707	-	750	702	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	502	485	836	444	472	839	1339	-	-	1365	-	-
Mov Cap-2 Maneuver	502	485	-	444	472	-	-	-	-	-	-	-
Stage 1	769	713	-	756	700	-	-	-	-	-	-	-
Stage 2	753	697	-	688	696	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	12.9	0.6	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1339	-	-	597	458	1365	-	-
HCM Lane V/C Ratio	0.013	-	-	0.189	0.009	0.007	-	-
HCM Control Delay (s)	7.7	0	-	12.4	12.9	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	1410	8	0	1582
Future Vol, veh/h	0	3	1410	8	0	1582
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, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	7	0	0	3
Mvmt Flow	0	3	1484	8	0	1665

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	746	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	309	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	309	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	309	-
HCM Lane V/C Ratio	-	-	0.01	-
HCM Control Delay (s)	-	-	16.8	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	76	5	2	102	12	2
Future Vol, veh/h	76	5	2	102	12	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	0	0	3	0	0
Mvmt Flow	80	5	2	107	13	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	85	0	194	83
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1524	-	799	982
Stage 1	-	-	-	-	945	-
Stage 2	-	-	-	-	919	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1524	-	798	982
Mov Cap-2 Maneuver	-	-	-	-	798	-
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	919	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	820	-	-	1524	-
HCM Lane V/C Ratio	0.018	-	-	0.001	-
HCM Control Delay (s)	9.5	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	1	60	30	0
Future Vol, veh/h	0	1	1	60	30	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	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1	1	63	32	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	97	32	32	0	-	0
Stage 1	32	-	-	-	-	-
Stage 2	65	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	907	1048	1593	-	-	-
Stage 1	996	-	-	-	-	-
Stage 2	963	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	906	1048	1593	-	-	-
Mov Cap-2 Maneuver	906	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	963	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1593	-	1048	-	-
HCM Lane V/C Ratio	0.001	-	0.001	-	-
HCM Control Delay (s)	7.3	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Capacity Analysis Summary Sheets

Projected Weekday Evening Peak Hour Conditions

Intersection	
Int Delay, s/veh	21.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	92	1647	42	106	1377
Future Vol, veh/h	67	92	1647	42	106	1377
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	70	0	-	-	115	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	1	2	0	4	2
Mvmt Flow	68	94	1681	43	108	1405

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2483	864	0	0	1726	0
Stage 1	1705	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Critical Hdwy	5.74	7.12	-	-	5.38	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.91	-	-	3.14	-
Pot Cap-1 Maneuver	~ 51	257	-	-	168	-
Stage 1	88	-	-	-	-	-
Stage 2	375	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 18	257	-	-	168	-
Mov Cap-2 Maneuver	~ 28	-	-	-	-	-
Stage 1	~ 31	-	-	-	-	-
Stage 2	375	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 417.7	0	4.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	28	257	168	-
HCM Lane V/C Ratio	-	-	2.442	0.365	0.644	-
HCM Control Delay (s)	-	-	$ 954.4	26.9	58.7	-
HCM Lane LOS	-	-	F	D	F	-
HCM 95th %tile Q(veh)	-	-	8.2	1.6	3.6	-

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

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	53	8	1651	1426	18
Future Vol, veh/h	38	53	8	1651	1426	18
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	0	135	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	54	8	1685	1455	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2154	737	1473	0	-	0
Stage 1	1464	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	77	310	230	-	-	-
Stage 1	125	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	74	310	230	-	-	-
Mov Cap-2 Maneuver	105	-	-	-	-	-
Stage 1	121	-	-	-	-	-
Stage 2	418	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	35.4	0.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	230	-	105	310	-	-
HCM Lane V/C Ratio	0.035	-	0.369	0.174	-	-
HCM Control Delay (s)	21.2	-	58.1	19.1	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.5	0.6	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	66	52	18	82	45	31
Future Vol, veh/h	66	52	18	82	45	31
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	5	0	6	1	0	11
Mvmt Flow	76	60	21	94	52	36

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	137	0	243	107
Stage 1	-	-	-	-	107	-
Stage 2	-	-	-	-	136	-
Critical Hdwy	-	-	4.16	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.399
Pot Cap-1 Maneuver	-	-	1423	-	750	923
Stage 1	-	-	-	-	922	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1422	-	737	922
Mov Cap-2 Maneuver	-	-	-	-	737	-
Stage 1	-	-	-	-	906	-
Stage 2	-	-	-	-	895	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	803	-	-	1422	-
HCM Lane V/C Ratio	0.109	-	-	0.015	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	63	3	49	11	5	11	21	226	3	12	198	65
Future Vol, veh/h	63	3	49	11	5	11	21	226	3	12	198	65
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	66	3	52	12	5	12	22	238	3	13	208	68

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	560	553	242	580	586	240	276	0	0	241	0	0
Stage 1	268	268	-	284	284	-	-	-	-	-	-	-
Stage 2	292	285	-	296	302	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	439	441	797	426	422	799	1287	-	-	1326	-	-
Stage 1	738	687	-	723	676	-	-	-	-	-	-	-
Stage 2	716	676	-	712	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	418	427	797	386	408	799	1287	-	-	1326	-	-
Mov Cap-2 Maneuver	418	427	-	386	408	-	-	-	-	-	-	-
Stage 1	723	679	-	709	662	-	-	-	-	-	-	-
Stage 2	686	662	-	655	656	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.9	12.7	0.7	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1287	-	-	525	495	1326	-	-
HCM Lane V/C Ratio	0.017	-	-	0.231	0.057	0.01	-	-
HCM Control Delay (s)	7.8	0	-	13.9	12.7	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	0.2	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	1655	11	0	1479
Future Vol, veh/h	0	4	1655	11	0	1479
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	2	0	0	2
Mvmt Flow	0	4	1742	12	0	1557

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	877	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	254	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	254	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	254	-
HCM Lane V/C Ratio	-	-	0.017	-
HCM Control Delay (s)	-	-	19.4	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	116	8	2	125	16	2
Future Vol, veh/h	116	8	2	125	16	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	0	0	1	0	0
Mvmt Flow	122	8	2	132	17	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	130	0	262	126
Stage 1	-	-	-	-	126	-
Stage 2	-	-	-	-	136	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1468	-	731	930
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1468	-	730	930
Mov Cap-2 Maneuver	-	-	-	-	730	-
Stage 1	-	-	-	-	904	-
Stage 2	-	-	-	-	895	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	748	-	-	1468	-
HCM Lane V/C Ratio	0.025	-	-	0.001	-
HCM Control Delay (s)	9.9	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	1	75	70	0
Future Vol, veh/h	1	1	1	75	70	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	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	1	1	79	74	0

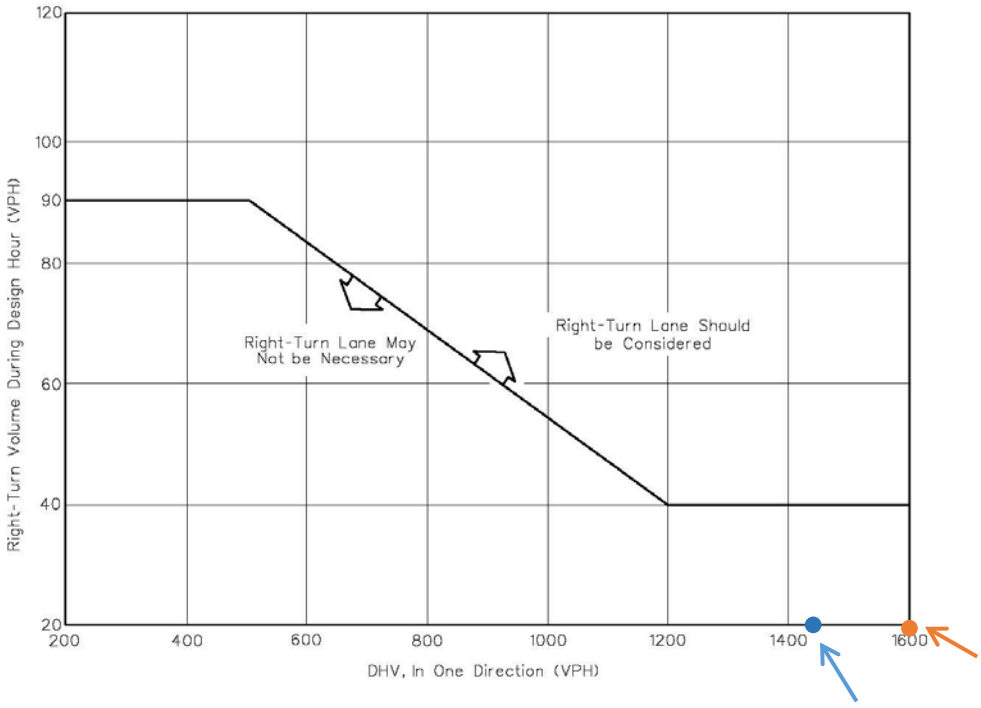
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	155	74	74	0	-	0
Stage 1	74	-	-	-	-	-
Stage 2	81	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	841	993	1538	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	840	993	1538	-	-	-
Mov Cap-2 Maneuver	840	-	-	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	947	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1538	-	910	-	-
HCM Lane V/C Ratio	0.001	-	0.002	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Turn Lane Warrants

Arlington Heights Road with Proposed Access Drive
Right Turn Lane Guidelines



Note: For speeds less than 50 mph (80 km/hr), see Section 36-3.01(a).

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTION ON FOUR-LANE HIGHWAYS
(Design Speed of 50 mph (80 km/hr) or Greater)

Figure 36-3.B