

# Traffic Impact Study

## Proposed Sigwalt Street Apartment Development

### Arlington Heights, Illinois



Prepared For:



Prepared By:



September 11, 2017

# 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 proposed apartment development to be located in Arlington Heights, Illinois. The site is located on the north side of Sigwalt Street and is bound by Highland Avenue on the east and Chestnut Avenue on the west. As proposed, the site will be developed with a five-story apartment building containing 88 units, and a parking garage with 110 parking spaces. Access to the first-floor parking spaces will be provided off Highland Avenue and access to the basement level parking spaces will be provided off Chestnut Avenue.

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. Additionally, the adequacy of the proposed parking supply of the proposed development was also evaluated.

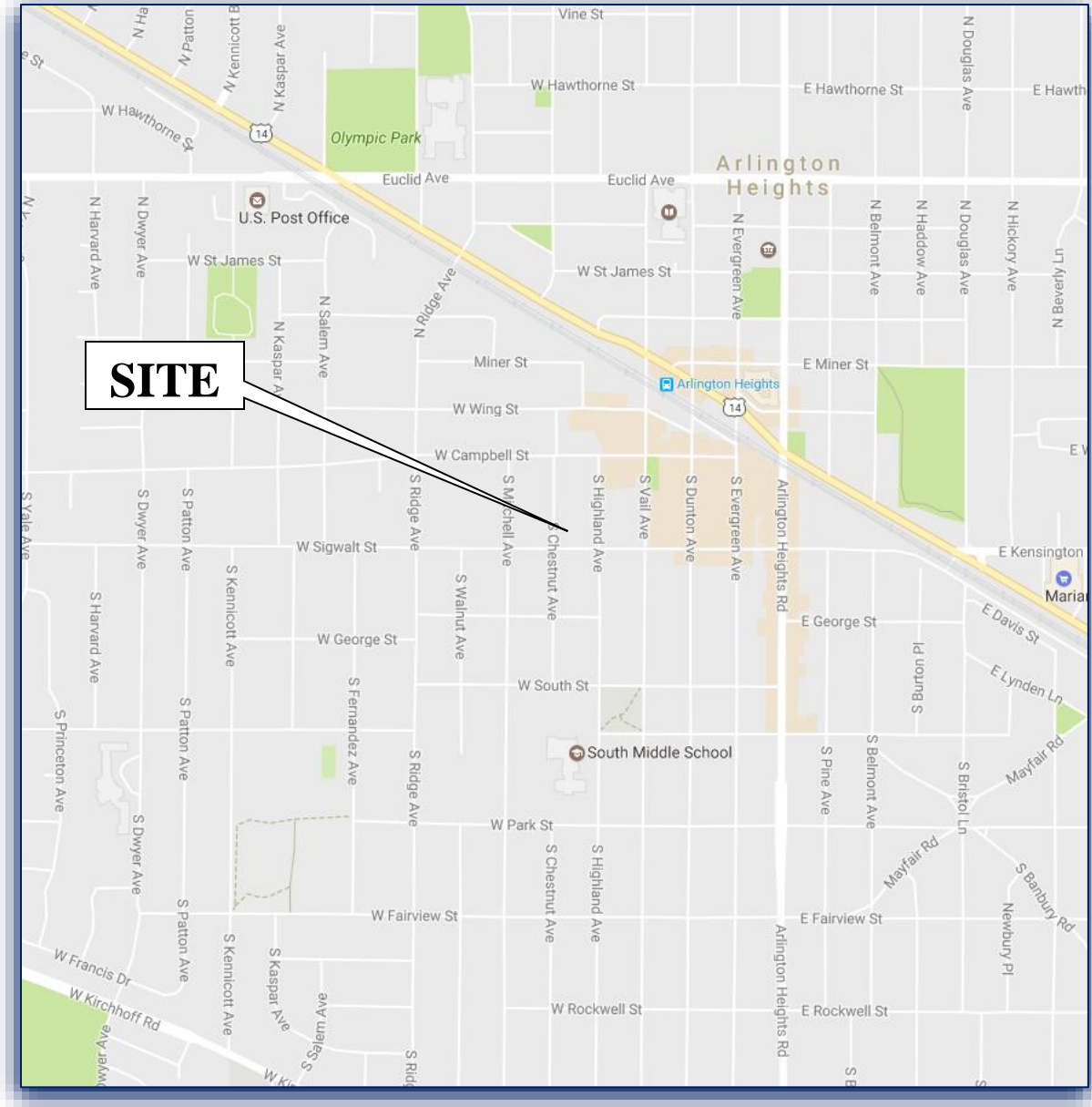
**Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site area.

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 evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system
- Recommendations regarding the adequacy of the parking supply.

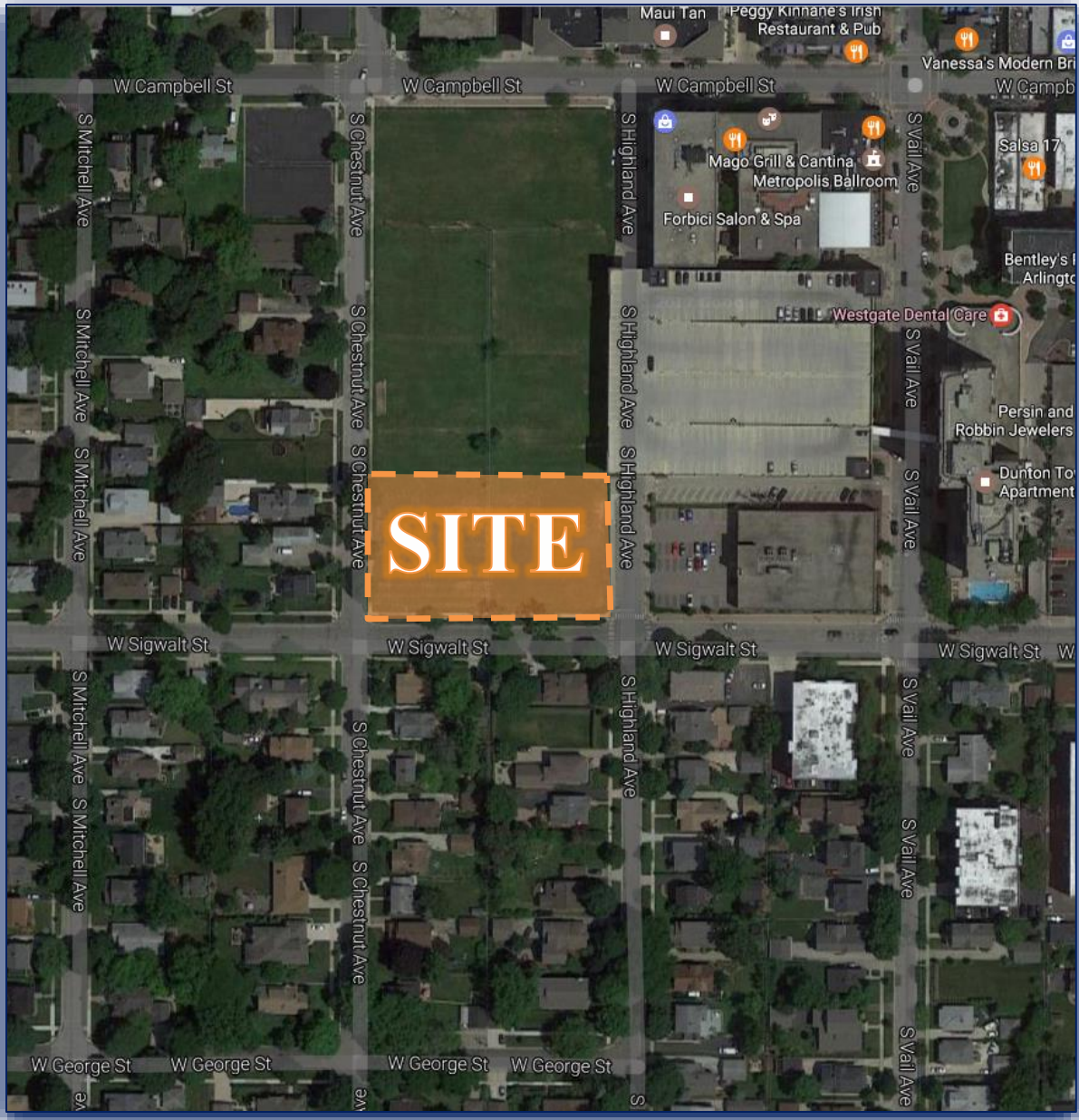
Traffic capacity analyses were conducted for the weekday morning and evening peak hours for the following conditions.

1. Existing Condition - Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
2. Future Condition - The future projected traffic volumes include the existing traffic volumes, ambient area growth not attributable to any particular development and the traffic estimated to be generated by the proposed subject development.



**Site Location**

**Figure 1**



**Aerial View of Site Location**

**Figure 2**

## 2. Existing Conditions

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

### Site Location

The site is located to the southwest of Downtown Arlington Heights on the northside of Sigwalt Street and is bound by Highland Avenue on the east and Chestnut Avenue on the west. The site is currently occupied by vacant land and is within walking distance to the Arlington Heights Metra Station for the Union Pacific – Northwest (UP-NW) Metra Rail Line. Land uses in the vicinity of the site are residential to the west and south and includes the Arlington Heights public parking garage to the northeast and AT&T and Dunton Tower Luxury Apartments to the east.

### Existing Roadway System Characteristics

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

*Sigwalt Street* is an east-west local roadway that in the vicinity of the site provides one lane in each direction. At its all-way stop-sign controlled intersection with Vail Avenue, Sigwalt Street provides a shared left/through/right-turn lane and high visibility crosswalks on both legs. At its unsignalized intersection with Highland Avenue, Sigwalt Street provides a shared left/through/right-turn lane and a high visibility crosswalk on both legs. At its unsignalized intersection with Chestnut Avenue, Sigwalt Street provides a shared left/through/right-turn lane on both legs. Parking is prohibited on both sides of the roadway except along the north side of Sigwalt Street between Highland Avenue and Vail Avenue which is restricted to two hours. Sigwalt Street is under the jurisdiction of the Village of Arlington Heights and has a posted speed limit of 25 miles per hour.

*Highland Avenue* is a north-south local roadway that provides one lane in each direction and extends from Campbell Street south to Central Road. At its unsignalized intersection with Sigwalt Street, Highland Avenue provides a shared left/through/right-turn lane under stop-sign control and a high visibility crosswalk on both legs. At its unsignalized intersection with South Street, Highland Avenue provides a shared left/through/right-turn lane under stop-sign control and a high visibility crosswalk on both legs. At its unsignalized intersection with Campbell Street, Highland Avenue provides a shared left/through/right-turn lane under stop-sign control and a high visibility crosswalk on both legs. It should be noted that between Sigwalt Street and Campbell Street, Highland Avenue traverses through the public parking garage. Parking is prohibited on the east side of the roadway and is restricted to two-hours on the west side of the roadway. Highland Avenue is under the jurisdiction of the Village of Arlington Heights and has a posted speed limit

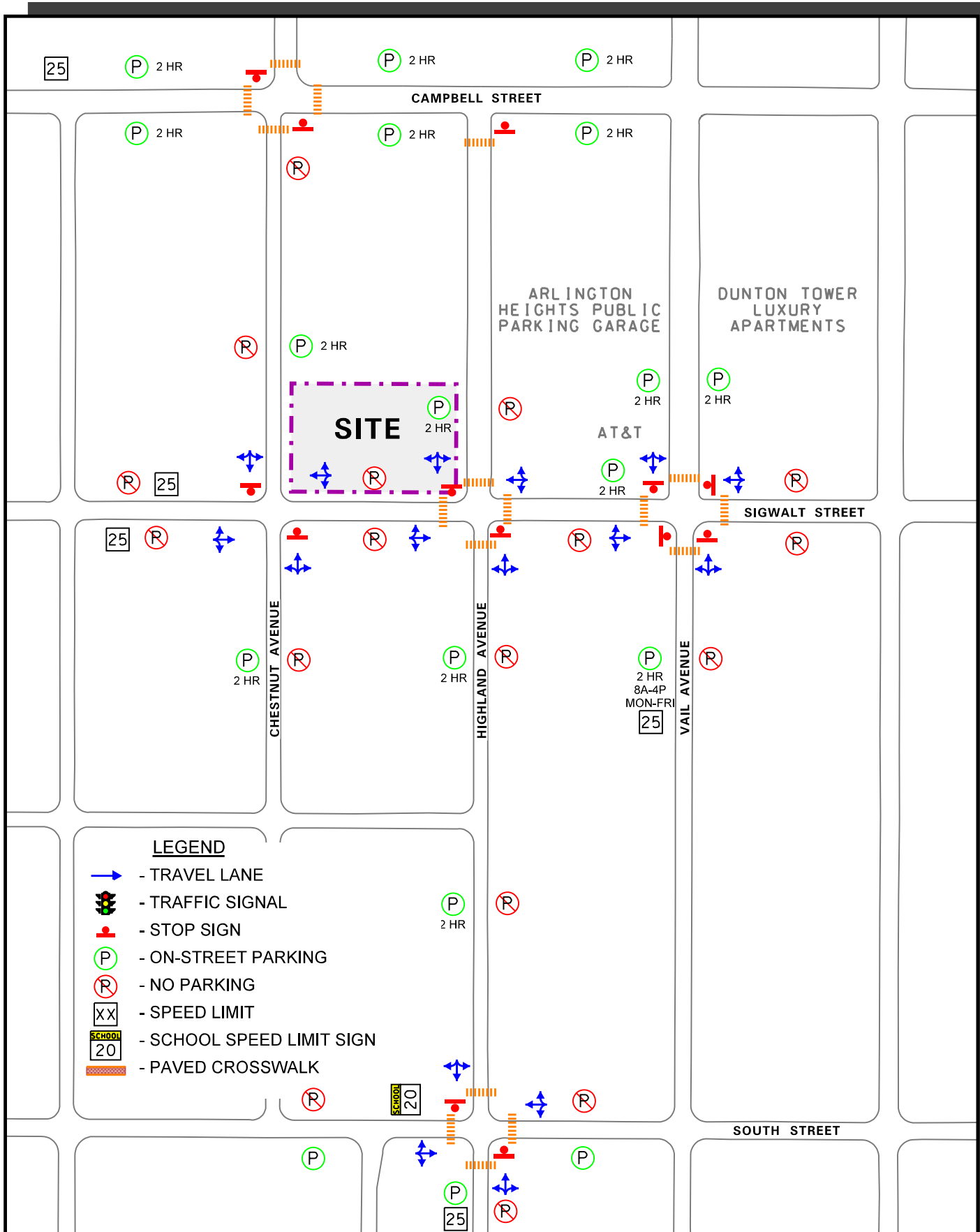
of 25 miles per hour.

*Vail Avenue* is a north-south local roadway that provides one lane in each direction and extends from Euclid Avenue south to Central Road. At its all-way stop-sign controlled intersection with Sigwalt Street, Vail Avenue provides a shared left/through/right-turn lane and a high visibility crosswalk on both legs. South of Sigwalt Street, parking is prohibited on the east side of the roadway and is restricted to two-hours on the west side of the roadway between 8:00 A.M. and 4:00 P.M. Monday through Friday. North of Sigwalt Street, parking is restricted to two-hours on both sides of the roadway. Vail Avenue is under the jurisdiction of the Village of Arlington Heights and has a posted speed limit of 25 miles per hour.

*Chestnut Avenue* is a north-south local roadway that provides one lane in each direction and extends from Wing Street south to South Street. At its unsignalized intersection with Sigwalt Street, Chestnut Avenue provides a shared left/through/right-turn lane under stop-sign control on both legs. At its unsignalized intersection with Campbell Street, Chestnut Avenue terminates and provides a shared left-turn/right-turn lane under stop-sign control. North of Sigwalt Street, parking is prohibited on the west side of the roadway and is restricted to two-hours on the east side of the roadway. South of Sigwalt Street, parking is prohibited on the east side of the roadway and is restricted to two-hours on the west side of the roadway. Chestnut Avenue is under the jurisdiction of the Village of Arlington Heights.

*South Street* is an east-west local roadway that provides one lane in each direction and extends from Arlington Heights Road west to Ridge Avenue. At its unsignalized intersection with Highland Avenue, South Street provides a shared left/through/right-turn lane and high visibility crosswalks on both legs. Parking is prohibited on the north side of the roadway. South Street is under the jurisdiction of the Village of Arlington Heights and has a school zone speed limit of 20 miles per hour.

*Campbell Street* is an east west local road way that provides one lane in each direction and extends from Rohlwing Road to Evergreen Avenue. At its unsignalized intersection with Chestnut Avenue and Highland Avenue, Campbell Street provides a shared left/through/right-turn lane in both directions. High visibility crosswalks are provided on both legs at its intersection with Chestnut Avenue. Parking is generally provided on both sides of the street and is restricted to two-hours. Campbell Street is under the jurisdiction of the Village of Arlington Heights and has a speed limit of 25 miles per hour.



Proposed Apartments  
Arlington Heights, Illinois

Existing Roadway Characteristics



Job No: 17-127 Figure: 3

## Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted manual peak period traffic counts using Miovision Scout Collection Units on Thursday, May 18, 2017 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:

- Sigwalt Street with Highland Avenue
- Sigwalt Street with Vail Avenue
- Sigwalt Street with Chestnut Avenue
- Highland Avenue with South Street

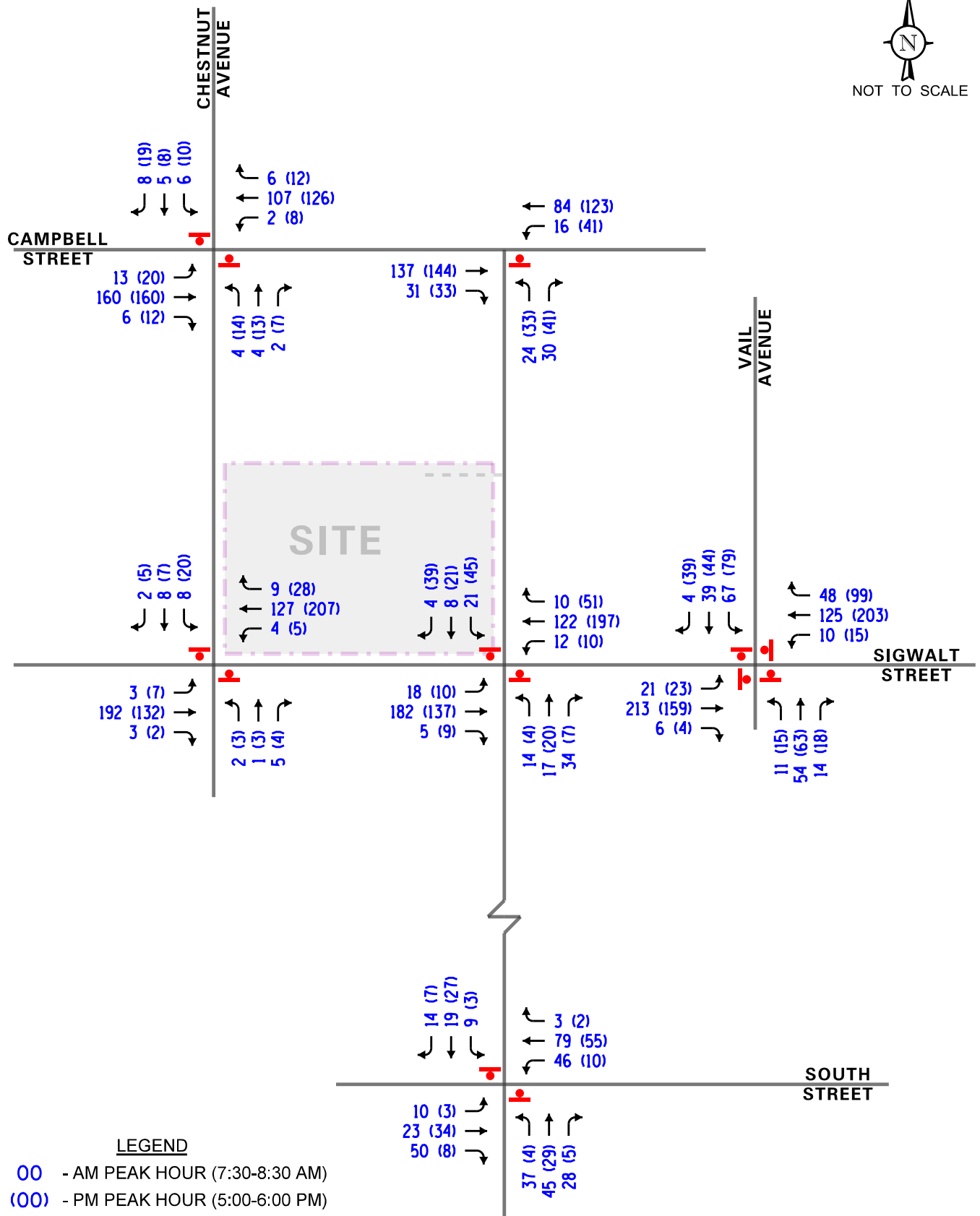
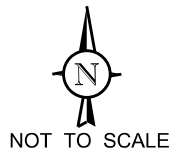
The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 7:30 A.M. to 8:30 A.M. and the evening peak hour of traffic occurs from 5:00 P.M. to 6:00 P.M.

Additional counts were conducted using Miovision Scout Collection Units on August 8, 2017 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:

- Campbell Street with Highland Avenue
- Campbell Street with Chestnut Avenue

The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 8:00 A.M. to 9:00 A.M. and the evening peak hour of traffic occurs from 5:00 P.M. to 6:00 P.M. **Figure 4** illustrates the existing peak hour traffic volumes for both days counts were performed. Copies of the traffic count summary sheets are included in the Appendix.





Proposed Apartments  
 Arlington Heights, Illinois

Existing Traffic Volumes



Job No: 17-127

Figure: 4

## Public Transportation

Sidewalks are provided on the entire surrounding street network and traditional/standard crosswalks are provided at the intersections of Sigwalt Street with Highland Avenue, Sigwalt Street with Vail Avenue and Highland Avenue with South Street. The intersection of Sigwalt Street with Chestnut Avenue does not provide crosswalks. Furthermore, the site is located approximately one-third of a mile walking distance from the Arlington Heights UP-NW Metra Station which offers daily service between Harvard/McHenry and Chicago.

The site is also within the vicinity of Pace Bus Route 696 (Randhurst/Woodfield/Harper College) which provides weekday service from Mt. Prospect to Palatine. Service operates from Randhurst Mall to Harper College. Rush hour service runs every 30 minutes and mid-day service runs every hour. This bus route serves the following major destinations: Randhurst Mall, Prospect H.S., Metra Union Pacific Northwest Line (Arlington Heights), Cook County Courthouse, Rolling Meadows Shopping Center, East Park, Mallard Cove, Woodfield Gardens, Motorola Headquarters, Schaumburg Convention Center, IKEA, Roosevelt University, Woodfield Mall, Pace Northwest Transportation Center and Harper College.

### 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 Development Plan

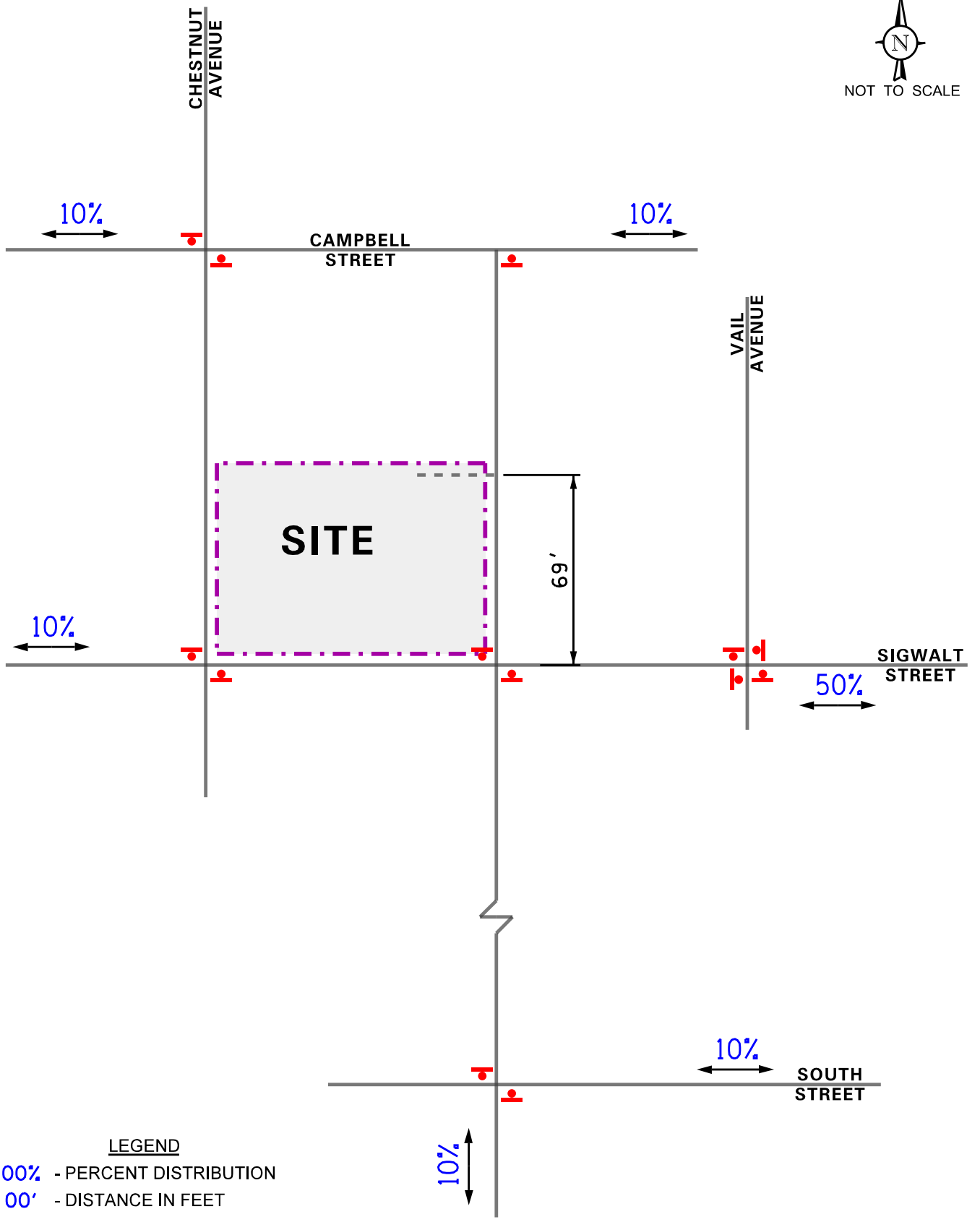
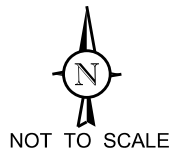
As proposed, the plans call for developing the site with a five-story apartment building containing 88 apartment units. The development will provide a parking garage containing 110 parking spaces for residents of the development. Access to the first-floor parking spaces will be provided via a full movement access drive off Highland Avenue aligned opposite the northerly access drive serving the employee only parking lot serving the AT&T building at 44 S. Vail Avenue. In order to accommodate the proposed access drive, two on-street parking spaces along the west side of Highland Avenue. Pedestrian access to the residential units will be on Sigwalt Street along the south side of the building. A copy of the preliminary site plan depicting the proposed development and access is included in the Appendix.

#### Directional Distribution

The directions from which residents of the apartment units 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.

#### Estimated Site Traffic Generation

The volume of traffic generated by a development is based on the type of land uses and the size of the development. The number of peak hour vehicle trips estimated to be generated by the proposed development of 88 apartment units was based on vehicle trip generation rates contained in *Trip Generation*, 9<sup>th</sup> Edition, published by the Institute of Transportation Engineers (ITE). As previously indicated, the proposed apartment development is located within one-quarter mile of the Arlington Heights Milwaukee District- Northwest Metra Station. A review of the census data indicates that approximately 15 percent of the residents located within one-quarter mile of the Metra Station utilize alternative modes of transportation to get to work. As a result, the estimated number of generated trips for the proposed apartments was reduced by 15 percent to account for the residents that will use means of transportation other than the automobile to commute to work. **Table 1** shows the site-generated traffic volumes for the proposed development.



Proposed Apartments  
Arlington Heights, Illinois

Estimated Directional Distribution

**KLOA**  
Kenig, Lindgren, O'Hara, Aboona, Inc.  
Job No: 17-127 Figure: 5

Table 1  
ESTIMATED 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	
220	Apartments (88 Units)	9	38	47	43	23	66	656
	<i>15% Transportation Reduction</i>	-1	-6	-7	-6	-4	-10	-98
	<b>Total New Trips</b>	<b>8</b>	<b>32</b>	<b>40</b>	<b>37</b>	<b>19</b>	<b>56</b>	<b>558</b>

## 4. Projected Traffic Conditions

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

### Development Traffic Assignment

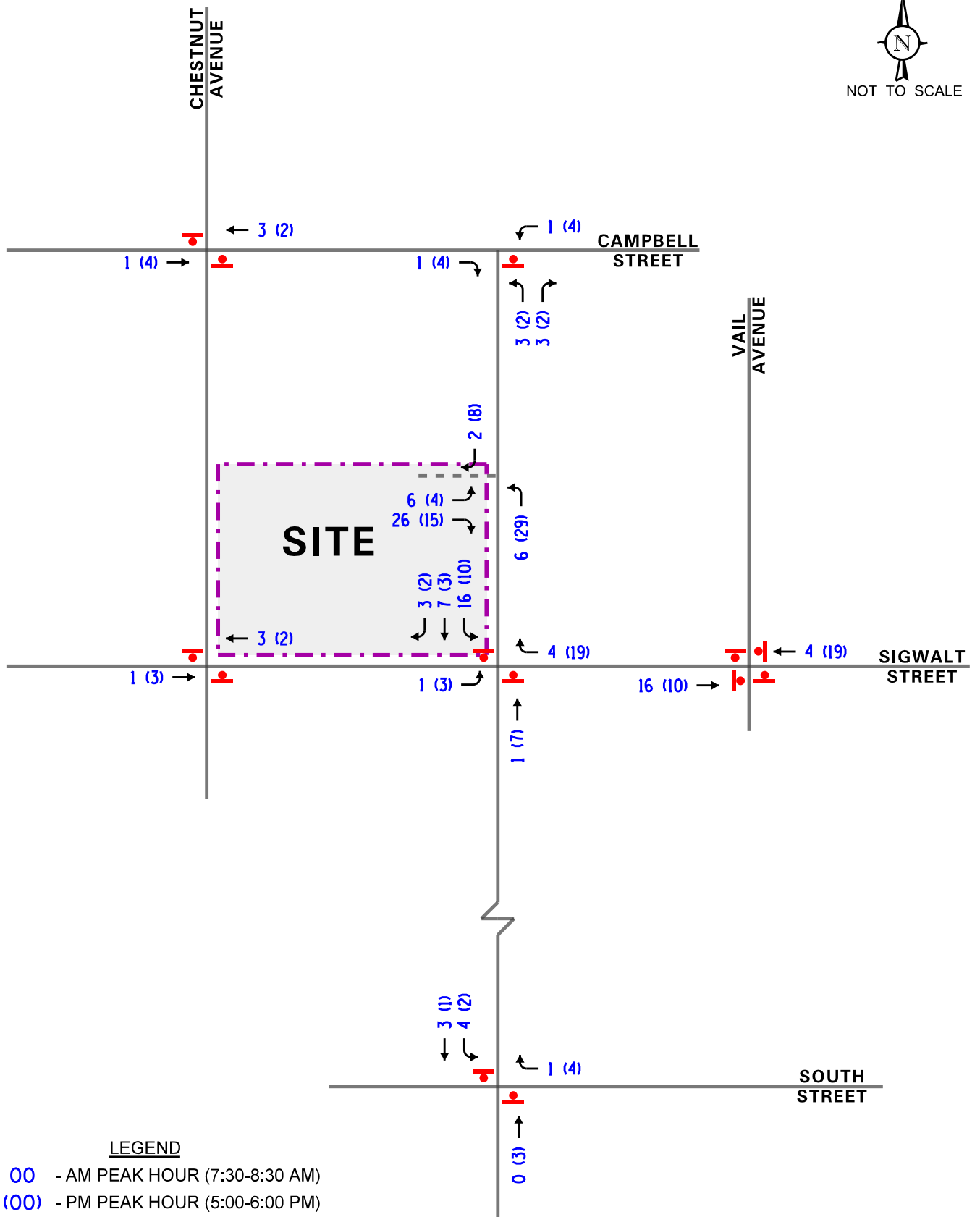
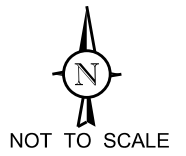
The estimated weekday morning and evening peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). The traffic assignment for the development is illustrated in **Figure 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 the Village of Arlington Heights 2015 Comprehensive Plan an increase of one-half percent per year over six years (three percent total) was applied to project Year 2023 conditions.

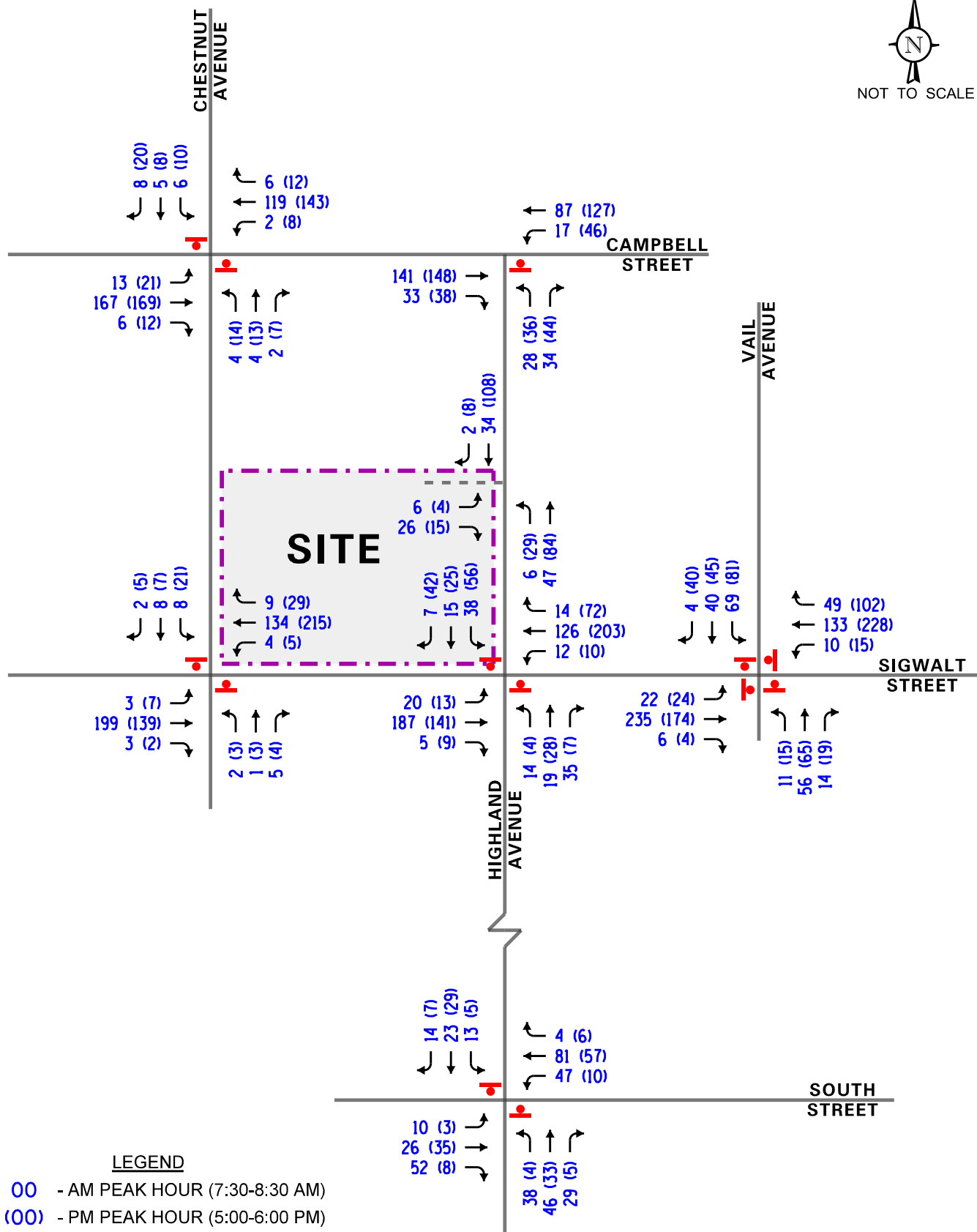
### Total Projected Traffic Volumes

The addition of the development generated traffic to the existing traffic volumes accounting for background growth, to determine the Year 2023 total projected traffic volumes, are shown in **Figure 7**.





NOT TO SCALE



Proposed Apartments  
Arlington Heights, Illinois

Year 2023 Total Projected  
Traffic Volumes

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Job No: 17-127      Figure: 7



## 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 modification are required.

### Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and weekday evening peak hour periods for the existing (Year 2016) and future projected (Year 2023) traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM), 2010* and analyzed using the HCS 7 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 and Year 2023 total projected conditions are presented in **Tables 2** and **3**, respectively. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 2

## CAPACITY ANALYSIS RESULTS – EXISTING TRAFFIC CONDITIONS

	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
<b>Sigwalt Street with Highland Avenue</b>				
• Northbound Approach	B	12.2	B	12.0
• Southbound Approach	B	13.9	B	12.5
• Eastbound Left-Turns	A	7.6	A	7.8
• Westbound Left-Turns	A	7.7	A	7.5
<b>Sigwalt Street with Vail Avenue</b>				
• Overall	B	11.0	B	10.6
• Eastbound Approach	B	12.0	B	10.1
• Westbound Approach	B	10.6	B	11.4
• Northbound Approach	A	9.6	A	9.4
• Southbound Approach	B	10.4	B	10.1
<b>Sigwalt Street with Chestnut Avenue</b>				
• Northbound Approach	B	10.6	B	10.7
• Southbound Approach	B	12.0	B	11.6
• Eastbound Left-Turns	A	7.6	A	7.7
• Westbound Left-Turns	A	7.5	A	7.5
<b>Highland Avenue with South Street</b>				
• Northbound Approach	B	14.6	A	10.0
• Southbound Approach	B	12.6	A	9.9
• Eastbound Left-Turns	A	7.6	A	7.3
• Westbound Left-Turns	A	7.6	A	7.3
<b>Campbell Street with Chestnut Avenue</b>				
• Northbound Approach	B	10.7	B	11.8
• Southbound Approach	B	10.2	B	10.9
• Eastbound Left-Turns	A	7.5	A	7.5
• Westbound Left-Turns	A	7.6	A	7.6
<b>Campbell Street with Highland Avenue</b>				
• Northbound Approach	B	10.4	B	11.2
• Westbound Left-Turns	A	7.6	A	7.7
LOS = Level of Service Delay is measured in seconds.				

Table 3

## CAPACITY ANALYSIS RESULTS - PROJECTED YEAR 2023 TRAFFIC CONDITIONS

	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
<b>Sigwalt Street with Highland Avenue</b>				
• Northbound Approach	B	12.8	B	12.7
• Southbound Approach	B	15.5	B	13.5
• Eastbound Left-Turns	A	7.6	A	7.8
• Westbound Left-Turns	A	7.8	A	7.5
<b>Sigwalt Street with Vail Avenue</b>				
• Overall	B	11.6	B	11.2
• Eastbound Approach	B	12.9	B	10.5
• Westbound Approach	B	11.0	B	12.3
• Northbound Approach	A	9.9	A	9.7
• Southbound Approach	B	10.7	B	10.5
<b>Sigwalt Street with Chestnut Avenue</b>				
• Northbound Approach	B	10.7	B	12.7
• Southbound Approach	B	12.2	B	13.5
• Eastbound Left-Turns	A	7.6	A	7.8
• Westbound Left-Turns	A	7.8	A	7.5
<b>Highland Avenue with South Street</b>				
• Northbound Approach	C	15.0	B	10.1
• Southbound Approach	B	13.3	A	10.0
• Eastbound Left-Turns	A	7.6	A	7.3
• Westbound Left-Turns	A	7.6	A	7.3
<b>Highland Avenue with Proposed Access Drive</b>				
• Eastbound Approach	A	8.7	A	9.2
• Northbound Left-Turns	A	7.3	A	7.5
<b>Campbell Street with Chestnut Avenue</b>				
• Northbound Approach	B	10.9	B	12.2
• Southbound Approach	B	10.3	B	11.2
• Eastbound Left-Turns	A	7.5	A	7.6
• Westbound Left-Turns	A	7.6	A	7.6
<b>Campbell Street with Highland Avenue</b>				
• Northbound Approach	B	10.6	B	11.6
• Westbound Left-Turns	A	7.7	A	7.8
LOS = Level of Service Delay is measured in seconds.				

## Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identify any roadway and traffic control improvements to accommodate the development traffic.

### *Sigwalt Street with Highland Avenue*

The results of the capacity analyses indicate that the northbound and southbound approaches currently operate at level of service (LOS) B during the weekday morning and weekday evening peak hours. Under future conditions, the northbound and southbound approaches are projected to continue operating at LOS B during the peak hours with increases in delay of less than one second. Furthermore, eastbound and westbound left-turn movements from Sigwalt Street onto Highland Avenue are projected to continue operating at LOS A during the peak hours with increases in delay of less than one second and 95<sup>th</sup> percentile queues of one to two vehicles. As such, the proposed development traffic will have a limited impact on the operations of this intersection and no roadway or traffic control improvements will be required.

### *Sigwalt Street with Vail Avenue*

The results of the capacity analyses indicate that overall, this intersection currently operates at LOS B during the weekday morning and weekday evening peak hour is projected to continue operating at LOS B during the peak hours with increases in delay of less than one second. Furthermore, all of the approaches are projected to continue operating at LOS B or better during the peak hours with increases in delay of approximately one second or less. As such, the proposed development traffic will have a limited impact on the operations of this intersection and no roadway or traffic control improvements will be required.

### *Sigwalt Street with Chestnut Avenue*

The results of the capacity analyses indicate that the northbound and southbound approaches currently operate at LOS B during the weekday morning and weekday evening peak hours. Under future conditions, the northbound and southbound approaches are projected to continue operating at LOS B during the peak hours with increases in delay of less than one second. Furthermore, eastbound and westbound left-turn movements from Sigwalt Street onto Chestnut Avenue are projected to continue operating at LOS A during the peak hours with increases in delay of less than one second and 95<sup>th</sup> percentile queues of one to two vehicles. As such, the proposed development traffic will have a limited impact on the operations of this intersection and no roadway or traffic control improvements will be required.

### *Highland Avenue with South Street*

The results of the capacity analyses indicate that the northbound and southbound approaches currently operate at LOS B or better during the peak hours. Under future conditions, the northbound and southbound approaches are projected to operate at LOS C or better during the peak hours with increases in delay of less than one second. Furthermore, eastbound and westbound left-turn movements from South Street onto Highland Avenue are projected to continue operating at LOS A during the peak hours with increases in delay of less than one second and 95<sup>th</sup> percentile queues of one to two vehicles. As such, the proposed development traffic will have a limited impact on the operations of this intersection and no roadway or traffic control improvements will be required.

### *Highland Avenue with Proposed Access Drive*

The results of the capacity analyses indicate that outbound movements from the proposed access drive are projected to operate at LOS A during the weekday morning and weekday evening peak hours. Furthermore, northbound left-turn movements from Highland Avenue onto the proposed access drive are projected to operate at LOS A during both peak hours with 95<sup>th</sup> percentile queues of one to two vehicles. As such, the proposed access drive will be adequate in accommodating the traffic projected to be generated by the proposed development and will have a limited impact on the operations of Highland Avenue.

### *Campbell Avenue with Chestnut Avenue*

The results of the capacity analyses indicate that the northbound and southbound approaches currently operate at LOS B or better during the peak hours. Under future conditions, the northbound and southbound approaches are projected to continue to operate at LOS B or better during the peak hours with increases in delay of less than one second. Furthermore, eastbound and westbound left-turn movements from Campbell Street onto Chestnut Avenue are projected to continue operating at LOS A during the peak hours with increases in delay of less than one second and 95<sup>th</sup> percentile queues of one to two vehicles. As such, the proposed development traffic will have a limited impact on the operations of this intersection and no roadway or traffic control improvements will be required.

### *Campbell Avenue with Highland Avenue*

The results of the capacity analyses indicate that the northbound approaches currently operate at LOS B or better during the peak hours. Under future conditions, the northbound approach is projected to operate at LOS B or better during the peak hours with increases in delay of less than one second. Furthermore, westbound left-turn movements from Campbell Street onto Highland Avenue are projected to continue operating at LOS A during the peak hours with increases in delay of less than one second and 95<sup>th</sup> percentile queues of one to two vehicles. As such, the proposed development traffic will have a limited impact on the operations of this intersection and no roadway or traffic control improvements will be required.

## 6. Parking Evaluation

As proposed, the site will be developed with 88 apartment units and a 110 spaces parking garage (parking ratio of 1.25 spaces per unit). The Village of Arlington Heights requires 1.5 spaces per dwelling unit, thereby requiring 132 parking spaces. As such, the proposed parking supply does not meet the village's parking code.

Based on a review of survey data published by the Institute of Transportation Engineers (ITE) in the Parking Generation Manual, 4<sup>th</sup> Edition for Land Use Code 221 (Low/Mid-Rise Apartments), the average parking demand of the proposed development is projected to be 87 parking spaces (ratio of .98 spaces per unit). Additionally, the average peak parking demand of all surveyed apartment developments is 1.23 spaces per dwelling unit.

Furthermore, for comparison purposes, KLOA, Inc. also examined US Census data compiled by the Center for Transit-Oriented Development. Based on the Census data, the average number of vehicles available per renter occupied household within one-quarter mile from the Arlington Heights Metra station is 0.8 vehicles. Additionally, approximately 75 percent of households have zero or one vehicles available. Given that the proposed apartment building is located within one-quarter mile of the Arlington Heights Metra station, it is anticipated that the apartment building will have the same characteristics as other apartment developments within this radius.

Lastly, the proposed parking ratio of 1.25 spaces per unit is similar to other apartment developments (built or planned) in the Chicago area that are located within proximity to train stations. A review of the parking supply at 19 similar developments indicate that they provide an average ratio of 1.22 spaces per unit. Approximately 60 percent of the apartment developments provides less than 1.25 spaces per unit. A summary table of the location, number of units and parking spaces provided for these developments are included in the Appendix.

Based on the above, it is KLOA, Inc.'s opinion that providing 1.25 parking spaces per unit for the proposed apartment building will be adequate in accommodating its peak parking demand.

## 7. Conclusion

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

- The development is well located with respect to the area roadway system.
- The amount of traffic projected to be generated by the development will be reduced due to the proximity of the development to alternative modes of transportation
- The development generated traffic will not have a significant impact on area roadways.
- The proposed access and roadway system will be adequate in accommodating the development generated traffic and will ensure that an efficient and flexible access is provided.
- No geometric or traffic control improvements will be required under future conditions at the study area intersections
- The proposed development will provide a sufficient number of parking spaces to accommodate its peak needs.

# Appendix

- Traffic Count Summary Sheets
  - Site Plan
  - Level of Service Criteria
- Capacity Analysis Summary Sheets
- Parking Ratios of Similar Developments



# Traffic Count Summary Sheets

*Proposed Apartment Development  
Arlington Heights, Illinois*





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

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

Count Name: Campbell St and Highland Ave  
Site Code:  
Start Date: 08/08/2017  
Page No: 1

### Turning Movement Data

Start Time	Campbell St Eastbound					Campbell St Westbound					Highland Ave Northbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
7:00 AM	0	24	8	1	32	1	3	14	13	18	0	10	9	4	19	69
7:15 AM	0	19	7	0	26	0	1	6	2	7	0	6	5	5	11	44
7:30 AM	0	20	10	0	30	0	3	21	4	24	0	6	7	3	13	67
7:45 AM	0	31	12	0	43	1	3	17	8	21	0	5	6	4	11	75
Hourly Total	0	94	37	1	131	2	10	58	27	70	0	27	27	16	54	255
8:00 AM	0	29	10	1	39	1	3	18	3	22	0	5	6	5	11	72
8:15 AM	0	27	11	0	38	1	5	22	1	28	0	8	8	6	16	82
8:30 AM	0	29	8	0	37	0	4	17	4	21	0	8	6	5	14	72
8:45 AM	0	52	2	1	54	2	4	27	2	33	0	3	10	10	13	100
Hourly Total	0	137	31	2	168	4	16	84	10	104	0	24	30	26	54	326
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	1	42	7	0	50	0	5	22	0	27	0	7	6	5	13	90
4:15 PM	0	30	8	1	38	0	5	36	4	41	0	6	11	5	17	96
4:30 PM	0	27	5	1	32	0	4	19	6	23	0	18	9	5	27	82
4:45 PM	0	29	6	2	35	0	4	28	4	32	1	5	10	6	16	83
Hourly Total	1	128	26	4	155	0	18	105	14	123	1	36	36	21	73	351
5:00 PM	0	33	7	5	40	0	5	27	1	32	0	13	8	13	21	93
5:15 PM	0	30	6	4	36	1	10	30	1	41	0	4	9	8	13	90
5:30 PM	0	25	5	1	30	1	9	35	0	45	0	10	14	12	24	99
5:45 PM	0	40	15	1	55	0	17	31	5	48	0	6	10	14	16	119
Hourly Total	0	128	33	11	161	2	41	123	7	166	0	33	41	47	74	401
Grand Total	1	487	127	18	615	8	85	370	58	463	1	120	134	110	255	1333
Approach %	0.2	79.2	20.7	-	-	1.7	18.4	79.9	-	-	0.4	47.1	52.5	-	-	-
Total %	0.1	36.5	9.5	-	46.1	0.6	6.4	27.8	-	34.7	0.1	9.0	10.1	-	19.1	-
Lights	1	477	126	-	604	8	84	360	-	452	1	120	132	-	253	1309
% Lights	100.0	97.9	99.2	-	98.2	100.0	98.8	97.3	-	97.6	100.0	100.0	98.5	-	99.2	98.2
Buses	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Buses	0.0	0.0	0.0	-	0.0	0.0	0.0	0.3	-	0.2	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	6	1	-	7	0	0	5	-	5	0	0	0	-	0	12
% Single-Unit Trucks	0.0	1.2	0.8	-	1.1	0.0	0.0	1.4	-	1.1	0.0	0.0	0.0	-	0.0	0.9
Articulated Trucks	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Articulated Trucks	0.0	0.2	0.0	-	0.2	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	3	0	-	3	0	1	4	-	5	0	0	2	-	2	10
% Bicycles on Road	0.0	0.6	0.0	-	0.5	0.0	1.2	1.1	-	1.1	0.0	0.0	1.5	-	0.8	0.8
Pedestrians	-	-	-	18	-	-	-	-	58	-	-	-	-	110	-	-
% 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: Campbell St and Highland Ave  
 Site Code:  
 Start Date: 08/08/2017  
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### Turning Movement Peak Hour Data (8:00 AM)

Start Time	Campbell St Eastbound					Campbell St Westbound					Highland Ave Northbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
8:00 AM	0	29	10	1	39	1	3	18	3	22	0	5	6	5	11	72
8:15 AM	0	27	11	0	38	1	5	22	1	28	0	8	8	6	16	82
8:30 AM	0	29	8	0	37	0	4	17	4	21	0	8	6	5	14	72
8:45 AM	0	52	2	1	54	2	4	27	2	33	0	3	10	10	13	100
Total	0	137	31	2	168	4	16	84	10	104	0	24	30	26	54	326
Approach %	0.0	81.5	18.5	-	-	3.8	15.4	80.8	-	-	0.0	44.4	55.6	-	-	-
Total %	0.0	42.0	9.5	-	51.5	1.2	4.9	25.8	-	31.9	0.0	7.4	9.2	-	16.6	-
PHF	0.000	0.659	0.705	-	0.778	0.500	0.800	0.778	-	0.788	0.000	0.750	0.750	-	0.844	0.815
Lights	0	134	31	-	165	4	16	80	-	100	0	24	30	-	54	319
% Lights	-	97.8	100.0	-	98.2	100.0	100.0	95.2	-	96.2	-	100.0	100.0	-	100.0	97.9
Buses	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Buses	-	0.0	0.0	-	0.0	0.0	0.0	1.2	-	1.0	-	0.0	0.0	-	0.0	0.3
Single-Unit Trucks	0	2	0	-	2	0	0	3	-	3	0	0	0	-	0	5
% Single-Unit Trucks	-	1.5	0.0	-	1.2	0.0	0.0	3.6	-	2.9	-	0.0	0.0	-	0.0	1.5
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Bicycles on Road	-	0.7	0.0	-	0.6	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.3
Pedestrians	-	-	-	2	-	-	-	-	10	-	-	-	-	26	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



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Count Name: Campbell St and Highland Ave  
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### Turning Movement Peak Hour Data (5:00 PM)

Start Time	Campbell St Eastbound					Campbell St Westbound					Highland Ave Northbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
5:00 PM	0	33	7	5	40	0	5	27	1	32	0	13	8	13	21	93
5:15 PM	0	30	6	4	36	1	10	30	1	41	0	4	9	8	13	90
5:30 PM	0	25	5	1	30	1	9	35	0	45	0	10	14	12	24	99
5:45 PM	0	40	15	1	55	0	17	31	5	48	0	6	10	14	16	119
Total	0	128	33	11	161	2	41	123	7	166	0	33	41	47	74	401
Approach %	0.0	79.5	20.5	-	-	1.2	24.7	74.1	-	-	0.0	44.6	55.4	-	-	-
Total %	0.0	31.9	8.2	-	40.1	0.5	10.2	30.7	-	41.4	0.0	8.2	10.2	-	18.5	-
PHF	0.000	0.800	0.550	-	0.732	0.500	0.603	0.879	-	0.865	0.000	0.635	0.732	-	0.771	0.842
Lights	0	127	33	-	160	2	41	120	-	163	0	33	41	-	74	397
% Lights	-	99.2	100.0	-	99.4	100.0	100.0	97.6	-	98.2	-	100.0	100.0	-	100.0	99.0
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	0	-	1	0	0	1	-	1	0	0	0	-	0	2
% Single-Unit Trucks	-	0.8	0.0	-	0.6	0.0	0.0	0.8	-	0.6	-	0.0	0.0	-	0.0	0.5
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	2	-	2	0	0	0	-	0	2
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	1.6	-	1.2	-	0.0	0.0	-	0.0	0.5
Pedestrians	-	-	-	11	-	-	-	-	7	-	-	-	-	47	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



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

Count Name: Campbell St and Chestnut Ave  
 Site Code:  
 Start Date: 08/08/2017  
 Page No: 1

### Turning Movement Data

Start Time	Campbell Ave Eastbound						Campbell St Westbound						Chestnut Ave Northbound						Chestnut Ave Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	4	24	0	0	28	0	0	24	2	3	26	0	0	1	2	3	3	0	0	5	2	2	7	64
7:15 AM	0	2	24	1	0	27	0	0	18	3	2	21	0	0	2	0	3	2	0	2	4	1	3	7	57
7:30 AM	0	5	26	0	1	31	0	0	22	2	1	24	0	1	1	0	0	2	0	1	3	2	5	6	63
7:45 AM	0	0	43	5	3	48	0	1	25	2	4	28	0	2	4	0	2	6	0	0	4	1	5	5	87
Hourly Total	0	11	117	6	4	134	0	1	89	9	10	99	0	3	8	2	8	13	0	3	16	6	15	25	271
8:00 AM	0	2	34	1	1	37	0	1	25	1	1	27	0	0	1	0	2	1	0	2	1	2	1	5	70
8:15 AM	0	3	38	1	1	42	0	0	28	2	3	30	0	2	0	0	1	2	0	2	2	2	3	6	80
8:30 AM	0	6	38	1	1	45	0	1	28	1	0	30	0	1	1	0	2	2	0	1	2	2	1	5	82
8:45 AM	0	2	43	3	1	48	0	0	26	2	2	28	0	1	2	2	2	5	0	1	0	2	2	3	84
Hourly Total	0	13	153	6	4	172	0	2	107	6	6	115	0	4	4	2	7	10	0	6	5	8	7	19	316
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	7	53	0	2	60	0	0	29	1	1	30	0	3	0	0	5	3	0	1	2	6	0	9	102
4:15 PM	0	4	35	0	1	39	0	0	38	2	1	40	0	6	1	0	0	7	0	0	2	7	2	9	95
4:30 PM	0	6	24	0	1	30	1	2	30	5	0	38	0	2	2	0	2	4	0	3	1	6	0	10	82
4:45 PM	0	3	33	4	0	40	0	0	31	2	0	33	0	2	2	3	2	7	0	1	3	3	2	7	87
Hourly Total	0	20	145	4	4	169	1	2	128	10	2	141	0	13	5	3	9	21	0	5	8	22	4	35	366
5:00 PM	0	2	40	3	0	45	0	0	34	0	0	34	0	4	2	2	2	8	0	1	1	9	2	11	98
5:15 PM	0	7	41	2	0	50	2	2	26	3	0	33	0	4	2	0	0	6	0	1	1	5	0	7	96
5:30 PM	0	5	29	4	0	38	1	5	35	6	2	47	0	4	1	2	4	7	0	5	2	3	4	10	102
5:45 PM	0	6	50	3	1	59	2	1	31	3	4	37	0	2	8	3	6	13	0	3	4	2	10	9	118
Hourly Total	0	20	160	12	1	192	5	8	126	12	6	151	0	14	13	7	12	34	0	10	8	19	16	37	414
Grand Total	0	64	575	28	13	667	6	13	450	37	24	506	0	34	30	14	36	78	0	24	37	55	42	116	1367
Approach %	0.0	9.6	86.2	4.2	-	-	1.2	2.6	88.9	7.3	-	-	0.0	43.6	38.5	17.9	-	-	0.0	20.7	31.9	47.4	-	-	-
Total %	0.0	4.7	42.1	2.0	-	48.8	0.4	1.0	32.9	2.7	-	37.0	0.0	2.5	2.2	1.0	-	5.7	0.0	1.8	2.7	4.0	-	8.5	-
Lights	0	60	564	27	-	651	6	13	440	35	-	494	0	34	27	13	-	74	0	24	34	53	-	111	1330
% Lights	-	93.8	98.1	96.4	-	97.6	100.0	100.0	97.8	94.6	-	97.6	-	100.0	90.0	92.9	-	94.9	-	100.0	91.9	96.4	-	95.7	97.3
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	2	0	-	2	0	0	0	0	-	0	2
% Buses	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	6.7	0.0	-	2.6	-	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	7	0	-	7	0	0	5	2	-	7	0	0	1	1	-	2	0	0	1	2	-	3	19
% Single-Unit Trucks	-	0.0	1.2	0.0	-	1.0	0.0	0.0	1.1	5.4	-	1.4	-	0.0	3.3	7.1	-	2.6	-	0.0	2.7	3.6	-	2.6	1.4
Articulated Trucks	0	1	1	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2
% Articulated Trucks	-	1.6	0.2	0.0	-	0.3	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	3	3	1	-	7	0	0	5	0	-	5	0	0	0	0	-	0	0	0	2	0	-	2	14
% Bicycles on Road	-	4.7	0.5	3.6	-	1.0	0.0	0.0	1.1	0.0	-	1.0	-	0.0	0.0	0.0	-	0.0	-	0.0	5.4	0.0	-	1.7	1.0
Pedestrians	-	-	-	-	13	-	-	-	-	-	24	-	-	-	-	-	36	-	-	-	-	-	42	-	-

% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-
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Count Name: Campbell St and Chestnut Ave  
Site Code:  
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### Turning Movement Peak Hour Data (8:00 AM)

Start Time	Campbell Ave Eastbound						Campbell St Westbound						Chestnut Ave Northbound						Chestnut Ave Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
8:00 AM	0	2	34	1	1	37	0	1	25	1	1	27	0	0	1	0	2	1	0	2	1	2	1	5	70
8:15 AM	0	3	38	1	1	42	0	0	28	2	3	30	0	2	0	0	1	2	0	2	2	2	3	6	80
8:30 AM	0	6	38	1	1	45	0	1	28	1	0	30	0	1	1	0	2	2	0	1	2	2	1	5	82
8:45 AM	0	2	43	3	1	48	0	0	26	2	2	28	0	1	2	2	2	5	0	1	0	2	2	3	84
Total	0	13	153	6	4	172	0	2	107	6	6	115	0	4	4	2	7	10	0	6	5	8	7	19	316
Approach %	0.0	7.6	89.0	3.5	-	-	0.0	1.7	93.0	5.2	-	-	0.0	40.0	40.0	20.0	-	-	0.0	31.6	26.3	42.1	-	-	-
Total %	0.0	4.1	48.4	1.9	-	54.4	0.0	0.6	33.9	1.9	-	36.4	0.0	1.3	1.3	0.6	-	3.2	0.0	1.9	1.6	2.5	-	6.0	-
PHF	0.000	0.542	0.890	0.500	-	0.896	0.000	0.500	0.955	0.750	-	0.958	0.000	0.500	0.500	0.250	-	0.500	0.000	0.750	0.625	1.000	-	0.792	0.940
Lights	0	13	151	6	-	170	0	2	104	5	-	111	0	4	4	2	-	10	0	6	5	7	-	18	309
% Lights	-	100.0	98.7	100.0	-	98.8	-	100.0	97.2	83.3	-	96.5	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	87.5	-	94.7	97.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	2	0	-	2	0	0	3	1	-	4	0	0	0	0	-	0	0	0	0	1	-	1	7
% Single-Unit Trucks	-	0.0	1.3	0.0	-	1.2	-	0.0	2.8	16.7	-	3.5	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	12.5	-	5.3	2.2
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	4	-	-	-	-	-	6	-	-	-	-	-	7	-	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-





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Count Name: Campbell St and Chestnut Ave  
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### Turning Movement Peak Hour Data (5:00 PM)

Start Time	Campbell Ave Eastbound						Campbell St Westbound						Chestnut Ave Northbound						Chestnut Ave Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	2	40	3	0	45	0	0	34	0	0	34	0	4	2	2	2	8	0	1	1	9	2	11	98
5:15 PM	0	7	41	2	0	50	2	2	26	3	0	33	0	4	2	0	0	6	0	1	1	5	0	7	96
5:30 PM	0	5	29	4	0	38	1	5	35	6	2	47	0	4	1	2	4	7	0	5	2	3	4	10	102
5:45 PM	0	6	50	3	1	59	2	1	31	3	4	37	0	2	8	3	6	13	0	3	4	2	10	9	118
<b>Total</b>	0	20	160	12	1	192	5	8	126	12	6	151	0	14	13	7	12	34	0	10	8	19	16	37	414
Approach %	0.0	10.4	83.3	6.3	-	-	3.3	5.3	83.4	7.9	-	-	0.0	41.2	38.2	20.6	-	-	0.0	27.0	21.6	51.4	-	-	-
Total %	0.0	4.8	38.6	2.9	-	46.4	1.2	1.9	30.4	2.9	-	36.5	0.0	3.4	3.1	1.7	-	8.2	0.0	2.4	1.9	4.6	-	8.9	-
PHF	0.000	0.714	0.800	0.750	-	0.814	0.625	0.400	0.900	0.500	-	0.803	0.000	0.875	0.406	0.583	-	0.654	0.000	0.500	0.500	0.528	-	0.841	0.877
Lights	0	20	157	11	-	188	5	8	123	12	-	148	0	14	13	7	-	34	0	10	6	19	-	35	405
% Lights	-	100.0	98.1	91.7	-	97.9	100.0	100.0	97.6	100.0	-	98.0	-	100.0	100.0	100.0	-	100.0	-	100.0	75.0	100.0	-	94.6	97.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	2	0	-	2	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	3
% Single-Unit Trucks	-	0.0	1.3	0.0	-	1.0	0.0	0.0	0.8	0.0	-	0.7	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	1	1	-	2	0	0	2	0	-	2	0	0	0	0	-	0	0	0	2	0	-	2	6
% Bicycles on Road	-	0.0	0.6	8.3	-	1.0	0.0	0.0	1.6	0.0	-	1.3	-	0.0	0.0	0.0	-	0.0	-	0.0	25.0	0.0	-	5.4	1.4
Pedestrians	-	-	-	-	1	-	-	-	-	-	6	-	-	-	-	-	12	-	-	-	-	-	16	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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

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

Count Name: Campbell St and Chestnut Ave  
Site Code:  
Start Date: 08/08/2017  
Page No: 5



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

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

Count Name: Sigwalt/Vail  
Site Code:  
Start Date: 05/18/2017  
Page No: 1

### Turning Movement Data

Start Time	Sigwalt Street Eastbound						Sigwalt Street Westbound						Vail Avenue Northbound						Vail Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	10	52	1	4	63	0	1	24	15	2	40	0	1	17	1	2	19	0	9	2	1	1	12	134
7:15 AM	0	2	33	1	1	36	0	2	18	6	0	26	0	1	8	4	3	13	0	14	7	1	0	22	97
7:30 AM	0	10	61	3	3	74	0	5	28	15	1	48	0	3	13	6	0	22	0	16	6	0	2	22	166
7:45 AM	0	8	73	2	6	83	0	3	37	14	2	54	0	4	23	2	4	29	0	23	15	1	0	39	205
Hourly Total	0	30	219	7	14	256	0	11	107	50	5	168	0	9	61	13	9	83	0	62	30	3	3	95	602
8:00 AM	0	2	44	0	2	46	0	1	35	11	0	47	0	3	13	4	0	20	0	16	10	2	4	28	141
8:15 AM	0	1	35	1	2	37	0	1	25	8	3	34	0	1	5	2	0	8	0	12	8	1	4	21	100
8:30 AM	0	1	31	2	0	34	0	1	27	4	1	32	0	1	9	3	0	13	0	14	7	3	0	24	103
8:45 AM	0	3	32	1	0	36	0	2	31	11	0	44	0	1	6	3	2	10	0	16	5	3	0	24	114
Hourly Total	0	7	142	4	4	153	0	5	118	34	4	157	0	6	33	12	2	51	0	58	30	9	8	97	458
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	2	41	2	5	45	0	2	41	28	0	71	0	0	14	2	5	16	1	23	14	8	6	46	178
4:15 PM	0	2	34	3	5	39	0	1	34	20	2	55	0	0	14	2	0	16	1	17	8	5	6	31	141
4:30 PM	0	4	39	0	6	43	0	4	50	30	5	84	0	1	12	0	1	13	0	19	13	5	6	37	177
4:45 PM	0	5	37	1	0	43	0	2	44	26	2	72	0	1	10	3	2	14	1	18	12	8	6	39	168
Hourly Total	0	13	151	6	16	170	0	9	169	104	9	282	0	2	50	7	8	59	3	77	47	26	24	153	664
5:00 PM	0	4	39	1	6	44	0	1	52	28	2	81	0	3	13	2	2	18	0	21	13	11	3	45	188
5:15 PM	0	3	44	0	3	47	0	6	57	17	0	80	0	5	14	8	2	27	0	17	4	8	0	29	183
5:30 PM	0	5	40	1	4	46	0	4	47	25	5	76	0	3	18	4	3	25	0	19	17	9	5	45	192
5:45 PM	1	11	36	2	5	50	0	4	47	29	5	80	0	4	18	4	7	26	0	22	10	11	6	43	199
Hourly Total	1	23	159	4	18	187	0	15	203	99	12	317	0	15	63	18	14	96	0	79	44	39	14	162	762
Grand Total	1	73	671	21	52	766	0	40	597	287	30	924	0	32	207	50	33	289	3	276	151	77	49	507	2486
Approach %	0.1	9.5	87.6	2.7	-	-	0.0	4.3	64.6	31.1	-	-	0.0	11.1	71.6	17.3	-	-	0.6	54.4	29.8	15.2	-	-	-
Total %	0.0	2.9	27.0	0.8	-	30.8	0.0	1.6	24.0	11.5	-	37.2	0.0	1.3	8.3	2.0	-	11.6	0.1	11.1	6.1	3.1	-	20.4	-
Lights	1	71	654	20	-	746	0	38	585	283	-	906	0	32	203	48	-	283	3	268	147	77	-	495	2430
% Lights	100.0	97.3	97.5	95.2	-	97.4	-	95.0	98.0	98.6	-	98.1	-	100.0	98.1	96.0	-	97.9	100.0	97.1	97.4	100.0	-	97.6	97.7
Buses	0	0	2	0	-	2	0	1	1	0	-	2	0	0	0	0	-	0	0	1	1	0	-	2	6
% Buses	0.0	0.0	0.3	0.0	-	0.3	-	2.5	0.2	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	0.0	0.4	0.7	0.0	-	0.4	0.2
Single-Unit Trucks	0	0	9	1	-	10	0	0	8	4	-	12	0	0	2	0	-	2	0	5	1	0	-	6	30
% Single-Unit Trucks	0.0	0.0	1.3	4.8	-	1.3	-	0.0	1.3	1.4	-	1.3	-	0.0	1.0	0.0	-	0.7	0.0	1.8	0.7	0.0	-	1.2	1.2
Articulated Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Articulated Trucks	0.0	1.4	0.0	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	1	6	0	-	7	0	1	3	0	-	4	0	0	2	2	-	4	0	2	2	0	-	4	19
% Bicycles on Road	0.0	1.4	0.9	0.0	-	0.9	-	2.5	0.5	0.0	-	0.4	-	0.0	1.0	4.0	-	1.4	0.0	0.7	1.3	0.0	-	0.8	0.8
Pedestrians	-	-	-	-	52	-	-	-	-	-	30	-	-	-	-	-	33	-	-	-	-	-	49	-	-

% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-
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**Kenig Lindgren O'Hara Aboona, Inc.**  
9575 W. Higgins Rd., Suite 400

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

Count Name: Sigwalt/Vail  
Site Code:  
Start Date: 05/18/2017  
Page No: 3

### Turning Movement Peak Hour Data (7:30 AM)

Start Time	Sigwalt Street Eastbound						Sigwalt Street Westbound						Vail Avenue Northbound						Vail Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	10	61	3	3	74	0	5	28	15	1	48	0	3	13	6	0	22	0	16	6	0	2	22	166
7:45 AM	0	8	73	2	6	83	0	3	37	14	2	54	0	4	23	2	4	29	0	23	15	1	0	39	205
8:00 AM	0	2	44	0	2	46	0	1	35	11	0	47	0	3	13	4	0	20	0	16	10	2	4	28	141
8:15 AM	0	1	35	1	2	37	0	1	25	8	3	34	0	1	5	2	0	8	0	12	8	1	4	21	100
<b>Total</b>	0	21	213	6	13	240	0	10	125	48	6	183	0	11	54	14	4	79	0	67	39	4	10	110	612
Approach %	0.0	8.8	88.8	2.5	-	-	0.0	5.5	68.3	26.2	-	-	0.0	13.9	68.4	17.7	-	-	0.0	60.9	35.5	3.6	-	-	-
Total %	0.0	3.4	34.8	1.0	-	39.2	0.0	1.6	20.4	7.8	-	29.9	0.0	1.8	8.8	2.3	-	12.9	0.0	10.9	6.4	0.7	-	18.0	-
PHF	0.000	0.525	0.729	0.500	-	0.723	0.000	0.500	0.845	0.800	-	0.847	0.000	0.688	0.587	0.583	-	0.681	0.000	0.728	0.650	0.500	-	0.705	0.746
Lights	0	20	210	6	-	236	0	8	123	45	-	176	0	11	52	13	-	76	0	66	36	4	-	106	594
% Lights	-	95.2	98.6	100.0	-	98.3	-	80.0	98.4	93.8	-	96.2	-	100.0	96.3	92.9	-	96.2	-	98.5	92.3	100.0	-	96.4	97.1
Buses	0	0	0	0	-	0	0	1	1	0	-	2	0	0	0	0	-	0	0	0	1	0	-	1	3
% Buses	-	0.0	0.0	0.0	-	0.0	-	10.0	0.8	0.0	-	1.1	-	0.0	0.0	0.0	-	0.0	-	0.0	2.6	0.0	-	0.9	0.5
Single-Unit Trucks	0	0	1	0	-	1	0	0	1	3	-	4	0	0	1	0	-	1	0	1	1	0	-	2	8
% Single-Unit Trucks	-	0.0	0.5	0.0	-	0.4	-	0.0	0.8	6.3	-	2.2	-	0.0	1.9	0.0	-	1.3	-	1.5	2.6	0.0	-	1.8	1.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	1	2	0	-	3	0	1	0	0	-	1	0	0	1	1	-	2	0	0	1	0	-	1	7
% Bicycles on Road	-	4.8	0.9	0.0	-	1.3	-	10.0	0.0	0.0	-	0.5	-	0.0	1.9	7.1	-	2.5	-	0.0	2.6	0.0	-	0.9	1.1
Pedestrians	-	-	-	-	13	-	-	-	-	-	6	-	-	-	-	-	4	-	-	-	-	-	10	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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

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

Count Name: Sigwalt/Vail  
Site Code:  
Start Date: 05/18/2017  
Page No: 4

### Turning Movement Peak Hour Data (5:00 PM)

Start Time	Sigwalt Street Eastbound						Sigwalt Street Westbound						Vail Avenue Northbound						Vail Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	4	39	1	6	44	0	1	52	28	2	81	0	3	13	2	2	18	0	21	13	11	3	45	188
5:15 PM	0	3	44	0	3	47	0	6	57	17	0	80	0	5	14	8	2	27	0	17	4	8	0	29	183
5:30 PM	0	5	40	1	4	46	0	4	47	25	5	76	0	3	18	4	3	25	0	19	17	9	5	45	192
5:45 PM	1	11	36	2	5	50	0	4	47	29	5	80	0	4	18	4	7	26	0	22	10	11	6	43	199
<b>Total</b>	<b>1</b>	<b>23</b>	<b>159</b>	<b>4</b>	<b>18</b>	<b>187</b>	<b>0</b>	<b>15</b>	<b>203</b>	<b>99</b>	<b>12</b>	<b>317</b>	<b>0</b>	<b>15</b>	<b>63</b>	<b>18</b>	<b>14</b>	<b>96</b>	<b>0</b>	<b>79</b>	<b>44</b>	<b>39</b>	<b>14</b>	<b>162</b>	<b>762</b>
Approach %	0.5	12.3	85.0	2.1	-	-	0.0	4.7	64.0	31.2	-	-	0.0	15.6	65.6	18.8	-	-	0.0	48.8	27.2	24.1	-	-	-
Total %	0.1	3.0	20.9	0.5	-	24.5	0.0	2.0	26.6	13.0	-	41.6	0.0	2.0	8.3	2.4	-	12.6	0.0	10.4	5.8	5.1	-	21.3	-
PHF	0.250	0.523	0.903	0.500	-	0.935	0.000	0.625	0.890	0.853	-	0.978	0.000	0.750	0.875	0.563	-	0.889	0.000	0.898	0.647	0.886	-	0.900	0.957
Lights	1	23	155	4	-	183	0	15	197	99	-	311	0	15	62	17	-	94	0	77	44	39	-	160	748
% Lights	100.0	100.0	97.5	100.0	-	97.9	-	100.0	97.0	100.0	-	98.1	-	100.0	98.4	94.4	-	97.9	-	97.5	100.0	100.0	-	98.8	98.2
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	2	0	-	2	0	0	4	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	6
% Single-Unit Trucks	0.0	0.0	1.3	0.0	-	1.1	-	0.0	2.0	0.0	-	1.3	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	2	0	-	2	0	0	2	0	-	2	0	0	1	1	-	2	0	2	0	0	-	2	8
% Bicycles on Road	0.0	0.0	1.3	0.0	-	1.1	-	0.0	1.0	0.0	-	0.6	-	0.0	1.6	5.6	-	2.1	-	2.5	0.0	0.0	-	1.2	1.0
Pedestrians	-	-	-	-	18	-	-	-	-	-	12	-	-	-	-	-	14	-	-	-	-	-	14	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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

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(847)518-9990

Count Name: Sigwalt/Vail  
Site Code:  
Start Date: 05/18/2017  
Page No: 5



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

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

Count Name: Sigwalt/Chestnut  
Site Code:  
Start Date: 05/18/2017  
Page No: 1

### Turning Movement Data

Start Time	Sigwalt Street Eastbound						Sigwalt Street Westbound						Chestnut Avenue Northbound						Chestnut Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	0	58	0	0	58	0	0	26	0	1	26	0	1	0	1	2	2	0	1	2	2	2	5	91
7:15 AM	0	0	29	0	0	29	0	0	14	2	1	16	0	1	0	0	3	1	0	1	0	0	1	1	47
7:30 AM	0	0	53	1	0	54	0	2	30	1	0	33	0	0	0	2	1	2	0	4	4	0	1	8	97
7:45 AM	0	1	70	0	1	71	0	0	39	3	3	42	0	0	1	1	0	2	0	2	2	1	0	5	120
Hourly Total	0	1	210	1	1	212	0	2	109	6	5	117	0	2	1	4	6	7	0	8	8	3	4	19	355
8:00 AM	0	2	39	1	0	42	0	0	36	2	0	38	0	1	0	1	1	2	1	1	1	0	0	3	85
8:15 AM	0	0	30	1	0	31	0	2	22	3	0	27	0	1	0	1	0	2	0	1	1	1	0	3	63
8:30 AM	0	0	24	2	0	26	0	0	31	2	0	33	0	0	0	1	0	1	0	1	1	1	0	3	63
8:45 AM	0	1	32	0	3	33	0	1	29	3	0	33	0	0	1	0	0	1	0	3	1	2	0	6	73
Hourly Total	0	3	125	4	3	132	0	3	118	10	0	131	0	2	1	3	1	6	1	6	4	4	0	15	284
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	3	26	0	0	29	0	1	39	4	3	44	0	0	1	1	7	2	0	3	2	1	1	6	81
4:15 PM	0	1	25	0	1	26	0	0	34	1	2	35	0	0	1	1	6	2	0	8	2	1	1	11	74
4:30 PM	0	0	31	2	1	33	0	0	50	0	0	50	0	0	0	2	1	2	0	1	3	0	3	4	89
4:45 PM	0	1	33	0	0	34	0	4	45	8	2	57	0	0	0	0	2	0	0	2	2	2	2	6	97
Hourly Total	0	5	115	2	2	122	0	5	168	13	7	186	0	0	2	4	16	6	0	14	9	4	7	27	341
5:00 PM	0	1	30	0	0	31	0	2	61	3	1	66	0	2	0	1	1	3	0	8	0	1	0	9	109
5:15 PM	0	0	39	0	0	39	0	0	54	6	1	60	0	1	2	0	3	3	0	2	5	2	0	9	111
5:30 PM	0	4	30	1	1	35	0	1	43	5	1	49	0	0	1	2	1	3	0	5	1	2	1	8	95
5:45 PM	0	2	32	1	1	35	0	2	49	14	0	65	0	0	0	1	3	1	0	5	1	0	1	6	107
Hourly Total	0	7	131	2	2	140	0	5	207	28	3	240	0	3	3	4	8	10	0	20	7	5	2	32	422
Grand Total	0	16	581	9	8	606	0	15	602	57	15	674	0	7	7	15	31	29	1	48	28	16	13	93	1402
Approach %	0.0	2.6	95.9	1.5	-	-	0.0	2.2	89.3	8.5	-	-	0.0	24.1	24.1	51.7	-	-	1.1	51.6	30.1	17.2	-	-	-
Total %	0.0	1.1	41.4	0.6	-	43.2	0.0	1.1	42.9	4.1	-	48.1	0.0	0.5	0.5	1.1	-	2.1	0.1	3.4	2.0	1.1	-	6.6	-
Lights	0	16	568	8	-	592	0	15	587	55	-	657	0	7	7	15	-	29	1	48	27	16	-	92	1370
% Lights	-	100.0	97.8	88.9	-	97.7	-	100.0	97.5	96.5	-	97.5	-	100.0	100.0	100.0	-	100.0	100.0	100.0	96.4	100.0	-	98.9	97.7
Buses	0	0	1	0	-	1	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	4
% Buses	-	0.0	0.2	0.0	-	0.2	-	0.0	0.5	0.0	-	0.4	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.3
Single-Unit Trucks	0	0	4	1	-	5	0	0	8	1	-	9	0	0	0	0	-	0	0	0	0	0	-	0	14
% Single-Unit Trucks	-	0.0	0.7	11.1	-	0.8	-	0.0	1.3	1.8	-	1.3	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	1.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	8	0	-	8	0	0	4	1	-	5	0	0	0	0	-	0	0	0	1	0	-	1	14
% Bicycles on Road	-	0.0	1.4	0.0	-	1.3	-	0.0	0.7	1.8	-	0.7	-	0.0	0.0	0.0	-	0.0	0.0	0.0	3.6	0.0	-	1.1	1.0
Pedestrians	-	-	-	-	8	-	-	-	-	-	15	-	-	-	-	-	31	-	-	-	-	-	13	-	-



% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-
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**Kenig Lindgren O'Hara Aboona, Inc.**  
9575 W. Higgins Rd., Suite 400

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

Count Name: Sigwalt/Chestnut  
Site Code:  
Start Date: 05/18/2017  
Page No: 3

### Turning Movement Peak Hour Data (7:30 AM)

Start Time	Sigwalt Street Eastbound						Sigwalt Street Westbound						Chestnut Avenue Northbound						Chestnut Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	0	53	1	0	54	0	2	30	1	0	33	0	0	0	2	1	2	0	4	4	0	1	8	97
7:45 AM	0	1	70	0	1	71	0	0	39	3	3	42	0	0	1	1	0	2	0	2	2	1	0	5	120
8:00 AM	0	2	39	1	0	42	0	0	36	2	0	38	0	1	0	1	1	2	1	1	1	0	0	3	85
8:15 AM	0	0	30	1	0	31	0	2	22	3	0	27	0	1	0	1	0	2	0	1	1	1	0	3	63
<b>Total</b>	0	3	192	3	1	198	0	4	127	9	3	140	0	2	1	5	2	8	1	8	8	2	1	19	365
Approach %	0.0	1.5	97.0	1.5	-	-	0.0	2.9	90.7	6.4	-	-	0.0	25.0	12.5	62.5	-	-	5.3	42.1	42.1	10.5	-	-	-
Total %	0.0	0.8	52.6	0.8	-	54.2	0.0	1.1	34.8	2.5	-	38.4	0.0	0.5	0.3	1.4	-	2.2	0.3	2.2	2.2	0.5	-	5.2	-
PHF	0.000	0.375	0.686	0.750	-	0.697	0.000	0.500	0.814	0.750	-	0.833	0.000	0.500	0.250	0.625	-	1.000	0.250	0.500	0.500	0.500	-	0.594	0.760
Lights	0	3	189	3	-	195	0	4	124	7	-	135	0	2	1	5	-	8	1	8	8	2	-	19	357
% Lights	-	100.0	98.4	100.0	-	98.5	-	100.0	97.6	77.8	-	96.4	-	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	-	100.0	97.8
Buses	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.8	0.0	-	0.7	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.3
Single-Unit Trucks	0	0	1	0	-	1	0	0	2	1	-	3	0	0	0	0	-	0	0	0	0	0	-	0	4
% Single-Unit Trucks	-	0.0	0.5	0.0	-	0.5	-	0.0	1.6	11.1	-	2.1	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	1.1
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	2	0	-	2	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	3
% Bicycles on Road	-	0.0	1.0	0.0	-	1.0	-	0.0	0.0	11.1	-	0.7	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.8
Pedestrians	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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

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

Count Name: Sigwalt/Chestnut  
Site Code:  
Start Date: 05/18/2017  
Page No: 4

### Turning Movement Peak Hour Data (5:00 PM)

Start Time	Sigwalt Street Eastbound						Sigwalt Street Westbound						Chestnut Avenue Northbound						Chestnut Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	1	30	0	0	31	0	2	61	3	1	66	0	2	0	1	1	3	0	8	0	1	0	9	109
5:15 PM	0	0	39	0	0	39	0	0	54	6	1	60	0	1	2	0	3	3	0	2	5	2	0	9	111
5:30 PM	0	4	30	1	1	35	0	1	43	5	1	49	0	0	1	2	1	3	0	5	1	2	1	8	95
5:45 PM	0	2	32	1	1	35	0	2	49	14	0	65	0	0	0	1	3	1	0	5	1	0	1	6	107
<b>Total</b>	0	7	131	2	2	140	0	5	207	28	3	240	0	3	3	4	8	10	0	20	7	5	2	32	422
Approach %	0.0	5.0	93.6	1.4	-	-	0.0	2.1	86.3	11.7	-	-	0.0	30.0	30.0	40.0	-	-	0.0	62.5	21.9	15.6	-	-	-
Total %	0.0	1.7	31.0	0.5	-	33.2	0.0	1.2	49.1	6.6	-	56.9	0.0	0.7	0.7	0.9	-	2.4	0.0	4.7	1.7	1.2	-	7.6	-
PHF	0.000	0.438	0.840	0.500	-	0.897	0.000	0.625	0.848	0.500	-	0.909	0.000	0.375	0.375	0.500	-	0.833	0.000	0.625	0.350	0.625	-	0.889	0.950
Lights	0	7	126	2	-	135	0	5	201	28	-	234	0	3	3	4	-	10	0	20	6	5	-	31	410
% Lights	-	100.0	96.2	100.0	-	96.4	-	100.0	97.1	100.0	-	97.5	-	100.0	100.0	100.0	-	100.0	-	100.0	85.7	100.0	-	96.9	97.2
Buses	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.5	0.0	-	0.4	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.2
Single-Unit Trucks	0	0	2	0	-	2	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	5
% Single-Unit Trucks	-	0.0	1.5	0.0	-	1.4	-	0.0	1.4	0.0	-	1.3	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	1.2
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	3	0	-	3	0	0	2	0	-	2	0	0	0	0	-	0	0	0	1	0	-	1	6
% Bicycles on Road	-	0.0	2.3	0.0	-	2.1	-	0.0	1.0	0.0	-	0.8	-	0.0	0.0	0.0	-	0.0	-	0.0	14.3	0.0	-	3.1	1.4
Pedestrians	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	8	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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

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

Count Name: Sigwalt/Chestnut  
Site Code:  
Start Date: 05/18/2017  
Page No: 5



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

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

Count Name: Highland/South  
Site Code:  
Start Date: 05/18/2017  
Page No: 1

### Turning Movement Data

Start Time	South Street Eastbound						South Street Westbound						Highland Avenue Northbound						Highland Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	0	5	2	1	7	0	4	12	2	0	18	0	2	3	0	1	5	0	0	1	2	0	3	33
7:15 AM	0	2	9	2	0	13	0	8	17	0	0	25	0	2	4	1	0	7	0	2	2	2	0	6	51
7:30 AM	0	6	4	32	1	42	0	37	24	2	2	63	0	3	15	17	2	35	0	1	5	6	1	12	152
7:45 AM	0	1	9	14	0	24	0	6	18	1	0	25	0	11	23	9	0	43	0	1	7	1	0	9	101
Hourly Total	0	9	27	50	2	86	0	55	71	5	2	131	0	18	45	27	3	90	0	4	15	11	1	30	337
8:00 AM	0	2	7	2	0	11	1	1	24	0	0	26	0	13	0	1	0	14	0	6	3	5	0	14	65
8:15 AM	0	1	3	2	0	6	0	2	13	0	0	15	0	10	7	1	1	18	0	1	4	2	0	7	46
8:30 AM	0	1	12	1	0	14	0	1	10	0	1	11	0	7	3	0	1	10	0	1	3	0	0	4	39
8:45 AM	0	1	8	3	1	12	0	1	13	0	2	14	0	5	3	0	2	8	0	1	3	0	0	4	38
Hourly Total	0	5	30	8	1	43	1	5	60	0	3	66	0	35	13	2	4	50	0	9	13	7	0	29	188
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	8	3	1	11	0	1	9	1	1	11	0	0	6	2	2	8	0	1	1	1	1	3	33
4:15 PM	0	0	11	0	1	11	0	3	9	1	1	13	0	2	4	3	2	9	0	1	2	0	1	3	36
4:30 PM	0	1	13	5	0	19	0	1	15	1	2	17	0	1	5	1	1	7	0	1	2	1	1	4	47
4:45 PM	0	1	5	1	0	7	0	1	6	1	1	8	0	2	5	0	3	7	0	1	4	1	3	6	28
Hourly Total	0	2	37	9	2	48	0	6	39	4	5	49	0	5	20	6	8	31	0	4	9	3	6	16	144
5:00 PM	0	0	6	0	0	6	0	1	14	1	1	16	0	0	4	1	0	5	0	1	9	0	1	10	37
5:15 PM	0	0	16	0	2	16	0	2	16	0	1	18	0	2	6	2	2	10	0	1	6	1	0	8	52
5:30 PM	0	3	7	0	3	10	0	1	10	1	2	12	0	0	11	1	2	12	0	0	5	3	0	8	42
5:45 PM	0	0	5	8	0	13	0	6	15	0	3	21	1	2	8	1	4	12	0	1	7	3	1	11	57
Hourly Total	0	3	34	8	5	45	0	10	55	2	7	67	1	4	29	5	8	39	0	3	27	7	2	37	188
Grand Total	0	19	128	75	10	222	1	76	225	11	17	313	1	62	107	40	23	210	0	20	64	28	9	112	857
Approach %	0.0	8.6	57.7	33.8	-	-	0.3	24.3	71.9	3.5	-	-	0.5	29.5	51.0	19.0	-	-	0.0	17.9	57.1	25.0	-	-	-
Total %	0.0	2.2	14.9	8.8	-	25.9	0.1	8.9	26.3	1.3	-	36.5	0.1	7.2	12.5	4.7	-	24.5	0.0	2.3	7.5	3.3	-	13.1	-
Lights	0	17	127	72	-	216	1	76	213	11	-	301	1	60	101	40	-	202	0	19	62	28	-	109	828
% Lights	-	89.5	99.2	96.0	-	97.3	100.0	100.0	94.7	100.0	-	96.2	100.0	96.8	94.4	100.0	-	96.2	-	95.0	96.9	100.0	-	97.3	96.6
Buses	0	1	0	0	-	1	0	0	8	0	-	8	0	0	1	0	-	1	0	0	0	0	-	0	10
% Buses	-	5.3	0.0	0.0	-	0.5	0.0	0.0	3.6	0.0	-	2.6	0.0	0.0	0.9	0.0	-	0.5	-	0.0	0.0	0.0	-	0.0	1.2
Single-Unit Trucks	0	1	0	2	-	3	0	0	1	0	-	1	0	0	1	0	-	1	0	1	1	0	-	2	7
% Single-Unit Trucks	-	5.3	0.0	2.7	-	1.4	0.0	0.0	0.4	0.0	-	0.3	0.0	0.0	0.9	0.0	-	0.5	-	5.0	1.6	0.0	-	1.8	0.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	1	1	-	2	0	0	3	0	-	3	0	2	4	0	-	6	0	0	1	0	-	1	12
% Bicycles on Road	-	0.0	0.8	1.3	-	0.9	0.0	0.0	1.3	0.0	-	1.0	0.0	3.2	3.7	0.0	-	2.9	-	0.0	1.6	0.0	-	0.9	1.4
Pedestrians	-	-	-	-	10	-	-	-	-	-	17	-	-	-	-	-	23	-	-	-	-	-	9	-	-

% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-
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**Kenig Lindgren O'Hara Aboona, Inc.**  
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(847)518-9990

Count Name: Highland/South  
Site Code:  
Start Date: 05/18/2017  
Page No: 3

### Turning Movement Peak Hour Data (7:30 AM)

Start Time	South Street Eastbound						South Street Westbound						Highland Avenue Northbound						Highland Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	6	4	32	1	42	0	37	24	2	2	63	0	3	15	17	2	35	0	1	5	6	1	12	152
7:45 AM	0	1	9	14	0	24	0	6	18	1	0	25	0	11	23	9	0	43	0	1	7	1	0	9	101
8:00 AM	0	2	7	2	0	11	1	1	24	0	0	26	0	13	0	1	0	14	0	6	3	5	0	14	65
8:15 AM	0	1	3	2	0	6	0	2	13	0	0	15	0	10	7	1	1	18	0	1	4	2	0	7	46
<b>Total</b>	0	10	23	50	1	83	1	46	79	3	2	129	0	37	45	28	3	110	0	9	19	14	1	42	364
Approach %	0.0	12.0	27.7	60.2	-	-	0.8	35.7	61.2	2.3	-	-	0.0	33.6	40.9	25.5	-	-	0.0	21.4	45.2	33.3	-	-	-
Total %	0.0	2.7	6.3	13.7	-	22.8	0.3	12.6	21.7	0.8	-	35.4	0.0	10.2	12.4	7.7	-	30.2	0.0	2.5	5.2	3.8	-	11.5	-
PHF	0.000	0.417	0.639	0.391	-	0.494	0.250	0.311	0.823	0.375	-	0.512	0.000	0.712	0.489	0.412	-	0.640	0.000	0.375	0.679	0.583	-	0.750	0.599
Lights	0	9	23	49	-	81	1	46	73	3	-	123	0	37	43	28	-	108	0	9	19	14	-	42	354
% Lights	-	90.0	100.0	98.0	-	97.6	100.0	100.0	92.4	100.0	-	95.3	-	100.0	95.6	100.0	-	98.2	-	100.0	100.0	100.0	-	100.0	97.3
Buses	0	1	0	0	-	1	0	0	5	0	-	5	0	0	0	0	-	0	0	0	0	0	-	0	6
% Buses	-	10.0	0.0	0.0	-	1.2	0.0	0.0	6.3	0.0	-	3.9	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	1.6
Single-Unit Trucks	0	0	0	1	-	1	0	0	1	0	-	1	0	0	1	0	-	1	0	0	0	0	-	0	3
% Single-Unit Trucks	-	0.0	0.0	2.0	-	1.2	0.0	0.0	1.3	0.0	-	0.8	-	0.0	2.2	0.0	-	0.9	-	0.0	0.0	0.0	-	0.0	0.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	2.2	0.0	-	0.9	-	0.0	0.0	0.0	-	0.0	0.3
Pedestrians	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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

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

Count Name: Highland/South  
Site Code:  
Start Date: 05/18/2017  
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### Turning Movement Peak Hour Data (5:00 PM)

Start Time	South Street Eastbound						South Street Westbound						Highland Avenue Northbound						Highland Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	0	6	0	0	6	0	1	14	1	1	16	0	0	4	1	0	5	0	1	9	0	1	10	37
5:15 PM	0	0	16	0	2	16	0	2	16	0	1	18	0	2	6	2	2	10	0	1	6	1	0	8	52
5:30 PM	0	3	7	0	3	10	0	1	10	1	2	12	0	0	11	1	2	12	0	0	5	3	0	8	42
5:45 PM	0	0	5	8	0	13	0	6	15	0	3	21	1	2	8	1	4	12	0	1	7	3	1	11	57
<b>Total</b>	0	3	34	8	5	45	0	10	55	2	7	67	1	4	29	5	8	39	0	3	27	7	2	37	188
Approach %	0.0	6.7	75.6	17.8	-	-	0.0	14.9	82.1	3.0	-	-	2.6	10.3	74.4	12.8	-	-	0.0	8.1	73.0	18.9	-	-	-
Total %	0.0	1.6	18.1	4.3	-	23.9	0.0	5.3	29.3	1.1	-	35.6	0.5	2.1	15.4	2.7	-	20.7	0.0	1.6	14.4	3.7	-	19.7	-
PHF	0.000	0.250	0.531	0.250	-	0.703	0.000	0.417	0.859	0.500	-	0.798	0.250	0.500	0.659	0.625	-	0.813	0.000	0.750	0.750	0.583	-	0.841	0.825
Lights	0	3	33	8	-	44	0	10	55	2	-	67	1	4	27	5	-	37	0	3	26	7	-	36	184
% Lights	-	100.0	97.1	100.0	-	97.8	-	100.0	100.0	100.0	-	100.0	100.0	100.0	93.1	100.0	-	94.9	-	100.0	96.3	100.0	-	97.3	97.9
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	2	0	-	2	0	0	1	0	-	1	4
% Bicycles on Road	-	0.0	2.9	0.0	-	2.2	-	0.0	0.0	0.0	-	0.0	0.0	0.0	6.9	0.0	-	5.1	-	0.0	3.7	0.0	-	2.7	2.1
Pedestrians	-	-	-	-	5	-	-	-	-	-	7	-	-	-	-	-	8	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-





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

Count Name: Highland/Sigwalt  
Site Code:  
Start Date: 05/18/2017  
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### Turning Movement Data

Start Time	Sigwalt Street Eastbound						Sigwalt Street Westbound						Highland Avenue Northbound						Highland Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	11	55	0	1	66	0	3	20	2	0	25	0	0	4	1	3	5	0	6	0	1	2	7	103
7:15 AM	0	1	27	1	1	29	0	3	15	5	0	23	0	0	4	2	2	6	0	8	2	4	0	14	72
7:30 AM	0	6	52	1	0	59	0	5	23	1	0	29	0	6	5	15	2	26	0	4	3	3	1	10	124
7:45 AM	0	10	60	2	1	72	0	3	34	4	1	41	0	5	7	14	3	26	0	6	2	0	1	8	147
Hourly Total	0	28	194	4	3	226	0	14	92	12	1	118	0	11	20	32	10	63	0	24	7	8	4	39	446
8:00 AM	0	0	40	1	0	41	0	1	39	3	0	43	0	1	0	2	1	3	0	4	2	0	0	6	93
8:15 AM	0	2	25	1	1	28	0	3	23	2	0	28	0	2	5	3	0	10	0	7	1	1	3	9	75
8:30 AM	0	2	25	0	1	27	0	1	26	2	0	29	0	2	2	2	0	6	0	4	1	5	1	10	72
8:45 AM	0	2	31	1	2	34	0	2	30	3	0	35	0	0	1	4	0	5	0	2	2	3	2	7	81
Hourly Total	0	6	121	3	4	130	0	7	118	10	0	135	0	5	8	11	1	24	0	17	6	9	6	32	321
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	30	0	0	30	0	3	38	8	1	49	0	0	2	6	4	8	2	8	0	7	2	17	104
4:15 PM	0	0	32	2	1	34	0	1	32	6	2	39	0	1	1	2	2	4	0	3	0	1	2	4	81
4:30 PM	0	1	33	0	1	34	0	1	45	7	1	53	0	0	3	2	5	5	1	7	3	4	4	15	107
4:45 PM	0	3	31	0	0	34	0	1	40	10	1	51	0	3	1	6	0	10	0	5	2	11	1	18	113
Hourly Total	0	4	126	2	2	132	0	6	155	31	5	192	0	4	7	16	11	27	3	23	5	23	9	54	405
5:00 PM	0	1	35	1	1	37	0	3	56	9	0	68	0	2	1	1	0	4	0	10	7	7	3	24	133
5:15 PM	0	3	40	2	2	45	0	4	56	14	1	74	0	1	3	1	4	5	0	6	0	5	0	11	135
5:30 PM	0	4	30	1	2	35	0	2	40	16	4	58	0	0	8	4	1	12	0	14	8	10	3	32	137
5:45 PM	0	2	32	5	1	39	0	1	45	12	2	58	0	1	8	1	4	10	0	15	6	17	4	38	145
Hourly Total	0	10	137	9	6	156	0	10	197	51	7	258	0	4	20	7	9	31	0	45	21	39	10	105	550
Grand Total	0	48	578	18	15	644	0	37	562	104	13	703	0	24	55	66	31	145	3	109	39	79	29	230	1722
Approach %	0.0	7.5	89.8	2.8	-	-	0.0	5.3	79.9	14.8	-	-	0.0	16.6	37.9	45.5	-	-	1.3	47.4	17.0	34.3	-	-	-
Total %	0.0	2.8	33.6	1.0	-	37.4	0.0	2.1	32.6	6.0	-	40.8	0.0	1.4	3.2	3.8	-	8.4	0.2	6.3	2.3	4.6	-	13.4	-
Lights	0	48	562	18	-	628	0	35	548	103	-	686	0	22	51	64	-	137	3	108	38	79	-	228	1679
% Lights	-	100.0	97.2	100.0	-	97.5	-	94.6	97.5	99.0	-	97.6	-	91.7	92.7	97.0	-	94.5	100.0	99.1	97.4	100.0	-	99.1	97.5
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	1	-	2	0	0	0	0	-	0	2
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	4.2	0.0	1.5	-	1.4	0.0	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	9	0	-	9	0	0	11	1	-	12	0	1	1	0	-	2	0	1	1	0	-	2	25
% Single-Unit Trucks	-	0.0	1.6	0.0	-	1.4	-	0.0	2.0	1.0	-	1.7	-	4.2	1.8	0.0	-	1.4	0.0	0.9	2.6	0.0	-	0.9	1.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	7	0	-	7	0	2	3	0	-	5	0	0	3	1	-	4	0	0	0	0	-	0	16
% Bicycles on Road	-	0.0	1.2	0.0	-	1.1	-	5.4	0.5	0.0	-	0.7	-	0.0	5.5	1.5	-	2.8	0.0	0.0	0.0	0.0	-	0.0	0.9
Pedestrians	-	-	-	-	15	-	-	-	-	-	13	-	-	-	-	-	31	-	-	-	-	-	29	-	-

% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-
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**Kenig Lindgren O'Hara Aboona, Inc.**  
9575 W. Higgins Rd., Suite 400

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(847)518-9990

Count Name: Highland/Sigwalt  
Site Code:  
Start Date: 05/18/2017  
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### Turning Movement Peak Hour Data (7:30 AM)

Start Time	Sigwalt Street Eastbound						Sigwalt Street Westbound						Highland Avenue Northbound						Highland Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	6	52	1	0	59	0	5	23	1	0	29	0	6	5	15	2	26	0	4	3	3	1	10	124
7:45 AM	0	10	60	2	1	72	0	3	34	4	1	41	0	5	7	14	3	26	0	6	2	0	1	8	147
8:00 AM	0	0	40	1	0	41	0	1	39	3	0	43	0	1	0	2	1	3	0	4	2	0	0	6	93
8:15 AM	0	2	25	1	1	28	0	3	23	2	0	28	0	2	5	3	0	10	0	7	1	1	3	9	75
<b>Total</b>	0	18	177	5	2	200	0	12	119	10	1	141	0	14	17	34	6	65	0	21	8	4	5	33	439
Approach %	0.0	9.0	88.5	2.5	-	-	0.0	8.5	84.4	7.1	-	-	0.0	21.5	26.2	52.3	-	-	0.0	63.6	24.2	12.1	-	-	-
Total %	0.0	4.1	40.3	1.1	-	45.6	0.0	2.7	27.1	2.3	-	32.1	0.0	3.2	3.9	7.7	-	14.8	0.0	4.8	1.8	0.9	-	7.5	-
PHF	0.000	0.450	0.738	0.625	-	0.694	0.000	0.600	0.763	0.625	-	0.820	0.000	0.583	0.607	0.567	-	0.625	0.000	0.750	0.667	0.333	-	0.825	0.747
Lights	0	18	174	5	-	197	0	12	115	10	-	137	0	13	16	33	-	62	0	21	8	4	-	33	429
% Lights	-	100.0	98.3	100.0	-	98.5	-	100.0	96.6	100.0	-	97.2	-	92.9	94.1	97.1	-	95.4	-	100.0	100.0	100.0	-	100.0	97.7
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	1	0	-	1	0	0	4	0	-	4	0	1	0	0	-	1	0	0	0	0	-	0	6
% Single-Unit Trucks	-	0.0	0.6	0.0	-	0.5	-	0.0	3.4	0.0	-	2.8	-	7.1	0.0	0.0	-	1.5	-	0.0	0.0	0.0	-	0.0	1.4
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	2	0	-	2	0	0	0	0	-	0	0	0	1	1	-	2	0	0	0	0	-	0	4
% Bicycles on Road	-	0.0	1.1	0.0	-	1.0	-	0.0	0.0	0.0	-	0.0	-	0.0	5.9	2.9	-	3.1	-	0.0	0.0	0.0	-	0.0	0.9
Pedestrians	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	6	-	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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### Turning Movement Peak Hour Data (5:00 PM)

Start Time	Sigwalt Street Eastbound						Sigwalt Street Westbound						Highland Avenue Northbound						Highland Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	1	35	1	1	37	0	3	56	9	0	68	0	2	1	1	0	4	0	10	7	7	3	24	133
5:15 PM	0	3	40	2	2	45	0	4	56	14	1	74	0	1	3	1	4	5	0	6	0	5	0	11	135
5:30 PM	0	4	30	1	2	35	0	2	40	16	4	58	0	0	8	4	1	12	0	14	8	10	3	32	137
5:45 PM	0	2	32	5	1	39	0	1	45	12	2	58	0	1	8	1	4	10	0	15	6	17	4	38	145
<b>Total</b>	0	10	137	9	6	156	0	10	197	51	7	258	0	4	20	7	9	31	0	45	21	39	10	105	550
Approach %	0.0	6.4	87.8	5.8	-	-	0.0	3.9	76.4	19.8	-	-	0.0	12.9	64.5	22.6	-	-	0.0	42.9	20.0	37.1	-	-	-
Total %	0.0	1.8	24.9	1.6	-	28.4	0.0	1.8	35.8	9.3	-	46.9	0.0	0.7	3.6	1.3	-	5.6	0.0	8.2	3.8	7.1	-	19.1	-
PHF	0.000	0.625	0.856	0.450	-	0.867	0.000	0.625	0.879	0.797	-	0.872	0.000	0.500	0.625	0.438	-	0.646	0.000	0.750	0.656	0.574	-	0.691	0.948
Lights	0	10	134	9	-	153	0	9	192	51	-	252	0	4	20	7	-	31	0	45	21	39	-	105	541
% Lights	-	100.0	97.8	100.0	-	98.1	-	90.0	97.5	100.0	-	97.7	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	98.4
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	1	0	-	1	0	0	4	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	5
% Single-Unit Trucks	-	0.0	0.7	0.0	-	0.6	-	0.0	2.0	0.0	-	1.6	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	2	0	-	2	0	1	1	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	4
% Bicycles on Road	-	0.0	1.5	0.0	-	1.3	-	10.0	0.5	0.0	-	0.8	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.7
Pedestrians	-	-	-	-	6	-	-	-	-	-	7	-	-	-	-	-	9	-	-	-	-	-	10	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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

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

Count Name: Highland/Sigwalt  
Site Code:  
Start Date: 05/18/2017  
Page No: 5

# Site Plan

*Proposed Apartment Development  
Arlington Heights, Illinois*



Future 8.0' ROW Dedication

±16.7'

±236.2'

±19.1'

±18.4'

Balcony Above

Area Well

Area Well

±13.4' ±5.0'

Transformer

Driveway

±111.7'

±11.1'

±19.9'

Hydrant

Utilities

South Highland Ave

Future 8.0' ROW Dedication

Loading Layby

South Chestnut Ave

**Preliminary Project Data**

<b>Site Area</b>	
Site Area	± 41,987 sf
<b>Net Site Area</b>	
Net Site Area	± 39,610 sf
<b>Residential Site Data</b>	
Dwelling Units	88
Building Footprint	± 28,245 sf

Parking - Provided	110
Stalls/Unit	1.25

Roof Deck

Entry Canopy

Sloped Walk

Bike Racks

Planter

Patio

Site Wall

Project Sign Lettering

Walk

West Sigwalt Street

**Site Plan**



Sigwalt Apartments  
Arlington Heights, IL



0 10' 20' 40'

43 South Vail Avenue  
Arlington Heights, Illinois 60005  
Job No. 16031 © 2017



May 15, 2017 ARCHITECTS + PLANNERS, INC.



# Level of Service Criteria

*Proposed Apartment Development  
Arlington Heights, Illinois*



**LEVEL OF SERVICE CRITERIA**

<b>Signalized Intersections</b>		
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
<b>Unsignalized Intersections</b>		
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

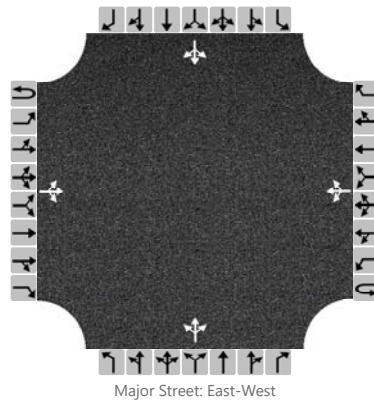
*Proposed Apartment Development  
Arlington Heights, Illinois*



# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ANB			Intersection	Campbell with Chestnut		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Campbell Street		
Analysis Year	2017			North/South Street	Chestnut Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.94		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		13	160	6		2	107	6		4	4	2		6	5	8
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	12
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

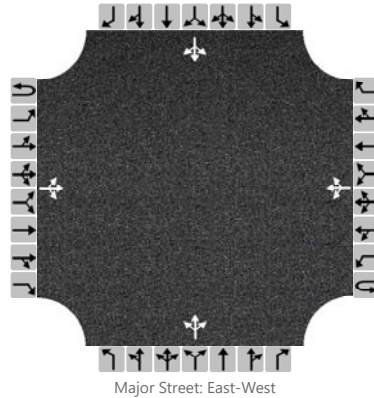
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		14			2					10					20		
Capacity, c (veh/h)		1480			1413					641					713		
v/c Ratio		0.01			0.00					0.02					0.03		
95% Queue Length, Q <sub>95</sub> (veh)		0.0			0.0					0.0					0.1		
Control Delay (s/veh)		7.5			7.6					10.7					10.2		
Level of Service, LOS		A			A					B					B		
Approach Delay (s/veh)		0.6				0.1				10.7				10.2			
Approach LOS										B				B			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ANB			Intersection	Campbell with Chestnut		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Campbell Street		
Analysis Year	2017			North/South Street	Chestnut Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.88		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		20	160	12		8	126	12		14	13	7		10	8	19
Percent Heavy Vehicles (%)		0				0				0	0	0		0	25	12
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

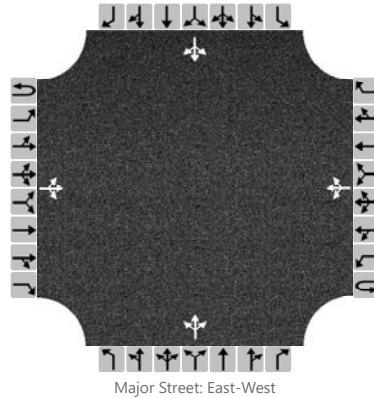
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		23			9					39					42	
Capacity, c (veh/h)		1435			1389					565					649	
v/c Ratio		0.02			0.01					0.07					0.06	
95% Queue Length, Q <sub>95</sub> (veh)		0.0			0.0					0.2					0.2	
Control Delay (s/veh)		7.5			7.6					11.8					10.9	
Level of Service, LOS		A			A					B					B	
Approach Delay (s/veh)		0.9			0.5					11.8				10.9		
Approach LOS										B				B		

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ANB			Intersection	Campbell with Chestnut		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Campbell Street		
Analysis Year	2023			North/South Street	Chestnut Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.88		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		21	169	12		8	148	12		14	13	7		10	8	20
Percent Heavy Vehicles (%)		0				0				0	0	0		0	25	12
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

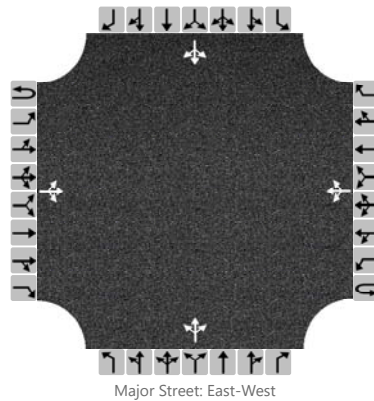
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		24			9					39					43		
Capacity, c (veh/h)		1406			1378					537					623		
v/c Ratio		0.02			0.01					0.07					0.07		
95% Queue Length, Q <sub>95</sub> (veh)		0.1			0.0					0.2					0.2		
Control Delay (s/veh)		7.6			7.6					12.2					11.2		
Level of Service, LOS		A			A					B					B		
Approach Delay (s/veh)		0.9				0.4				12.2				11.2			
Approach LOS										B				B			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ANB			Intersection	Campbell with Chestnut		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Campbell Street		
Analysis Year	2023			North/South Street	Chestnut Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.94		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		13	167	6		2	119	6		4	4	2		6	5	8
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	12
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

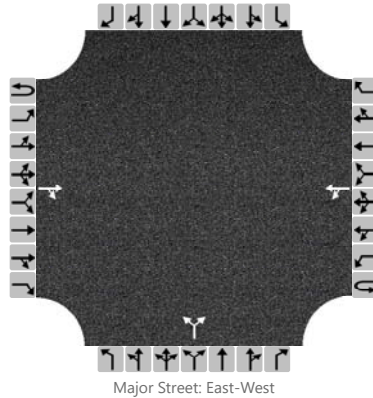
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		14				2					10					20	
Capacity, c (veh/h)		1464				1403					624					695	
v/c Ratio		0.01				0.00					0.02					0.03	
95% Queue Length, Q <sub>95</sub> (veh)		0.0				0.0					0.0					0.1	
Control Delay (s/veh)		7.5				7.6					10.9					10.3	
Level of Service, LOS		A				A					B					B	
Approach Delay (s/veh)		0.6				0.1				10.9				10.3			
Approach LOS										B				B			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ANB			Intersection	Campbell with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Campbell Street		
Analysis Year	2017			North/South Street	Highland Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.82		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			137	31		16	84			24		30				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

## Delay, Queue Length, and Level of Service

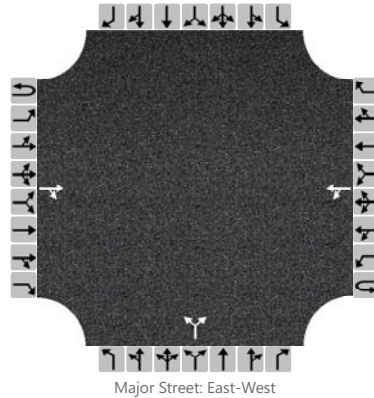
Flow Rate, v (veh/h)						20					66					
Capacity, c (veh/h)						1379					737					
v/c Ratio						0.01					0.09					
95% Queue Length, Q <sub>95</sub> (veh)						0.0					0.3					
Control Delay (s/veh)						7.6					10.4					
Level of Service, LOS						A					B					
Approach Delay (s/veh)					1.4				10.4							
Approach LOS									B							



# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ANB			Intersection	Campbell with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Campbell Street		
Analysis Year	2017			North/South Street	Highland Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.84		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	0	0	
Configuration				TR		LT					LR					
Volume, V (veh/h)			144	33		41	123			33		41				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

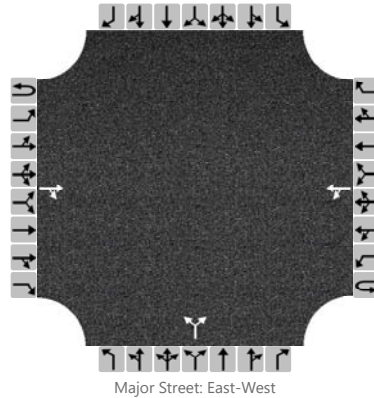
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						49					88					
Capacity, c (veh/h)						1373					666					
v/c Ratio						0.04					0.13					
95% Queue Length, Q <sub>95</sub> (veh)						0.1					0.5					
Control Delay (s/veh)						7.7					11.2					
Level of Service, LOS						A					B					
Approach Delay (s/veh)					2.2				11.2							
Approach LOS									B							

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ANB			Intersection	Campbell with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Campbell Street		
Analysis Year	2023			North/South Street	Highland Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.82		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			141	33		17	87			28		34				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

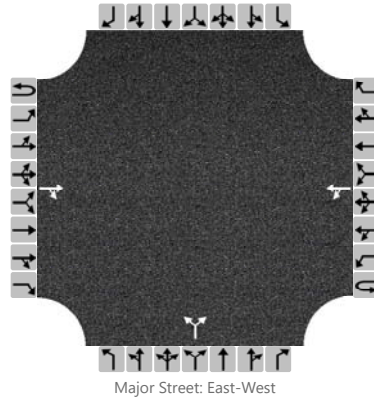
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						21					75					
Capacity, c (veh/h)						1371					723					
v/c Ratio						0.02					0.10					
95% Queue Length, Q <sub>95</sub> (veh)						0.0					0.3					
Control Delay (s/veh)						7.7					10.6					
Level of Service, LOS						A					B					
Approach Delay (s/veh)					1.4				10.6							
Approach LOS									B							

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ANB			Intersection	Campbell with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Campbell Street		
Analysis Year	2023			North/South Street	Highland Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.84		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			148	38		46	127			36		44				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

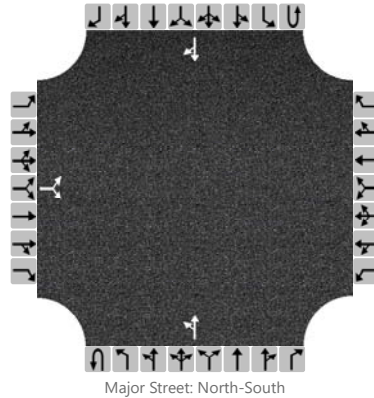
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						55					95					
Capacity, c (veh/h)						1360					643					
v/c Ratio						0.04					0.15					
95% Queue Length, Q <sub>95</sub> (veh)						0.1					0.5					
Control Delay (s/veh)						7.8					11.6					
Level of Service, LOS						A					B					
Approach Delay (s/veh)					2.3				11.6							
Approach LOS									B							

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	Highland with Access		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Proposed Access Drive		
Analysis Year	2023			North/South Street	Highland Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.95		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0		0	1	0		0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		6		26						6	47				34	2
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

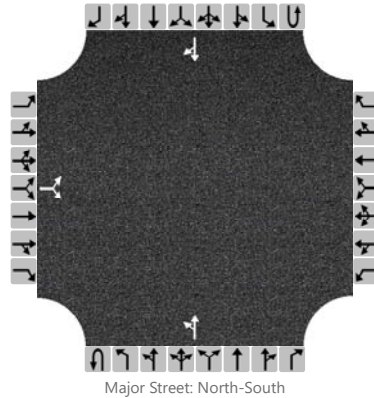
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			33							6						
Capacity, c (veh/h)			1013							1585						
v/c Ratio			0.03							0.00						
95% Queue Length, Q <sub>95</sub> (veh)			0.1							0.0						
Control Delay (s/veh)			8.7							7.3						
Level of Service, LOS			A							A						
Approach Delay (s/veh)	8.7								0.8							
Approach LOS	A															

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	Highland with Access		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Proposed Access Drive		
Analysis Year	2023			North/South Street	Highland Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.95		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0		0	1	0		0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		4		15						29	84				108	8
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

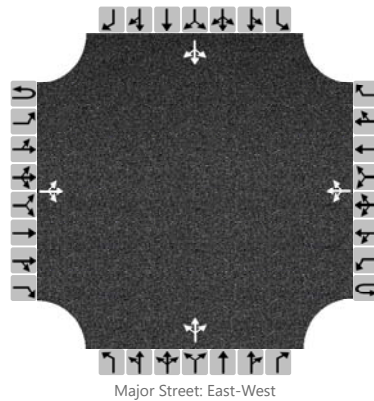
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			20								31					
Capacity, c (veh/h)			883								1478					
v/c Ratio			0.02								0.02					
95% Queue Length, Q <sub>95</sub> (veh)			0.1								0.1					
Control Delay (s/veh)			9.2								7.5					
Level of Service, LOS			A								A					
Approach Delay (s/veh)	9.2								2.1							
Approach LOS	A															

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	Sigwalt with Chestnut		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Sigwalt Street		
Analysis Year	2017			North/South Street	Chestnut Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.76		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		3	192	3		4	127	9		2	1	5		8	8	2
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

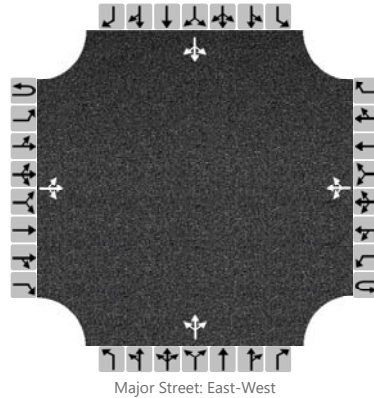
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4			5					11				25			
Capacity, c (veh/h)		1409			1320					656				537			
v/c Ratio		0.00			0.00					0.02				0.05			
95% Queue Length, Q <sub>95</sub> (veh)		0.0			0.0					0.1				0.1			
Control Delay (s/veh)		7.6			7.7					10.6				12.0			
Level of Service, LOS		A			A					B				B			
Approach Delay (s/veh)		0.1				0.2				10.6				12.0			
Approach LOS										B				B			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	Sigwalt with Chestnut		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Sigwalt Street		
Analysis Year	2017			North/South Street	Chestnut Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		7	132	2		5	207	28		3	3	4		20	7	5
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

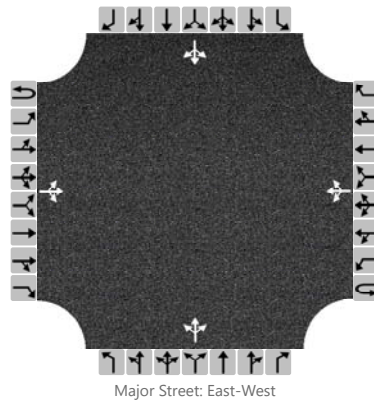
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7			5					10						33	
Capacity, c (veh/h)		1331			1455					645						579	
v/c Ratio		0.01			0.00					0.02						0.06	
95% Queue Length, Q <sub>95</sub> (veh)		0.0			0.0					0.0						0.2	
Control Delay (s/veh)		7.7			7.5					10.7						11.6	
Level of Service, LOS		A			A					B						B	
Approach Delay (s/veh)		0.4				0.2				10.7				11.6			
Approach LOS										B				B			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	Sigwalt with Chestnut		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Sigwalt Street		
Analysis Year	2023			North/South Street	Chestnut Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.76		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		3	199	3		4	134	9		2	1	5		8	8	2
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

## Delay, Queue Length, and Level of Service

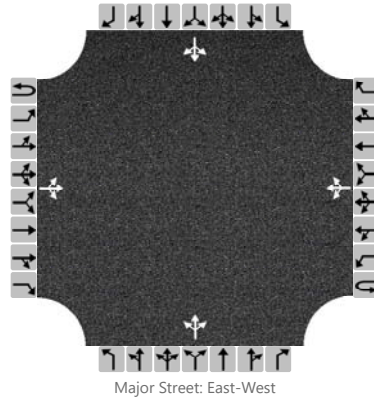
Flow Rate, v (veh/h)		4			5					11				25	
Capacity, c (veh/h)		1398			1310					643				524	
v/c Ratio		0.00			0.00					0.02				0.05	
95% Queue Length, Q <sub>95</sub> (veh)		0.0			0.0					0.1				0.2	
Control Delay (s/veh)		7.6			7.8					10.7				12.2	
Level of Service, LOS		A			A					B				B	
Approach Delay (s/veh)		0.1			0.2					10.7			12.2		
Approach LOS										B			B		



# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	Sigwalt with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Sigwalt Street		
Analysis Year	2023			North/South Street	Highland Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		13	141	9		10	203	72		4	28	7		56	25	42
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

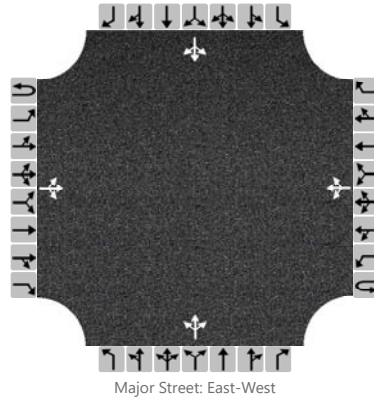
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		14				11					40					129	
Capacity, c (veh/h)		1284				1435					509					551	
v/c Ratio		0.01				0.01					0.08					0.23	
95% Queue Length, Q <sub>95</sub> (veh)		0.0				0.0					0.3					0.9	
Control Delay (s/veh)		7.8				7.5					12.7					13.5	
Level of Service, LOS		A				A					B					B	
Approach Delay (s/veh)		0.7				0.3				12.7				13.5			
Approach LOS										B				B			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	Sigwalt with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Sigwalt Street		
Analysis Year	2017			North/South Street	Highland Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.75		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		18	182	5		12	122	10		14	17	34		21	8	4
Percent Heavy Vehicles (%)		0				0				7	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

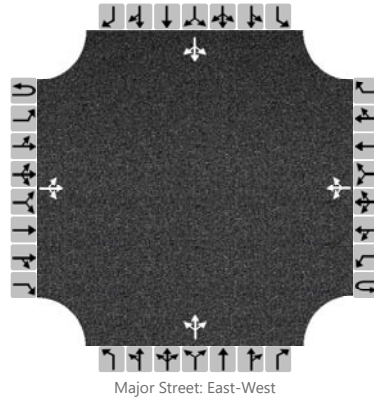
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		24				16					87				44		
Capacity, c (veh/h)		1413				1327					584				449		
v/c Ratio		0.02				0.01					0.15				0.10		
95% Queue Length, Q <sub>95</sub> (veh)		0.1				0.0					0.5				0.3		
Control Delay (s/veh)		7.6				7.7					12.2				13.9		
Level of Service, LOS		A				A					B				B		
Approach Delay (s/veh)		0.8				0.7				12.2				13.9			
Approach LOS										B				B			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	Sigwalt with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Sigwalt Street		
Analysis Year	2017			North/South Street	Highland Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		10	137	9		10	197	51		4	20	7		45	21	39
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

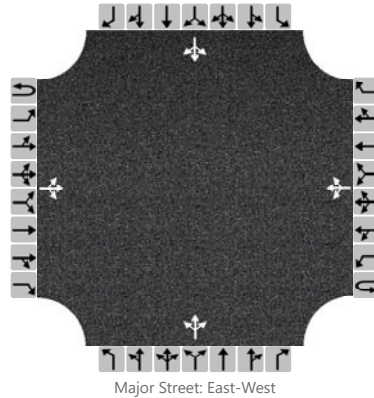
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		11			11					32				110			
Capacity, c (veh/h)		1315			1440					546				588			
v/c Ratio		0.01			0.01					0.06				0.19			
95% Queue Length, Q <sub>95</sub> (veh)		0.0			0.0					0.2				0.7			
Control Delay (s/veh)		7.8			7.5					12.0				12.5			
Level of Service, LOS		A			A					B				B			
Approach Delay (s/veh)		0.6				0.4				12.0				12.5			
Approach LOS										B				B			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	Sigwalt with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Sigwalt Street		
Analysis Year	2023			North/South Street	Highland Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.75		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		20	197	5		12	126	14		14	19	35		38	15	7
Percent Heavy Vehicles (%)		0				0				7	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

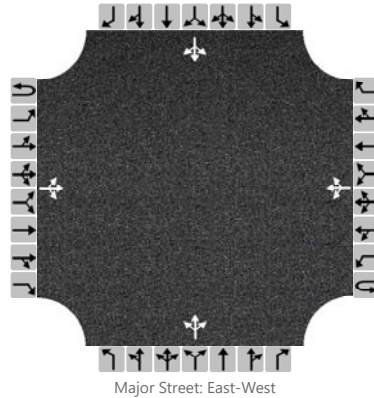
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		27				16					91					80	
Capacity, c (veh/h)		1400				1305					555					423	
v/c Ratio		0.02				0.01					0.16					0.19	
95% Queue Length, Q <sub>95</sub> (veh)		0.1				0.0					0.6					0.7	
Control Delay (s/veh)		7.6				7.8					12.8					15.5	
Level of Service, LOS		A				A					B					C	
Approach Delay (s/veh)		0.9				0.7				12.8				15.5			
Approach LOS										B				C			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	Sigwalt with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	Sigwalt Street		
Analysis Year	2023			North/South Street	Highland Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		13	141	9		10	203	72		4	28	7		56	25	42
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

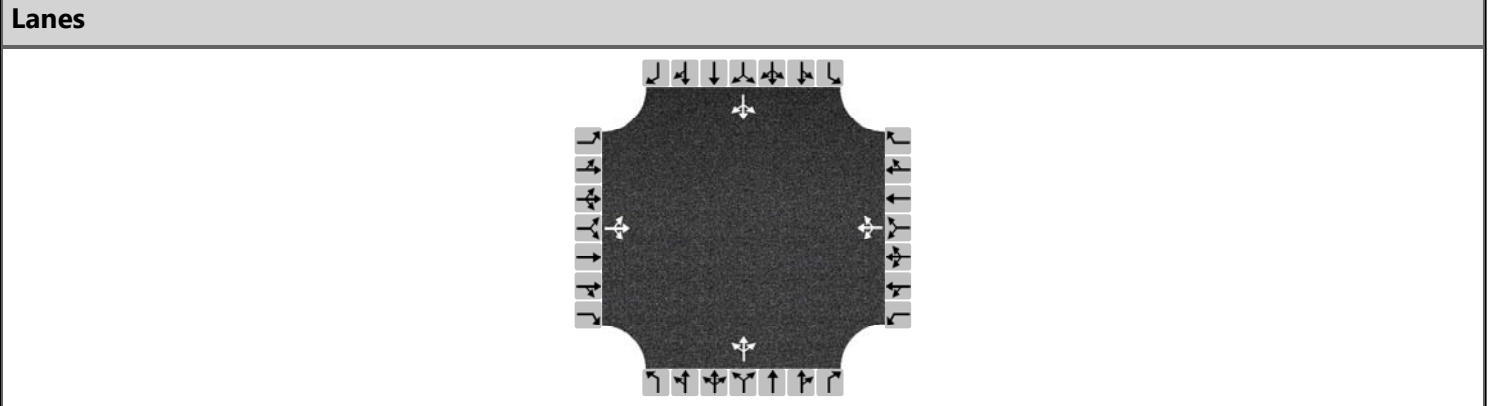
Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		14				11					40					129	
Capacity, c (veh/h)		1284				1435					509					551	
v/c Ratio		0.01				0.01					0.08					0.23	
95% Queue Length, Q <sub>95</sub> (veh)		0.0				0.0					0.3					0.9	
Control Delay (s/veh)		7.8				7.5					12.7					13.5	
Level of Service, LOS		A				A					B					B	
Approach Delay (s/veh)		0.7				0.3				12.7				13.5			
Approach LOS										B				B			

# HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	BSM	Intersection	Sigwalt with Vail
Agency/Co.	KLOA, Inc.	Jurisdiction	Arlington Heights
Date Performed	8/10/2017	East/West Street	Sigwalt Street
Analysis Year	2017	North/South Street	Vail Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.75
Time Analyzed	AM Peak Hour		
Project Description	17-127		



**Vehicle Volume and Adjustments**

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	21	213	6	10	125	48	11	54	14	67	39	4
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	320			244			105			147		
Percent Heavy Vehicles	1			3			1			3		

**Departure Headway and Service Time**

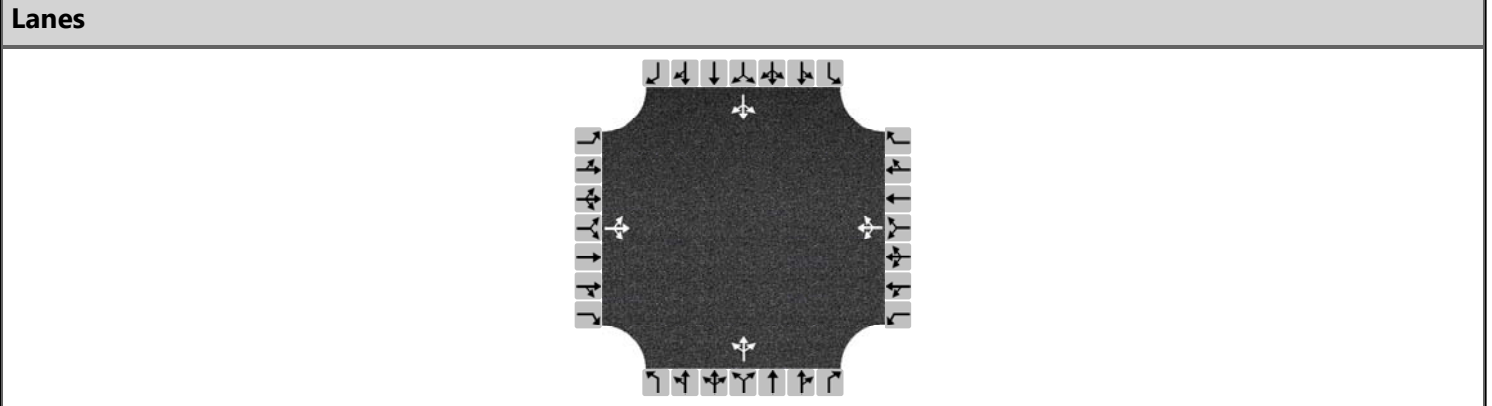
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.284			0.217			0.094			0.130		
Final Departure Headway, hd (s)	5.00			5.00			5.56			5.68		
Final Degree of Utilization, x	0.445			0.339			0.163			0.232		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.00			3.00			3.56			3.68		

**Capacity, Delay and Level of Service**

Flow Rate, v (veh/h)	320			244			105			147		
Capacity	719			720			648			633		
95% Queue Length, Q <sub>95</sub> (veh)	2.3			1.5			0.6			0.9		
Control Delay (s/veh)	12.0			10.5			9.6			10.4		
Level of Service, LOS	B			B			A			B		
Approach Delay (s/veh)	12.0			10.5			9.6			10.4		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh   LOS	11.0						B					

# HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	BSM	Intersection	Sigwalt with Vail
Agency/Co.	KLOA, Inc.	Jurisdiction	Arlington Heights
Date Performed	8/10/2017	East/West Street	Sigwalt Street
Analysis Year	2017	North/South Street	Vail Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.96
Time Analyzed	PM Peak Hour		
Project Description	17-127		



**Vehicle Volume and Adjustments**

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	23	159	4	15	203	99	15	63	18	79	44	37
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	194			330			100			167		
Percent Heavy Vehicles	1			1			0			0		

**Departure Headway and Service Time**

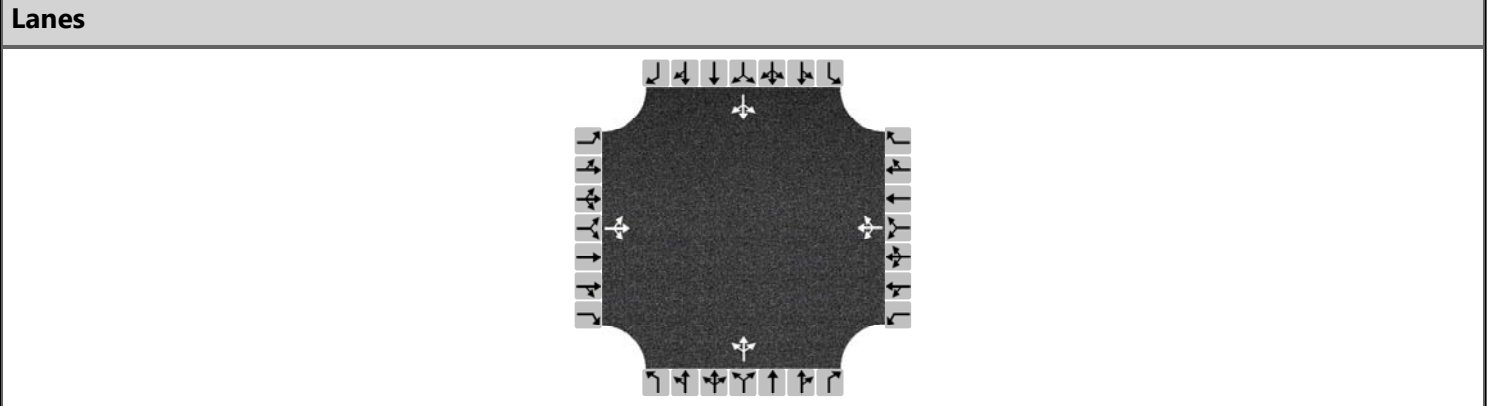
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.172			0.294			0.089			0.148		
Final Departure Headway, hd (s)	5.13			4.77			5.43			5.35		
Final Degree of Utilization, x	0.276			0.437			0.151			0.248		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.13			2.77			3.43			3.35		

**Capacity, Delay and Level of Service**

Flow Rate, v (veh/h)	194			330			100			167		
Capacity	702			755			663			673		
95% Queue Length, Q <sub>95</sub> (veh)	1.1			2.2			0.5			1.0		
Control Delay (s/veh)	10.1			11.4			9.4			10.1		
Level of Service, LOS	B			B			A			B		
Approach Delay (s/veh)	10.1			11.4			9.4			10.1		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh   LOS	10.6						B					

# HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	BSM	Intersection	Sigwalt with Vail
Agency/Co.	KLOA, Inc.	Jurisdiction	Arlington Heights
Date Performed	8/10/2017	East/West Street	Sigwalt Street
Analysis Year	2023	North/South Street	Vail Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.75
Time Analyzed	AM Peak Hour		
Project Description	17-127		



**Vehicle Volume and Adjustments**

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	22	235	6	10	133	49	11	56	14	69	40	4
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	351			256			108			151		
Percent Heavy Vehicles	1			3			1			3		

**Departure Headway and Service Time**

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.312			0.228			0.096			0.134		
Final Departure Headway, hd (s)	5.07			5.09			5.71			5.82		
Final Degree of Utilization, x	0.494			0.362			0.171			0.244		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.07			3.09			3.71			3.82		

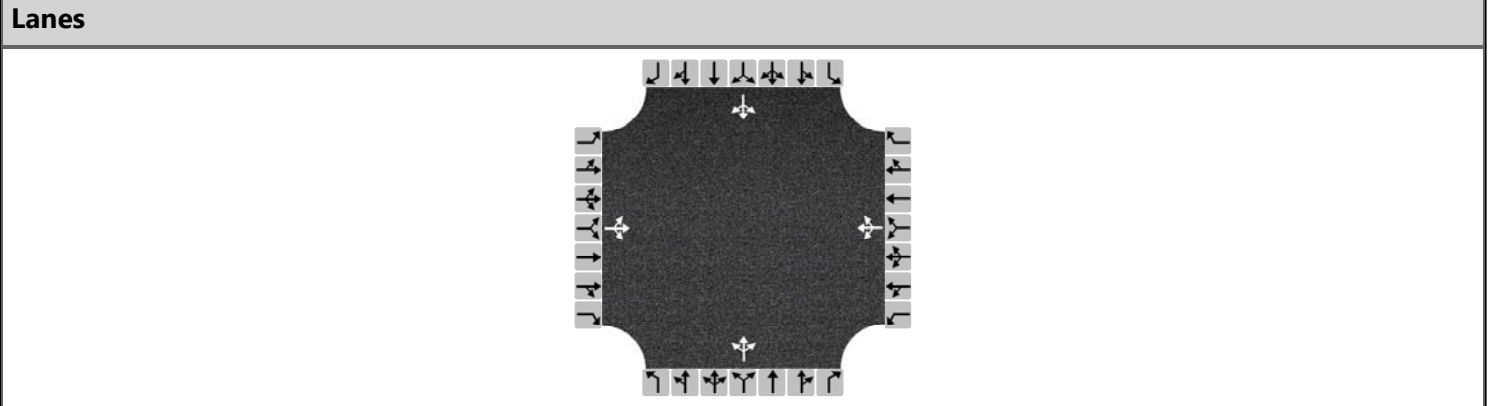
**Capacity, Delay and Level of Service**

Flow Rate, v (veh/h)	351			256			108			151		
Capacity	710			707			631			618		
95% Queue Length, Q <sub>95</sub> (veh)	2.8			1.7			0.6			1.0		
Control Delay (s/veh)	12.9			11.0			9.9			10.7		
Level of Service, LOS	B			B			A			B		
Approach Delay (s/veh)	12.9			11.0			9.9			10.7		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh   LOS	11.6						B					



# HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	BSM	Intersection	Sigwalt with Vail
Agency/Co.	KLOA, Inc.	Jurisdiction	Arlington Heights
Date Performed	8/10/2017	East/West Street	Sigwalt Street
Analysis Year	2023	North/South Street	Vail Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.96
Time Analyzed	PM Peak Hour		
Project Description	17-127		



**Vehicle Volume and Adjustments**

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	24	174	4	15	228	102	15	65	19	81	45	40
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	210			359			103			173		
Percent Heavy Vehicles	1			1			0			0		

**Departure Headway and Service Time**

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.187			0.319			0.092			0.154		
Final Departure Headway, hd (s)	5.23			4.86			5.59			5.49		
Final Degree of Utilization, x	0.306			0.485			0.160			0.264		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.23			2.86			3.59			3.49		

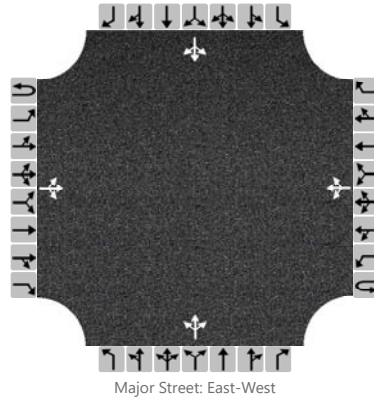
**Capacity, Delay and Level of Service**

Flow Rate, v (veh/h)	210			359			103			173		
Capacity	688			741			644			655		
95% Queue Length, Q <sub>95</sub> (veh)	1.3			2.7			0.6			1.1		
Control Delay (s/veh)	10.5			12.3			9.7			10.5		
Level of Service, LOS	B			B			A			B		
Approach Delay (s/veh)	10.5			12.3			9.7			10.5		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh   LOS	11.2						B					

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	South with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	South Street		
Analysis Year	2017			North/South Street	Highland Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.60		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		10	23	50		46	79	3		37	45	28		9	19	14
Percent Heavy Vehicles (%)		10				0				0	4	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

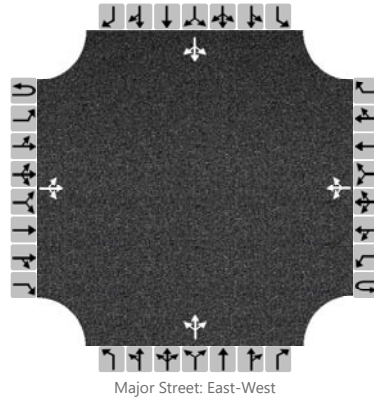
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		17			77					184				70		
Capacity, c (veh/h)		1399			1479					557				543		
v/c Ratio		0.01			0.05					0.33				0.13		
95% Queue Length, Q <sub>95</sub> (veh)		0.0			0.2					1.4				0.4		
Control Delay (s/veh)		7.6			7.6					14.6				12.6		
Level of Service, LOS		A			A					B				B		
Approach Delay (s/veh)		1.0			3.0					14.6				12.6		
Approach LOS										B				B		

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	South with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	South Street		
Analysis Year	2017			North/South Street	Highland Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.83		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		3	34	8		10	55	2		4	29	5		3	27	7
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

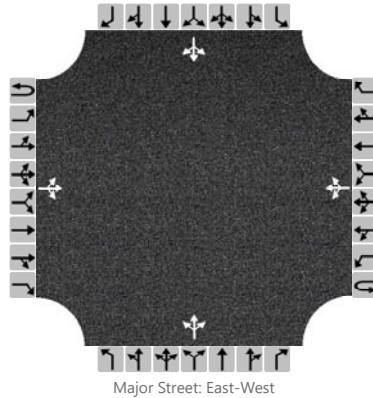
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4			12					46				45	
Capacity, c (veh/h)		1546			1568					772				776	
v/c Ratio		0.00			0.01					0.06				0.06	
95% Queue Length, Q <sub>95</sub> (veh)		0.0			0.0					0.2				0.2	
Control Delay (s/veh)		7.3			7.3					10.0				9.9	
Level of Service, LOS		A			A					A				A	
Approach Delay (s/veh)		0.6			1.1					10.0			9.9		
Approach LOS										A			A		

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	South with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	South Street		
Analysis Year	2023			North/South Street	Highland Avenue		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.60		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		10	24	52		47	81	4		38	46	29		13	23	14
Percent Heavy Vehicles (%)		10				0				0	4	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

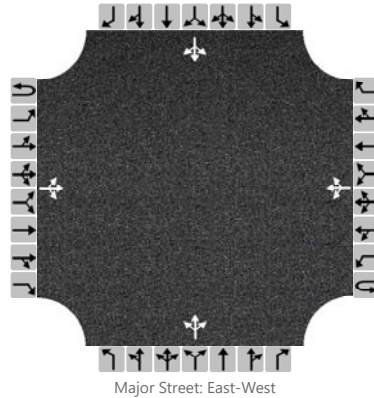
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		17			78					188				83		
Capacity, c (veh/h)		1393			1472					546				514		
v/c Ratio		0.01			0.05					0.34				0.16		
95% Queue Length, Q <sub>95</sub> (veh)		0.0			0.2					1.5				0.6		
Control Delay (s/veh)		7.6			7.6					15.0				13.3		
Level of Service, LOS		A			A					C				B		
Approach Delay (s/veh)		1.0			3.0					15.0				13.3		
Approach LOS										C				B		

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	BSM			Intersection	South with Highland		
Agency/Co.	KLOA, Inc.			Jurisdiction	Arlington Heights		
Date Performed	8/10/2017			East/West Street	South Street		
Analysis Year	2023			North/South Street	Highland Avenue		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.83		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-127						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		3	35	8		10	57	6		4	33	5		5	29	7
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4			12					51				49		
Capacity, c (veh/h)		1536			1567					760				767		
v/c Ratio		0.00			0.01					0.07				0.06		
95% Queue Length, Q <sub>95</sub> (veh)		0.0			0.0					0.2				0.2		
Control Delay (s/veh)		7.3			7.3					10.1				10.0		
Level of Service, LOS		A			A					B				B		
Approach Delay (s/veh)		0.5			1.0					10.1				10.0		
Approach LOS										B				B		

# Parking Ratios of Similar Developments

*Proposed Apartment Development  
Arlington Heights, Illinois*



PARKING RATIOS OF SIMILAR DEVELOPMENTS

Development	Location	Units	Parking	Parking Ratio
Aloft at the Glen	Glenview	181	181	1.00
9750 on the Park	Orland Park	295	365	1.24
Wheaton 121	Wheaton	306	400	1.31
Glen Gate	Glenview	240	360	1.50
1717 Ridge	Evanston	175	205	1.17
AMLI Evanston	Evanston	214	312	1.46
Residences at the Grove	Downers Grove	294	345	1.17
Uptown La Grange	La Grange	254	336	1.32
The Reserve at Evanston	Evanston	195	219	1.12
Regency Place	Oak Brook	112	130	1.16
One Arlington	Arlington Heights	214	300	1.40
E2	Evanston	356	371	1.04
1717 Ridge	Evanston	175	200	1.14
Ninety7Fifty on the Park	Orland Park	295	300	1.02
Avant at the Arboretum	Warrenville	310	392	1.26
Central Station	Evanston	80	80	1.00
Wheaton 121	Wheaton	306	400	1.31
Midtown Square	Glenview	138	160	1.16
Uptown LaGrange	La Grange	254	336	1.32
	<b>Average</b>	<b>231</b>	<b>284</b>	<b>1.22</b>

*Proposed Apartment Development  
Arlington Heights, Illinois*

