Meeting Held Electronically



COMMITTEE OF THE WHOLE MEETING MONDAY, APRIL 4, 2022

(Immediately following the Village Board Meeting)

AGENDA

CALL TO ORDER

ROLL CALL

AUDIENCE COMMENTS

TRUSTEE COMMENTS

DISCUSSION

- 1. Petition #22-02: Seasons of North Aurora Apartment Complex
- 2. FY 2022-23 Draft Budget Presentation

EXECUTIVE SESSION

ADJOURN

Initials: _______

VILLAGE OF NORTH AURORA BOARD REPORT

TO: VILLAGE PRESIDENT & BOARD OF TRUSTEES

CC: STEVE BOSCO, VILLAGE ADMINISTRATOR

FROM: MIKE TOTH, COMMUNITY & ECONOMIC DEVELOPMENT DIRECTOR

SUBJECT: PETITION 22-02: SEASONS AT NORTH AURORA APARTMENTS

AGENDA: APRIL 4, 2022 COMMITTEE OF THE WHOLE MEETING

DISCUSSION

The subject property is a 21.7-acre vacant tract situated west of Orchard Road, south of West Mooseheart Road, and east of Deerpath Road. The petitioner has submitted plans for a multi-family residential development to be located on the subject property in the B-2 General Business District/R-4 General Residence District Mixed Use Planned Unit Development. The submitted development plans include thirteen (13) two-story residential buildings consisting of 20 units per building and providing a total of 260 residential units – 26 studio units, 104 one-bedroom units, 104 two-bedroom units and 26 three-bedroom units. A clubhouse, pool and other ancillary amenities would also be included.

A public hearing was conducted on this item before the Plan Commission at their March 1, 2022 meeting. The Plan Commission unanimously recommended approval of Petition #22-02, subject to staff's eight conditions and three added conditions – evaluate alternative locations for the clubhouse, provide additional traffic information and to the greatest extent possible protect the trees on the residential properties located directly to the west.

Staff solicited feedback from the Village Board on the proposed development at the March 7, 2022 Committee of the Whole meeting. At that time, the developer presented an alternative clubhouse location, which moves the clubhouse to the south of its previously-proposed location (away from the homes to the west of the development). As the site plan standards included in the Annexation Agreement require sidewalk to be constructed on both sides of all internal public streets and on the adjacent public road frontages, staff also solicited feedback on the proposed pedestrian plan.

The Village Board was supportive of the overall development and the new clubhouse location. They did convey their desire to create a public pedestrian network and asked the developer to either install public sidewalks within the right of way or place an access easement over the proposed perimeter walkways to allow for public access. The developer agreed to place an access easement over the existing perimeter walkways and allow for public access.

The developer has submitted the full Traffic Impact Study, prepared by KLOA, Inc., dated March 24, 2022. While the Traffic Impact Study contains a multitude of traffic data and information, pages 24 - 28 provide the recommendations and conclusions of the study including KLOA's findings for each of the intersections adjacent to the proposed development.

The Board will be asked to consider approval of an ordinance amending the PUD and an amendment to the Annexation Agreement. Initial drafts have been prepared and included for Board review. The documents would cover the zoning and site development requests being made: Special Use - Planned Unit Development amendment with deviations to the Planned Unit Development and Zoning Ordinance; preliminary final plat of subdivision; and site plan approval. A public hearing to amend the Annexation Agreement is required and has been scheduled for the April, 18, 2022 Village Board meeting.



SITE STATISTICS

MULTIFAMILY

TWO STORY WALKUP BUILDINGS WITH 20 UNIT CONFIGURATIONS ALONG WITH A CLUBHOUSE AND POOL

CLUBHOUSE - 4,942 SF

20 UNIT BUILDING - 25,797 SF (1,072 SF/UNIT*)
* SF/UNIT DOES NOT INCLUDE GARAGE

STUDIO 26
ONE BEDROOM 104
TWO BEDROOM 104
THREE BEDROOM 26

OVERALL UNIT COUNT 260

SITE AREA: 21.7 ACRES (12 UNITS/ACRE)

PARKING

ON SITE STALLS 391 (1.5 STALLS/UNIT) ENCLOSED STALLS 172 (0.66 STALLS/UNIT)

TOTAL STALLS 563 (2.16 STALLS/UNIT)

TYPICAL PARKING STALL DIMENSIONS: 9' X 18.5'

LOT COVERAGE

SITE AREA	945,303 SQFT (21.7ACRES)
BUILDINGS AND SITE STRUCTURES	198,416 SQFT (21%)

SETBACKS

YARD REGULATIONS		CURRENT SETBACK
FRONT YARD REAR YARD INTERIOR SIDE YARD CORNER SIDE YARD	25 FT 30 FT 10 FT 30 FT	25 FT 30 FT 25 FT 30 FT
ORCHARD ROAD LANDSCAPE BUFFER	35 FT	35 FT
DEDICATION TO ORCHARD R.O.W.	15FT	1 5 F T
MOOSEHEART RD LANDSCAPE BUFFER	50 FT	50 FT

SCALE 1"=60'



Seasons at North Aurora

MULTIFAMILY DEVELOPMENT

North Aurora, Illinois





Traffic Impact Study Proposed Residential Development

North Aurora, Illinois



Prepared For:





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 the proposed apartment development to be located in North Aurora, Illinois.

This site, which is currently vacant, is located on the west side of Orchard Road north of Tanner Road. As proposed, the site will be developed with an apartment development containing approximately 260 units and 598 parking spaces. As part of the proposed development, a proposed roadway will be developed along the south side of the site connecting Orchard Road to Deerpath Road. Access to the site will be provided via a full-movement access drive and a right-in/right-out access drive off the proposed roadway.

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

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

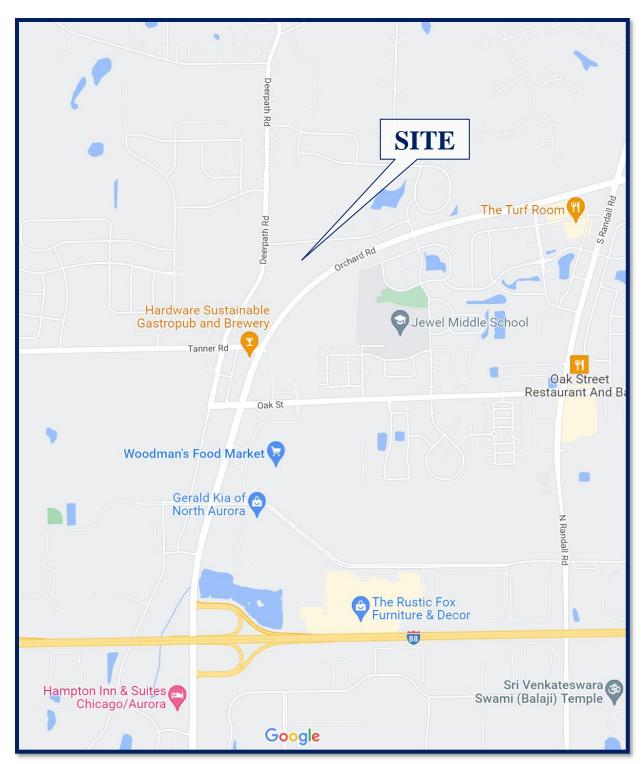
The sections of this report present the following:

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

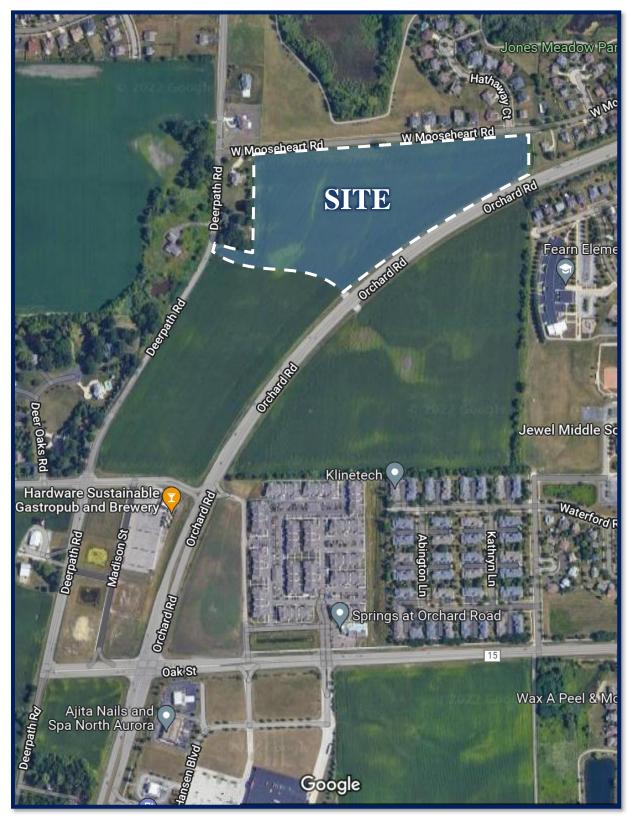
Traffic capacity analyses were conducted for the weekday morning and weekday evening peak hours for the following conditions:

- 1. Base Conditions Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area adjusted to reflect normal conditions.
- 2. Future Conditions Analyzes the projected traffic volumes which includes the base traffic volumes increased by an ambient area growth factor (growth not attributable to any particular development) and the traffic estimated to be generated by the proposed subject development.





Site Location Figure 1



Aerial View of Site Figure 2



2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented 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

This site, which is currently vacant, is located on the west side of Orchard Road north of Tanner Road and is bounded by Deerpath Road on the west and Mooseheart Road on the north. Land uses in the vicinity of the site are primarily residential in all directions and include Hardware Sustainable Gastropub and Brewery, the Springs at Orchard Road residential development, and the Waterford Oaks residential development to the south; Fearn Elementary School, Jewel Middle School, the Orchard Crossing subdivision, and the Orchard Estates subdivision to the east; the Mirador subdivision to the north; and The Reserves at Tanner Trails to the west.

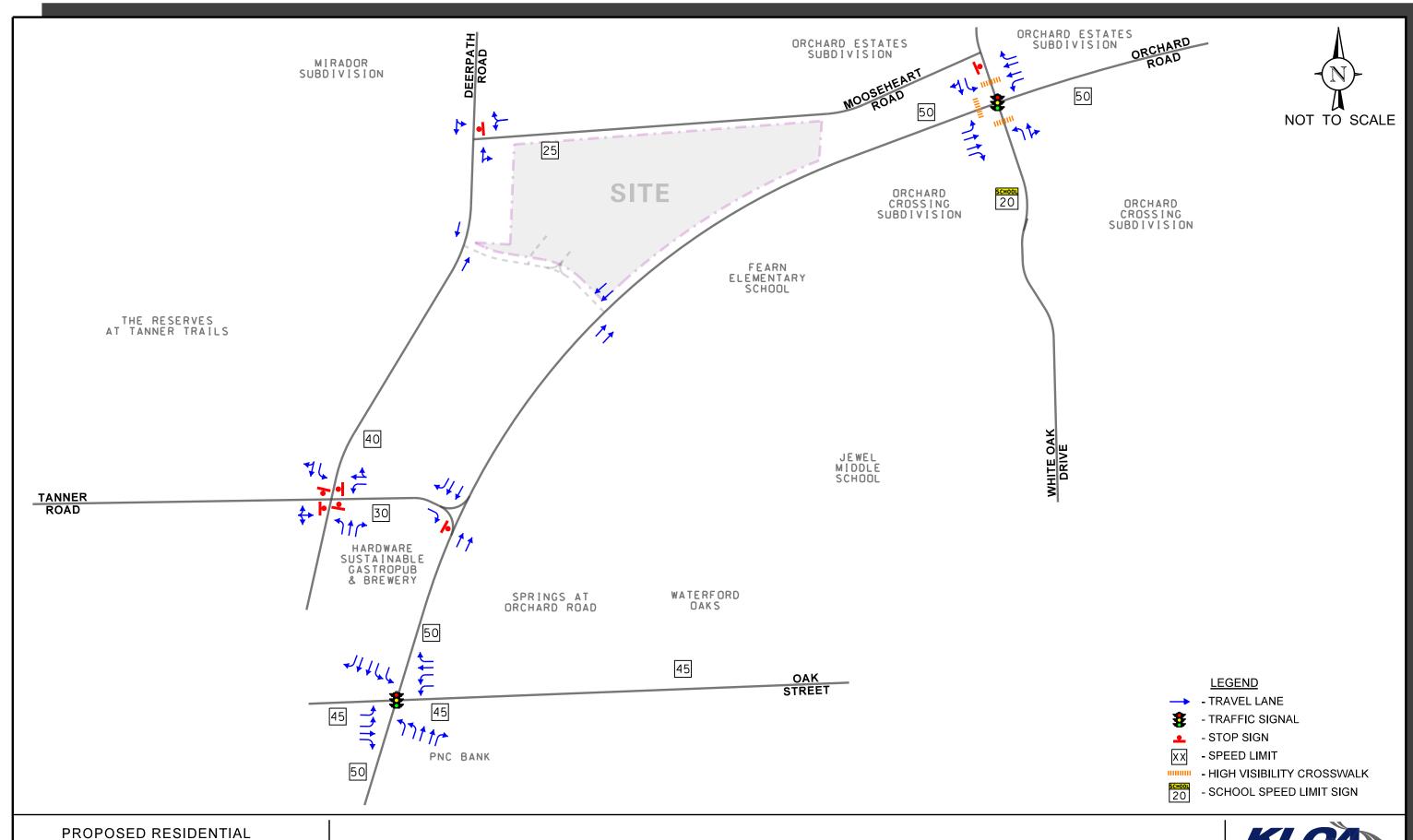
Existing Roadway System Characteristics

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

Orchard Road (Kane County Highway 83) is a north-south, major arterial roadway that has a four-lane undivided cross-section along the site frontage. At its signalized intersection with Oak Street, Orchard Road provides dual left-turn lanes, two through lanes, and an exclusive right-turn lane on the northbound and southbound approaches. At its signalized intersection with White Oak Drive, Orchard Road provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on the eastbound and westbound approaches. The west leg of this intersection provides a high visibility crosswalk and pedestrian countdown signals. At its unsignalized intersection with Tanner Road, Orchard Road provides two through lanes and an exclusive right-turn lane on the southbound approach and two through lanes on the northbound approach. Orchard Road is under the jurisdiction of the Kane County Division of Transportation (KDOT), is classified as a Strategic Regional Arterial (SRA) Route, carries an Annual Average Daily Traffic (AADT) volume of 12,400 vehicles north of Oak Street and 27,800 vehicles south of Oak Street (Illinois Department of Transportation [IDOT] 2018), and has a posted speed limit of 50 miles per hour.

Deerpath Road is a north-south major collector roadway that provides one travel lane in each direction and is widened between Tanner Road and Oak Street to provide a striped median. At its all-way stop sign-controlled intersection with Tanner Road, Deerpath Road provides an exclusive left-turn lane, a through lane, and an exclusive right-turn lane on the northbound approach and an exclusive left-turn lane and a shared through/right-turn lane on the southbound approach. At its unsignalized intersection with Oak Street, Deerpath Road provides a shared through/right-turn lane on the northbound approach and an exclusive left-turn lane and a through lane on the southbound approach.





DEVELOPMENT

NORTH AURORA, ILLINOIS

Figure: 3

At its unsignalized intersection with Mooseheart Road, Deerpath Road provides a shared through/right-turn lane on the northbound approach and a shared left-turn/through lane on the southbound approach. North of Tanner Road, Deerpath Road is under the jurisdiction of the Village of North Aurora, carries an AADT volume of 7,450 vehicles, and has a posted speed limit of 45 miles per hour. Between Tanner Road and Oak Street, Deerpath Road is under the jurisdiction of KDOT and carries an AADT volume of 10,100 vehicles (IDOT 2018). South of Oak Street, Deerpath Road carries an AADT volume of 6,950 vehicles (IDOT 2018).

Oak Street is an east-west major collector roadway that generally provides a single travel lane in each direction. At its signalized intersection with Orchard Road, Oak Street provides dual left-turn lane, a through lane, and an exclusive right-turn lane on the eastbound and westbound approaches. At its unsignalized intersection with Deerpath Road, Oak Street provides an exclusive left-turn lane and an exclusive right-turn lane that are under stop-sign control. Between Deerpath Road and Orchard Road, Oak Street is under the jurisdiction of KDOT and carries an AADT volume of 3,900 vehicles (IDOT 2018). East of Orchard Road, Oak Street is under the jurisdiction of the Village of North Aurora, carries an AADT volume of 6,600 vehicles (IDOT 2018), and has a posted speed limit of 45 miles per hour.

Tanner Road (Kane County Highway 15) is an east-west major collector roadway that provides a single travel lane in each direction separated by a striped median. At its all-way stop sign-controlled intersection with Deerpath Road, Tanner Road provides a shared left-turn/through/right-turn lane on the eastbound approach and an exclusive left-turn lane and a shared through/right-turn lane on the westbound approach. At its unsignalized intersection with Orchard Road, Tanner Road provides a single lane that is under stop sign control and is restricted to right-turn movements only via a channelizing island and the existing landscaped median along Orchard Road. West of Deerpath Road, Tanner Road is under the jurisdiction of KDOT, carries an AADT volume of 2,650 vehicles (IDOT 2018), and has a posted speed limit of 50 miles per hour. Between Deerpath Road and Orchard Road, Tanner Road is under local jurisdiction and has a posted speed limit of 30 miles per hour.

Mooseheart Road is an east-west local roadway that provides a single travel lane in each direction and extends from Deerpath Road to White Oak Drive. At its unsignalized intersection with Deerpath Road, Mooseheart Road provides a shared left-turn/right-turn lane that is under stop sign control. Mooseheart Road is under the jurisdiction of the Village of North Aurora and has a posted speed limit of 25 miles per hour.



Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. utilized peak period traffic counts that were conducted on Tuesday, March 15, 2022, 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:

- Orchard Road with Oak Street
- Orchard Road with Tanner Road
- Orchard Road with White Oak Drive
- Deerpath Road with Tanner Road
- Deerpath Road with Mooseheart Road

The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 7:15 A.M. to 8:15 A.M. and the weekday evening peak hour of traffic occurs from 4:45 P.M. to 5:45 P.M.

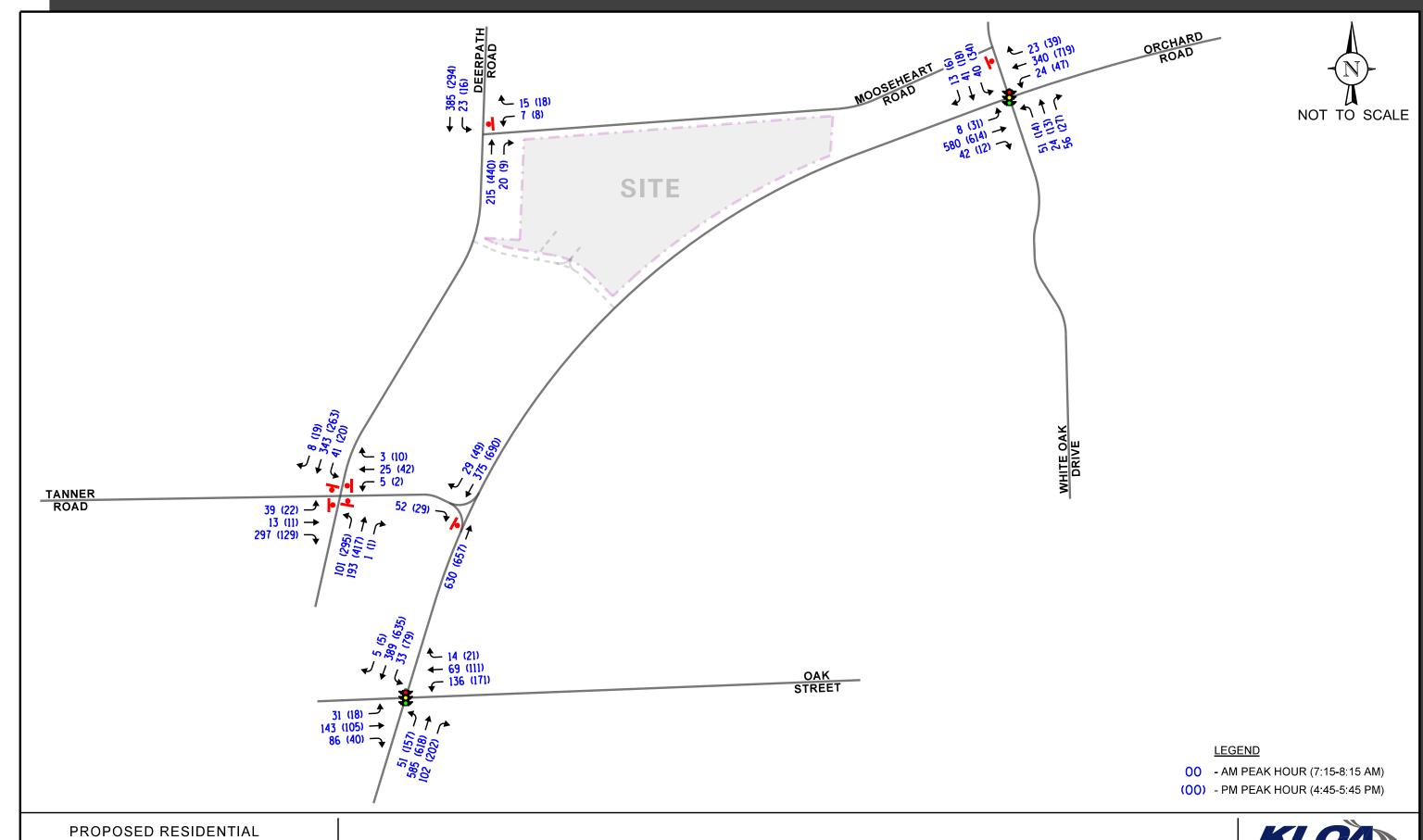
However, due to the COVID-19 pandemic, it is anticipated that the Year 2022 traffic volumes may not be representative of typical conditions. As such, the Year 2022 peak hour traffic volumes were compared to two-way traffic volumes along the study area roadway segments from 2018, which were increased by a regional growth factor (as discussed later) to reflect Year 2022 conditions. These traffic volumes were obtained from the IDOT Traffic Count Database System (TCDS) website

The results of the comparison indicated that the weekday morning peak hour traffic volumes at the study area intersections were generally consistent or higher than the Year 2018 traffic volumes increased by a regional growth factor. Additionally, the traffic volumes during the weekday evening peak hour were generally consistent or higher except for the traffic volumes along Deerpath Road which were approximately 25 percent lower, the traffic volumes along Orchard Road which were approximately 14 percent lower, and the traffic volumes along Oak Street which were approximately 18 percent lower than the Year 2018 traffic volumes increased by a regional growth factor.

As such, the Year 2022 traffic counts were utilized as-is, except during the weekday evening peak hour where the through traffic volumes along Orchard Road were increased by approximately 14 percent, the through traffic volumes along Deerpath Road were increased by approximately 25 percent, and the turning movements to/from Oak Street were increased by approximately 18 percent.

Figure 4 illustrates the Year 2022 base traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.





DEVELOPMENT

Crash Analysis

KLOA, Inc. obtained crash data¹ from IDOT for the most recent available five years (2016 to 2020) for the study area intersections. The crash data for the intersections of Orchard Road with Oak Street, Orchard Road with White Oak Drive, and Deerpath Road with Tanner Road are summarized in **Tables 1** through **3**, respectively. A review of the crash data indicated the following:

- The intersection of Orchard Road with Tanner Road experienced zero crashes in 2016, 2017, 2018, and 2019 and one crash in 2020
- The intersection of Deerpath Road with Mooseheart Road experienced zero crashes in 2016, 2018, and 2020 and one crash in 2017 and 2019.
- No fatalities were reported at the study area intersections between 2016 and 2020.

Table 1 ORCHARD ROAD WITH OAK STREET – CRASH SUMMARY

			Тур	e of Cras	h Frequency			
Year	Angle	Pedestrian	Object	Rear End	Sideswipe	Turning	Other	Total
2016	0	0	0	1	0	1	0	2
2017	0	0	0	0	0	0	0	0
2018	0	0	0	4	0	0	0	4
2019	0	0	0	3	0	1	1	5
2020	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>2</u>
Total	0	0	0	8	1	3	1	13
Average	0	0	0	1.6	<1	< 1	< 1	2.6

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



Table 2 ORCHARD ROAD WITH WHITE OAK DRIVE - CRASH SUMMARY

	Type of Crash Frequency														
Year	Angle	Pedestrian	Object	Rear End	Sideswipe	Turning	Other	Total							
2016	0	0	0	0	0	0	0	0							
2017	0	0	0	0	0	0	0	0							
2018	0	0	0	0	0	0	0								
2019	1	0	0	1	0	1	0	3							
2020	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>							
Total	1	0	0	2	0	1	0	4							
Average	< 1	0	0	< 1	0	< 1									

Table 3 DEERPATH ROAD WITH TANNER ROAD – CRASH SUMMARY

			Тур	e of Crash	n Frequency			
Year	Angle	Pedestrian	Object	Rear End	Sideswipe	Turning	Other	Total
2016	1	0	0	0	0	1	0	2
2017	0	0	0	1	0	0	0	1
2018	1	0	0	0	0	0	0	1
2019	0	0	0	0	0	0	0	0
2020	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
Total	2	0	0	1	0	2	0	5
Average	< 1	0	0	< 1	0	< 1	0	1

3. Traffic Characteristics of the Proposed Development

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

Proposed Site and Development Plan

As proposed, the plans call for developing the site with 260 apartment units among 13 buildings. A total of 598 parking spaces will be provided of which 172 spaces will be enclosed. As part of the proposed development, a proposed public roadway will be developed along the south side of the site that will connect Orchard Road to Deerpath Road. The proposed roadway will provide exclusive left- and right-turn lanes and will be under stop sign control at its respective intersections with Orchard Road and Deerpath Road. Furthermore, Orchard Road at the proposed roadway will be widened to provide an exclusive northbound left-turn lane and an exclusive southbound right-turn lane. Based on the Illinois Department of Transportation *Bureau of Design and Environment* (BDE) Manual, these turn lanes should provide 240 feet of storage and 240 feet of taper. Access to the proposed apartment units will be provided via a full-movement access drive and a right-in/right-out access drive off the proposed roadway. Outbound movements from the proposed access drives onto the proposed roadway should be under stop sign control. A copy of the site plan is included in the Appendix.

Directional Distribution

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

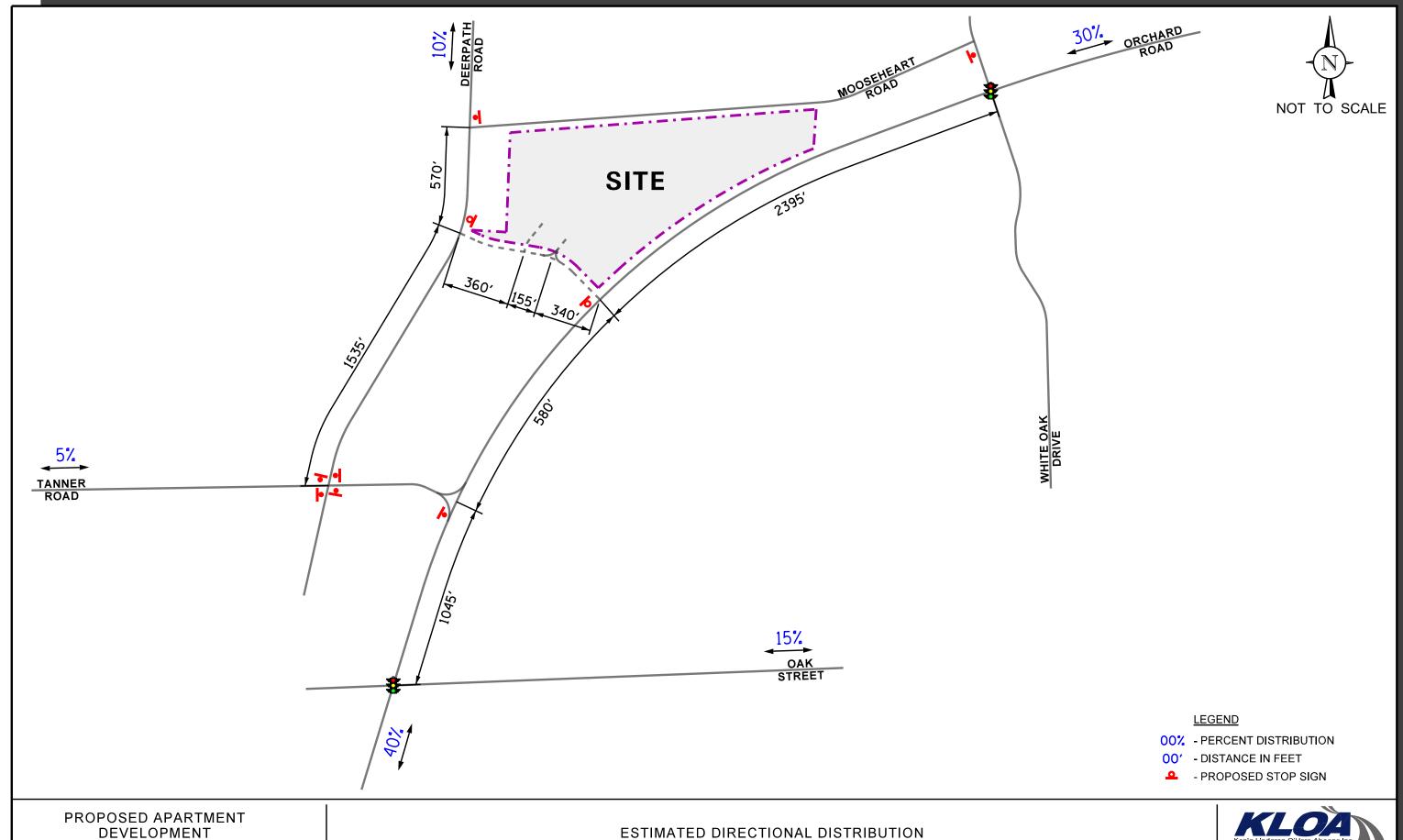
Estimated Site Traffic Generation

The number of peak hour vehicle trips estimated to be generated by the proposed development was based on vehicle trip generation rates contained in *Trip Generation Manual*, 11th Edition, published by the Institute of Transportation Engineers (ITE). Land-Use Code 220 (Multi-Family Housing) was utilized. Copies of the ITE trip generation sheets are included in the Appendix. **Table 4** shows the estimated vehicle trip generation for the weekday morning and weekday evening peak hours.

Table 4
ESTIMATED SITE-GENERATED TRAFFIC VOLUMES

ITE Land-Use	Type/Size		kday Mo Peak Ho			kday E Peak Ho	Weekday Daily	
Code		In	Out	Total	In	Out	Total	Traffic
220	Multifamily Housing (Low-Rise) – 260 units	24	79	103	83	49	132	1,742





4. Projected Traffic Conditions

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

Development Traffic Assignment

The estimated weekday morning and 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 total new traffic assignment for the residential development is illustrated in **Figure 6**. As previously indicated, the proposed development will provide a public roadway that will connect Orchard Road to Deerpath Road. As such, some of the existing traffic that currently traverses the intersections of Deerpath Road with Tanner Road and Oak Street will be diverted to the proposed public roadway. **Figure 7** illustrates the reassignment of existing traffic volumes that will traverse the proposed roadway.

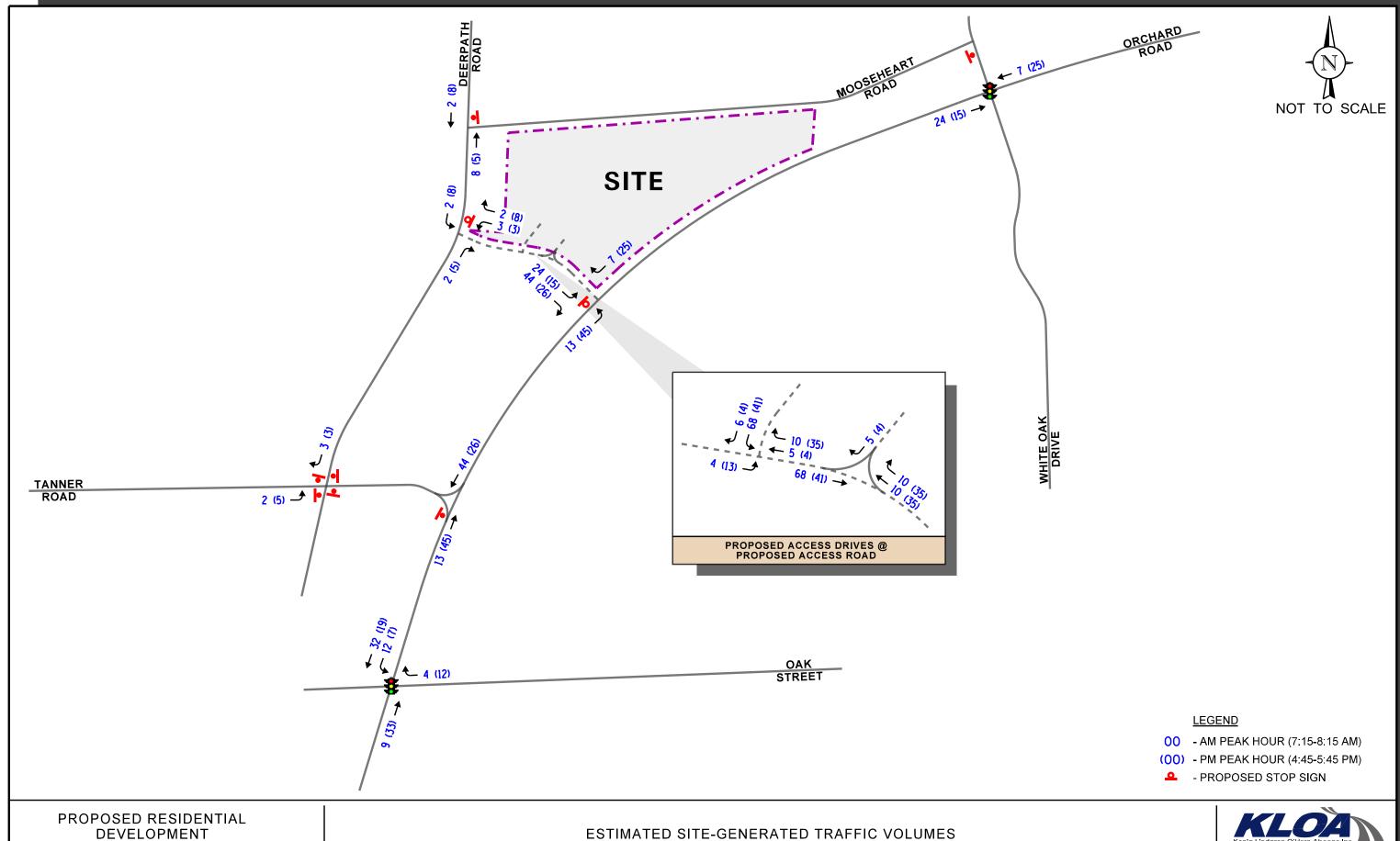
Background (No-Build) Traffic Conditions

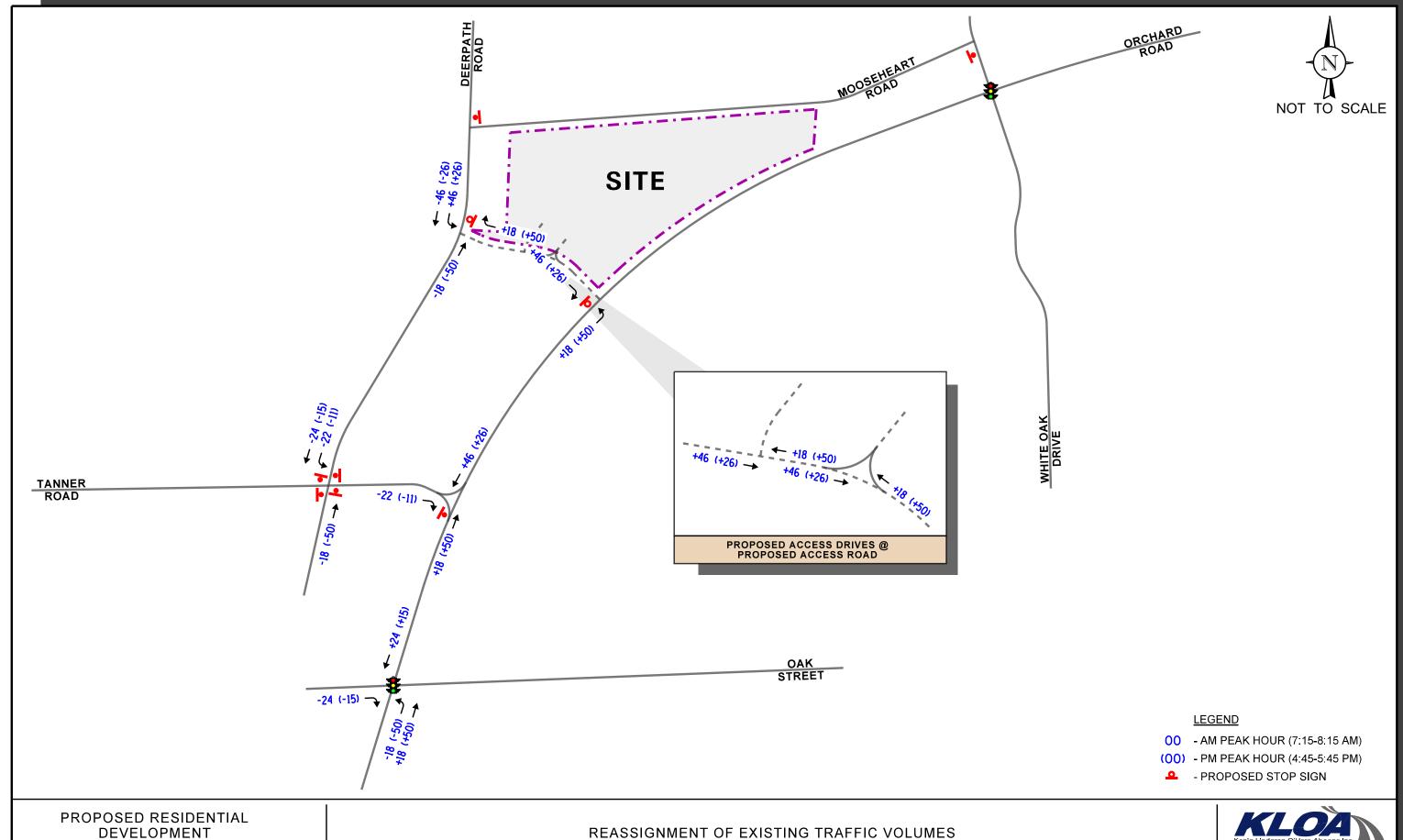
The base traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on 2050 Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated March 17, 2022, the base traffic volumes were increased by an annually compounded growth rate for eight years (one-year buildout plus seven years) totaling nine and a half percent to represent Year 2030 no-build conditions. A copy of the CMAP 2050 projections letter is included in the Appendix. **Figure 8** illustrates the Year 2030 no-build traffic volumes.

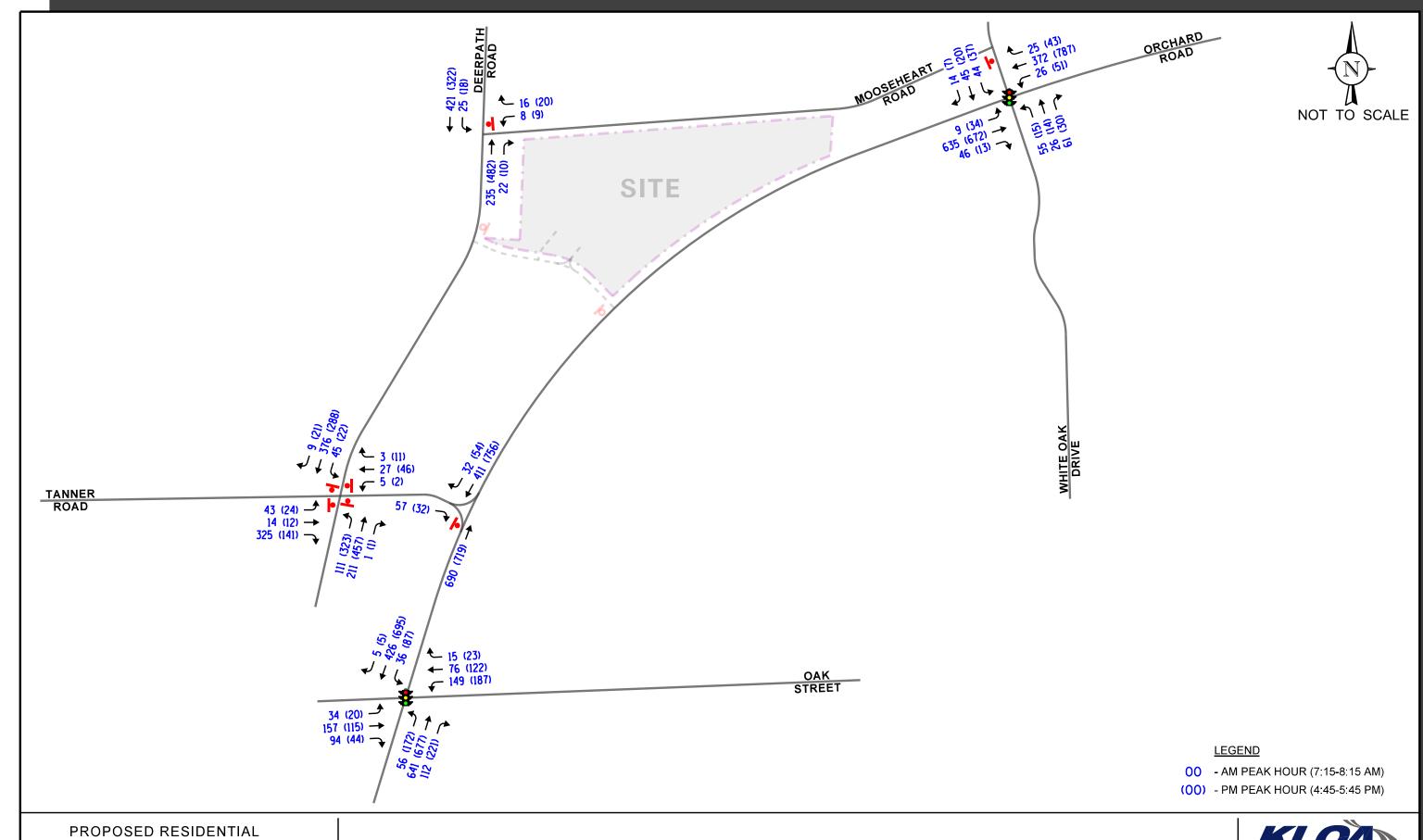
Total Projected Traffic Volumes

The development-generated traffic (Figure 6) was added to the base traffic volumes increased by a regional growth factor to determine the Year 2030 total projected traffic volumes, as illustrated in **Figure 9**.

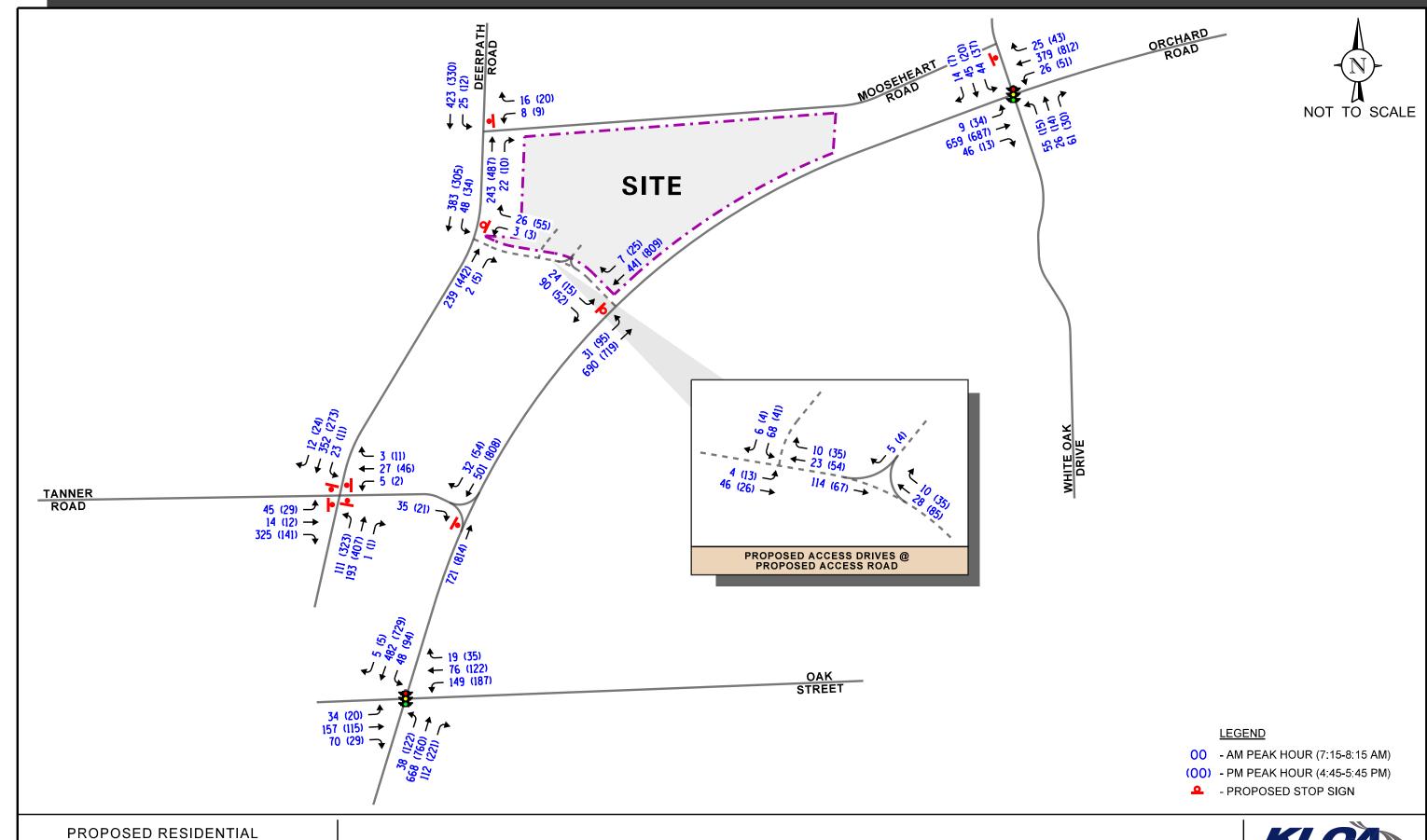








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5. Traffic Analysis and Recommendations

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

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and weekday evening peak hours for the base (Year 2022), Year 2030 no-build, and future projected (Year 2030) traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6th *Edition* and analyzed using Synchro/SimTraffic 11 computer software. The analysis for the traffic-signal controlled intersections of Orchard Road with Oak Street and White Oak Drive were accomplished utilizing actual cycle lengths, phasings, and offsets.

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 Year 2022 base, Year 2030 no-build, and Year 2030 total projected conditions are presented in **Tables 5** through **9.** A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.



Table 5
CAPACITY ANALYSIS RESULTS – ORCHARD ROAD WITH OAK STREET – SIGNALIZED

	Peak	K	Eastboun	d	V	Vestboun	ıd	N	orthbou	nd	So	ıd	011	
	Hour	L	T	R	L	Т	R	L	T	R	L	Т	R	Overall
Su	Weekday Morning	E 62.1	E 66.1	A 8.3	E 64.4	D 46.8	A 0.1	E 63.1	B 13.4	A 1.4	E 59.0	B 13.0	A 0.4	G 25.7
2022 nditio	Peak Hour		D – 46.4			D - 54.8			B – 15.2			B – 16.5		C - 25.7
Year 2022 Base Conditions	Weekday Evening	E 61.2	E 65.8	A 0.8	E 64.4	D 50.4	A 0.1	E 64.3	B 13.6	A 1.1	E 57.0	B 13.0	A 0.1	C – 26.0
B	Peak Hour		D – 49.2			D – 54.8			B – 19.2			B – 17.7		
Build	Weekday Morning	E 62.3	E 66.2	A 7.8	E 64.5	D 47.1	A 0.1	E 63.3	B 14.7	A 1.4	E 61.1	B 14.3	A 0.4	C – 26.6
No-] tions	Morning Peak Hour Weekday Evening		D – 46.5			E - 55.0			B – 16.2					
Year 2030 No-Build Conditions	Weekday Evening	E 61.2	_		A 64.3	D 49.4	A 0.2	E 64.3	B 14.9	A 1.2	E 58.2	B 14.7	A 0.1	C – 26.9
Yea	Peak Hour		D – 49.5			D – 54.4			B - 20.0			B – 19.4		20.5
ons	Weekday Morning	E 62.3	E 66.2	A 8.7	E 64.5	D 47.1	A 0.2	E 62.4	B 15.1	A 1.5	E 62.0	B 13.9	A 0.2	C – 26.2
2030 nditi	Peak Hour		D – 50.3			D – 54.0			B – 15.5			B – 18.1		
Year 2030 Total Conditions	Weekday Evening	E 61.2	D 65.8	A 0.3	E 64.3	D 49.4	A 0.3	E 64.2	B 15.5	A 1.2	E 59.3	B 14.2	A 0.1	C – 25.7
	Peak Hour		D – 53.8		D-52.6				B – 18.0				23.1	

LOS = Level of Service

Delay is measured in seconds.



Table 6 CAPACITY ANALYSIS RESULTS – ORCHARD ROAD WITH WHITE OAK DRIVE – SIGNALIZED

	Peak	F	Eastboun			Vestboun			orthboun	d	So	outhbour	nd	0																												
	Hour	L	T	R	L	T	R	L	T	R	L	T	R	Overall																												
f z	Weekday Morning	A	B	A	A	A	A	C	B		C 27.4		7																													
2022 dition	Peak Hour	5.8	10.3 A $- 9.8$	3.6	3.8	6.0 A -5.5	0.1	30.0	13. B – 19.9	3	27.4	$\frac{21}{C - 24.2}$		B – 10.6																												
Year 2022 Base Conditions	Weekday Evening	A 4.2	A 8.9	A 0.9	A 3.0	A 6.4	A 0.1	C 25.8		В 15.6		21	.8	A – 8.1																												
B	Peak Hour		A – 8.5			A – 5.9			B – 18.3			C – 25.5		11 0.1																												
Build	Weekday Morning	A 5.0	B 11.8	A 4.0	A 3.9	A 6.1	A 0.1	C 30.3	B 13.		C 27.7	22	Z 2.0	B – 11.4																												
No-]	Peak Hour		B – 11.2			A - 5.7			B – 19.9																																	
Year 2030 No-Build Conditions	Weekday Evening	A 3.8	B 10.7	A 0.8	A 3.1	A 6.6	A 0.1	C 25.8	B 15.		C 28.4	21		A – 8.9																												
Yea	Peak Hour		B – 10.1			A – 6.1			B – 17.9			C - 25.4																														
ons	Weekday Morning	A 5.0	B 12.2	A 3.7	A 3.9	A 6.2	A 0.1	C 30.3	B 13.3										C 27.7	22		B – 11.5																				
2030 nditi	Peak Hour		B – 11.5			A - 5.7			B – 19.9			C – 24.4																														
Year 2030 Total Conditions	Weekday Evening	A 3.8	B 11.0	A 0.3	A 3.1	A 6.7	A C B 15.2																																C 28.4	21	.3	A – 9.1
	Peak Hour		B – 10.4			A – 6.2			B – 17.9			71 7.1																														

LOS = Level of Service

Delay is measured in seconds.



Table 7
CAPACITY ANALYSIS RESULTS
YEAR 2022 BASE CONDITIONS - UNSIGNALIZED

Intersection	_	y Morning Hour	Weekday Evening Peak Hour					
	LOS	Delay	LOS	Delay				
Deerpath Road with Tanner Road ¹								
 Overall 	D	25.3	C	20.8				
Eastbound Approach	D	28.3	В	13.9				
Westbound Approach	В	12.4	В	12.0				
 Northbound Approach 	C	15.8	C	24.0				
Southbound Approach	D	31.0	C	18.7				
Orchard Road with Tanner Road ²								
Eastbound Approach	A	9.8	В	10.8				
Deerpath Road with Mooseheart Road ²								
Westbound Approach	В	12.1	В	12.7				
Southbound Left Turn	A	7.9	A	8.3				
LOS = Level of Service 1 - All-way stop sign co Delay is measured in seconds 2 - Two-way stop sign co								



Table 8
CAPACITY ANALYSIS RESULTS
YEAR 2030 NO-BUILD CONDITIONS - UNSIGNALIZED

Intersection	_	Morning Hour	Weekday Evening Peak Hour				
	LOS	Delay	LOS	Delay			
Deerpath Road with Tanner Road ¹							
• Overall	Е	37.2	D	27.4			
Eastbound Approach	E	42.5	C	15.4			
Westbound Approach	В	13.2	В	12.8			
Northbound Approach	C	18.4	D	33.1			
Southbound Approach	Е	48.7	C	23.0			
Orchard Road with Tanner Road ²							
Eastbound Approach	В	10.0	В	11.2			
Deerpath Road with Mooseheart Road ²							
Westbound Approach	В	12.9	В	13.4			
Southbound Left Turn	A	8.0	A	8.4			



Table 9
CAPACITY ANALYSIS RESULTS
YEAR 2030 PROJECTED CONDITIONS - UNSIGNALIZED

Intersection		y Morning Hour	Weekday Peak	Evening Hour	
	LOS	Delay	LOS	Delay	
Deerpath Road with Tanner Road ¹					
• Overall	D	32.0	C	22.5	
Eastbound Approach	E	38.2	C	15.1	
Westbound Approach	В	12.8	В	12.5	
Northbound Approach	C	16.6	D	25.7	
Southbound Approach	E	39.6	C	21.3	
Orchard Road with Tanner Road ²					
Eastbound Approach	В	10.2	В	11.3	
Deerpath Road with Mooseheart Road ²					
Westbound Approach	В	13.0	В	13.5	
Southbound Left Turn	A	8.1	A	8.4	
Orchard Road with Proposed Roadway ²					
Eastbound Approach	В	12.2	C	18.7	
Northbound Left Turn	A	8.4	В	10.3	
Deerpath Road with Proposed Roadway ²					
Westbound Approach	В	10.3	В	11.9	
Southbound Left Turn	A	7.8	A	8.4	
Proposed Roadway with Full Access Drive ²					
Southbound Approach	A	9.2	A	9.4	
Eastbound Left Turn	A	7.3	A	7.4	
Proposed Roadway with Right-In/Right-Out Acc	cess Drive	2			
Southbound Approach	A	8.5	A	8.8	
LOS = Level of Service $1 - \text{All-way stop sign control}$ Delay is measured in seconds $2 - \text{Two-way stop sign cont}$					



Discussion and Recommendations

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

Orchard Road with Oak Street

The results of the capacity analysis indicate that overall, this intersection currently operates at Level of Service (LOS) C during the weekday morning and weekday evening peak hours. It should be noted that all of the approaches currently operate at LOS D or better during the peak hours and that all of the left-turn movements currently operate at LOS E during the peak hours. However, this level of service for the left-turn movements is expected given the operation of these movements under a protected phase only. Under Year 2030 no-build conditions, this intersection overall is projected to continue operating at LOS C during the weekday morning and weekday evening peak hours with increases in delay of less than one second over existing conditions.

Under Year 2030 total projected conditions, taking into consideration the reassignment of existing traffic to the proposed roadway connecting Orchard Road to Deerpath Road, this intersection overall is projected to continue operating at LOS C during the weekday morning and weekday evening peak hours with increases in delay of less than one second or less over existing conditions. Furthermore, all of the approaches are projected to continue operating at LOS D or better during the peak hours and left-turn movements are projected to continue operating at LOS E during the peak hours.

As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway improvements or signal modifications will be required. Overall, the proposed development is only projected to increase the volume of traffic traversing this intersection by approximately three percent during the peak hours.

Orchard Road with White Oak Drive

The results of the capacity analysis indicate that overall, this intersection currently operates at LOS B during the weekday morning peak hour and LOS A during the weekday evening peak hour. Furthermore, all of the approaches currently operate at LOS C or better during the peak hours.

Under Year 2030 no-build and total projected conditions, this intersection overall is projected to continue operating at LOS B during the weekday morning peak hour and LOS A during the weekday morning peak hour with increases in delay of approximately one second or less. All of the approaches are projected to continue operating at LOS C or better during the peak hours with increases in delay of approximately two seconds or less over existing conditions.

As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway improvements or signal modifications will be required. Overall, the proposed development is only projected to increase the volume of traffic traversing this intersection by approximately two percent during the peak hours.



Deerpath Road with Tanner Road

The results of the capacity analysis indicate that overall, this intersection currently operates at LOS D during the weekday morning peak hour and LOS C during the weekday evening peak hour. Furthermore, all of the approaches currently operate at LOS D or better during the peak hours. Under Year 2030 no-build conditions, this intersection overall is projected to operate at LOS E during the weekday morning peak hour and LOS D during the weekday evening peak hour. The resulting levels of service during the weekday morning peak hour are the result of the existing high volume of eastbound left-turn and southbound through movements that are increased by the 9.5 percent regional growth factor which are projected to operate at LOS E.

Under Year 2030 total projected conditions, taking into consideration the reassignment of existing traffic to the proposed roadway connecting Orchard Road to Deerpath Road which will reduce the volume of northbound and southbound through movements, this intersection overall is projected to operate at LOS D during the weekday morning peak hour and at LOS C during the weekday evening peak hour. While the eastbound and southbound approaches are projected to continue operating at LOS E during the weekday morning peak hour, they are projected to experience a decrease in delay of approximately four and nine seconds, respectively, over no-build conditions.

Overall, the proposed development (with the provision of the public roadway connecting Orchard Road with Deerpath Road) will reduce the total volume of traffic traversing this intersection by approximately five percent during the peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway or traffic control improvements will be required.

Orchard Road with Tanner Road

The results of the capacity analysis indicate that right-turn movements from Tanner Road onto Orchard Road currently operate at LOS A during the weekday morning peak hour and LOS B during the weekday evening peak hour. Under Year 2030 no-build conditions, right-turn movements from Tanner Road onto Orchard Road are projected to operate at LOS B during the weekday morning and weekday evening peak hour with increases in delay of less than one second over existing conditions.

Under Year 2030 total projected conditions, taking into consideration the reassignment of existing traffic to the proposed roadway connecting Orchard Road to Deerpath Road, right-turn movements from Tanner Road onto Orchard Road are projected to continue operating at LOS B during the peak hours with increases in delay of less than one second over no-build conditions. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway or traffic control improvements will be required.

Deerpath Road with Mooseheart Road

The results of the capacity analysis indicate that the westbound approach currently operates at LOS B during the weekday morning and weekday evening peak hours. Furthermore, southbound left-turn movements from Deerpath Road onto Mooseheart Road currently operate at LOS A during the weekday morning and weekday evening peak hours.



Under Year 2030 no-build conditions, the westbound approach is projected to continue operating at LOS B during the peak hours with increase in delay of less than one second over existing conditions.

Under Year 2030 total projected conditions, the westbound approach is projected to continue operating at LOS B during the peak hours with increases in delay of approximately one second over existing conditions. Furthermore, southbound left-turn movements are projected to continue operating at LOS A during the peak hours with increases in delay of less than one second.

As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway or traffic control improvements will be required.

Proposed Public Roadway Intersections

As previously indicated, as part of the proposed development, a proposed public roadway will be developed along the south side of the site that will connect Orchard Road to Deerpath Road. The proposed roadway will provide exclusive left- and right-turn lanes and will be under stop sign control at its respective intersections with Orchard Road and Deerpath Road.

The results of the capacity analysis indicate that the eastbound approach of the public roadway at Orchard Road is projected to operate at LOS A during the weekday morning peak hour and LOS B during the weekday evening peak hour with 95th percentile queues of one to two vehicles. The westbound approach of the public roadway at Deerpath Road is projected to operate at LOS B during the weekday morning and weekday evening peak hours with 95th percentile queues of one to two vehicles. Northbound left turns from Orchard Road onto the public roadway are projected to operate at LOS A during the weekday morning peak hour and LOS B during the weekday evening peak hour with 95th percentile queues of one to two vehicles, which can be accommodated within the proposed left-turn lane storage. Southbound left turns from Deerpath Road onto the public roadway are projected to operate at LOS A during both peak hours with 95th percentile queues of one to two vehicles.

It should be noted that the results of the capacity analyses take into consideration the provision of exclusive left- and right-turn lanes for the approaches of the proposed roadway at Orchard Road and Deerpath Road and the inclusion of the exclusive turn lanes on Orchard Road.

When the projected traffic volumes along Orchard Road are compared to the turn lane warrant guidelines published in Section 2 of the Kane County Division of Transportation Permit Regulations and Access Control Regulations, an exclusive southbound right-turn lane is warranted at the intersection of Orchard Road with the proposed public roadway during the weekday evening peak hour and an exclusive northbound left-turn lane is warranted at the intersection of Orchard Road with the proposed public roadway during the weekday morning and weekday evening peak hours. The left-turn lane warrant figures are included in the Appendix.

Based on information published in Chapter 36 of the IDOT *Bureau of Design and Environment* (BDE) Manual, the warranted turn lanes on Orchard Road should provide 240 feet of storage and 240 feet of taper based on a 55 mile per hour design speed.



Overall, the proposed access roadway with the provision of exclusive left- and right-turn lanes on Orchard Road will be adequate in accommodating the traffic generated by the proposed development and the reassignment of area traffic volumes, will have sufficient reserve capacity at its intersections with Orchard Road and Deerpath Road, and will enhance the connectivity of the roadway network within the study area.

Proposed Development Access Drives

The results of the capacity analysis indicate that outbound movements from the access drives onto the proposed public roadway are projected to operate at LOS A during the weekday morning and weekday evening peak hours. Furthermore, eastbound left-turn movements from the proposed public roadway onto the full movement access drive are projected to operate at LOS A during both peak hours with 95th percentile queues of one to two vehicles. As such, the proposed access system will be adequate in accommodating the traffic estimated to be generated by the proposed development and will ensure efficient and flexible access is provided.

Orchard Road with Proposed Public Road – Signal Evaluation

The installation of a traffic signal requires that one or more of the nine signal warrants outlined in the *Manual on Uniform Traffic Control Devices* (MUTCD 2009) is met. However, Orchard Road is classified as an SRA route and, as such, IDOT SRA signal warrant requirements (which only take into consideration Warrant 1, Eight-Hour Vehicular Volume) were utilized.

Warrant 1, Eight-Hour Vehicular Volume states that the Minimum Vehicular Volume, Condition A, is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal. The Interruption of Continuous Traffic, Condition B, is intended for application at locations where Condition A is not satisfied and where the traffic volumes on a major street are so heavy that traffic on the minor intersecting street suffers excessive delay or conflict in entering or crossing the major street. Given that Orchard Road provides two through lanes, the required vehicles per hour on the major street is 600 (total of both approaches) and the required vehicles per hour on the minor street (one direction only) is 200 for Condition A. For Condition B, the required number of vehicles per hour on the major street is 900 (total of both approaches) and the required number of vehicles per hour on the minor street (one direction only) is 100. However, for SRA routes, the requirements on the minor street for Condition B shall be increased from 100 vehicles per hour to 150 for a two or more-lane minor approaches. Furthermore, based on IDOT's guidelines, the right-turn volume from the minor approach will be reduced by 75 percent during the weekday morning peak hour and by 70 percent during the weekday evening peak hour to take into consideration the right-turn on red reduction and mainline congestion factors.

Based on the above, the weekday morning peak hour has a minor approach volume of 47 vehicles and the weekday evening peak hour has a minor approach volume of 31 vehicles, which is less than the 150-vehicle minor approach volume threshold. Therefore, it is anticipated that the other hours of the day will not meet the eight-hour traffic signal warrant and thus, a traffic signal will not be warranted at this intersection.



6. Conclusion

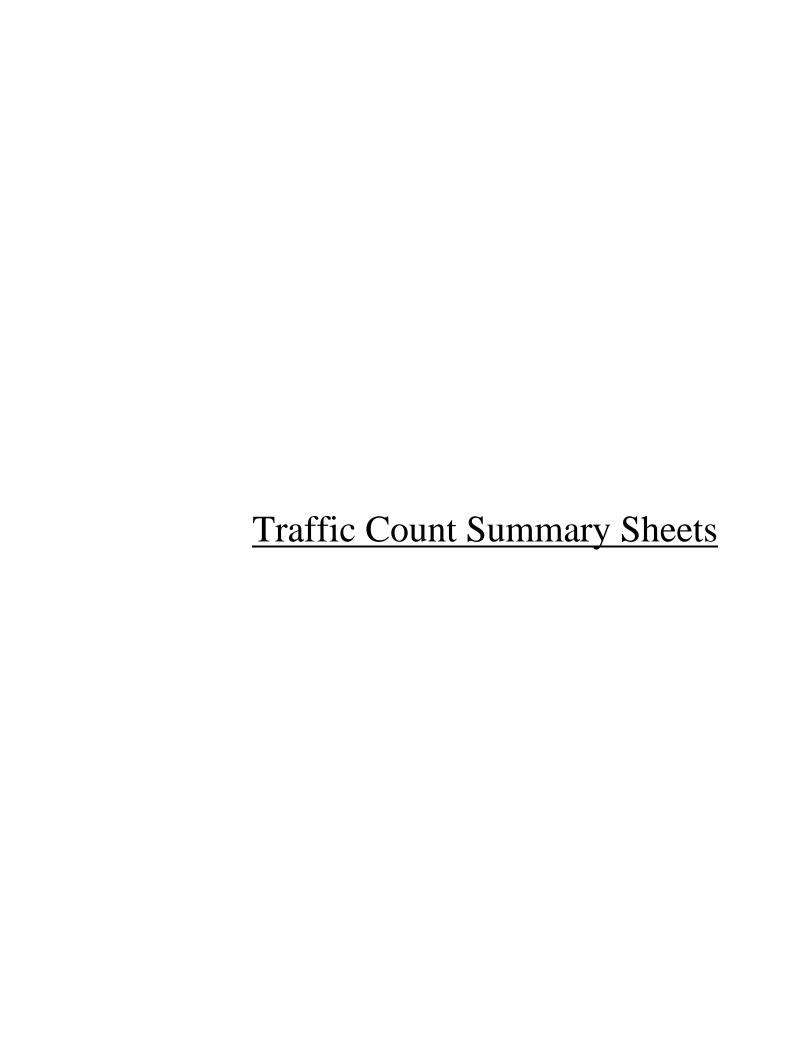
Based on the preceding analyses and recommendations, the following conclusions have been made:

- The traffic that will be generated by the proposed residential development can be accommodated by the existing area roadway system.
- All of the signalized intersections within the study area have sufficient reserve capacity to accommodate the background growth and the traffic estimated to be generated by the proposed development.
- The proposed public roadway connections to Orchard Road and Deerpath Road are projected to operate at acceptable levels of service with limited delays and minimal queueing.
- When the projected traffic volumes along Orchard Road are compared to the turn lane warrant guidelines published in Section 2 of the Kane County Division of Transportation Permit Regulations and Access Control Regulations, the following was determined:
 - An exclusive southbound right-turn lane is warranted at the intersection of Orchard Road with the proposed public roadway during the weekday evening peak hour.
 - An exclusive northbound left-turn lane is warranted at the intersection of Orchard Road with the proposed public roadway during the weekday morning and weekday evening peak hours.
- Based on information published in Chapter 36 of the IDOT *Bureau of Design and Environment* (BDE) Manual, the warranted turn lanes on Orchard Road should provide 240 feet of storage and 240 feet of taper based on a 55 mile per hour design speed.
- A traffic signal will not be warranted at the intersection of Orchard Road with the proposed public roadway.



Appendix

Traffic Count Summary Sheets
Site Plan
CMAP 2050 Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets
Left Turn Lane Warrant Diagrams





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

Count Name: Orchard Rd with Oak St Site Code: Start Date: 03/15/2022 Page No: 1

			Int. Total	350	386	440	421	1597	347	334	321	307	1309		440	462	467	504	1873	475	489	467	429	1860	6639			6438	97.0	38	9.0	73	1.1	06	4.1	0
			App. Total	82	106	114	119	421	88	75	77	87	327	-	152	171	147	178	648	153	140	157	131	581	1977		29.8	1904	96.3	8	0.4	23	1.2	42	2.1	0
			Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0				-							
	d Rd	puno	Right	-	1	0	4	9	0	0	0	0	0		-	0	0	2	3	-	0	2	-	4	13	0.7	0.2	8	61.5	-	7.7	3	23.1	-	7.7	0
	Orchard Rd	Southbound	Thru	77	26	106	105	385	81	72	72	79	304		136	154	130	155	575	139	123	139	115	516	1780	0.06	26.8	1714	96.3	7	0.4	18	1.0	41	2.3	0
			Left	4	8	8	10	30	9	3	5	8	22		14	17	17	21	69	13	17	16	15	61	182	9.5	2.7	180	98.9	0	0.0	2	1.1	0	0.0	0
			U-Tum	0	0	0	0	0	1	0	0	0	1		1	0	0	0	1	0	0	0	0	0	2	0.1	0.0	2	100.0	0	0.0	0	0.0	0	0.0	0
			App. Total	165	157	188	180	069	163	159	142	153	617		179	181	220	228	808	224	228	190	208	850	2965		44.7	2888	97.4	6	0.3	32	1.1	36	1.2	0
			Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0				-		,		-	1		
	. Rd	pun	Right	11	17	27	28	83	30	29	26	23	108		26	35	20	48	159	44	47	32	37	160	510	17.2	7.7	496	97.3	9	1.2	3	9.0	5	1.0	0
	Orchard Rd	Northbound	Thru	138	127	146	143	554	119	120	96	116	451		124	110	123	134	491	142	141	125	128	536	2032	68.5	30.6	1980	97.4	_	0.0	22	1.1	29	1.4	0
ata			Left	16	13	15	6	53	14	10	20	14	58		59	36	47	45	157	38	40	33	43	154	422	14.2	6.4	411	97.4	2	0.5	7	1.7	2	0.5	0
ent Da			U-Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	1	1	0	0	0	0	0	-	0.0	0.0	-	100.0	0	0.0	0	0.0	0	0.0	0
urning Movement Data			App. Total	47	55	09	59	221	45	50	61	35	191		61	69	54	50	234	89	80	92	09	284	930		14.0	905	97.0	10	1.1	8	6.0	10	1.1	0
ng Mc			Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0			,	-		,					
Turni		pur	Right	4	5	3	3	15	3	2	5	2	12		2	4	4	2	12	5	7	4	2	18	57	6.1	6.0	57	100.0	0	0.0	0	0.0	0	0.0	0
	Oak St	Westbound	Thru	13	14	19	18	64	18	12	21	13	64		28	28	24	25	105	23	30	33	24	110	343	36.9	5.2	335	7.76	4	1.2	3	6.0	-	0.3	0
			Left	30	36	38	38	142	24	36	34	20	114		31	37	26	23	117	40	43	39	34	156	529	56.9	8.0	509	96.2	9	1.1	5	6.0	6	1.7	0
			U-Turn	0	0	0	0	0	0	0	1	0	1		0	0	0	0	0	0	0	0	0	0	-	0.1	0.0	-	100.0	0	0.0	0	0.0	0	0.0	0
			App. Total U	56	89	78	63	265	51	20	41	32	174		48	41	46	48	183	30	41	44	30	145	797		11.6	744	97.0	11	4.1	10	1.3	2	0.3	0
			Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0			,	-		,			1		
		þ	Right	28	22	29	19	98	16	15	16	19	99		12	16	13	16	25	8	9	10	7	31	252	32.9	3.8	240	95.2	3	1.2	7	2.8	2	8.0	0
	Oak St	Eastbound	Thru F	21	38	41	34	134	30	32	24	13	66		31	23	29	28	111	19	28	30	23	100	444	57.9	6.7	435	98.0	9	1.4	3	0.7	0	0.0	0
			Left	7	8	8	10	33	5	3	1	0	6		5	2	4	4	15	3	7	4	0	14	71	9.3	1.1	69	97.2	2	2.8	0	0.0	0	0.0	0
			U-Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	3	0		0	-	0		0
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		į	Start IIme	7:00 AM	7:15 AM	7:30 AM	7:45 AM	Hourly Tota	8:00 AM	8:15 AM	8:30 AM	8:45 AM	Hourly Total	*** BREAK **	4:00 PM	4:15 PM	4:30 PM	4:45 PM	Hourly Tota	5:00 PM	5:15 PM	5:30 PM	5:45 PM	Hourly Total	Grand Total	Approach %	Total %	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road

% Bicycles on Road	0.0	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	0.0		0:0	0.0
Pedestrians				0						0						0						0		
% Pedestrians																								



Count Name: Orchard Rd with Oak St Site Code: Start Date: 03/15/2022 Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

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			Oa	Oak St					Oak St	St				•	Orchard Rd	. Rd					Orchard Rd	Rd			
			East	Eastbound					Westbound	punc					Northbound	pun					Southbound	pund			
Start Time	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Tum	Left	Thru	Right	Peds	App. Total	U-Tum	Left	Thru	Right	Peds	App. Total	Int. Total
7:15 AM	0	8	38	22	0	89	0	36	14	2	0	22	0	13	127	17	0	157	0	8	26	1	0	106	386
7:30 AM	0	8	41	29	0	78	0	38	19	3	0	09	0	15	146	27	0	188	0	8	106	0	0	114	440
7:45 AM	0	10	34	19	0	63	0	38	18	3	0	29	0	6	143	28	0	180	0	10	105	4	0	119	421
8:00 AM	0	5	30	16	0	51	0	24	18	3	0	45	0	14	119	30	0	163	1	9	81	0	0	88	347
Total	0	31	143	98	0	260	0	136	69	14	0	219	0	51	535	102	0	889	1	32	389	5	0	427	1594
Approach %	0.0	11.9	55.0	33.1			0.0	62.1	31.5	6.4			0.0	7.4	77.8	14.8			0.2	7.5	91.1	1.2	-	-	
Total %	0.0	1.9	9.0	5.4		16.3	0.0	8.5	4.3	6.0		13.7	0.0	3.2	33.6	6.4		43.2	0.1	2.0	24.4	0.3	-	26.8	
PHF	0.000	0.775	0.872	0.741		0.833	0.000	0.895	0.908	0.700		0.913	0.000	0.850	0.916	0.850		0.915	0.250	0.800	0.917	0.313	-	0.897	906.0
Lights	0	29	141	82		252	0	132	64	14		210	0	48	523	94		665	1	31	371	0	-	403	1530
% Lights		93.5	98.6	95.3		6.96	-	97.1	92.8	100.0		95.9		94.1	97.8	92.2		96.7	100.0	6.96	95.4	0.0	-	94.4	0.96
Buses	0	2	-	1		4	0	-	4	0		5	0	1	1	3		5	0	0	3	1	-	4	18
% Buses		6.5	0.7	1.2		1.5		0.7	5.8	0.0	,	2.3		2.0	0.2	2.9		0.7	0.0	0.0	8.0	20.0		6.0	1.1
Single-Unit Trucks	0	0	-	-		2	0	-	0	0	,	-	0	-	5	-	,	7	0	-	9	က	,	10	20
% Single-Unit Trucks		0.0	0.7	1.2		0.8		0.7	0:0	0.0		0.5		2.0	6.0	1.0		1.0	0.0	3.1	1.5	0.09		2.3	1.3
Articulated Trucks	0	0	0	2		2	0	2	1	0	-	3	0	1	9	4		11	0	0	6	1	-	10	26
% Articulated Trucks		0.0	0.0	2.3		0.8		1.5	1.4	0.0		4:1		2.0	1.1	3.9		1.6	0.0	0.0	2.3	20.0		2.3	9.1
Bicycles on Road	0	0	0	0	,	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles on Road		0.0	0.0	0.0		0.0		0.0	0:0	0.0		0:0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Pedestrians		٠			0						0						0						0		
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Count Name: Orchard Rd with Oak St Site Code: Start Date: 03/15/2022 Page No: 4

Turning Movement Peak Hour Data (4:45 PM)

											nent F	ement reak noul	Junor	Data (4:45 FM	4.45	<u>≅</u>									
			Oa	Oak St					Oak St	St					Orchard Rd	d Rd		•			Orchard Rd	Rd Rd			
			East	Eastbound					Westbound	punoc					Northbound	puno		•			Southbound	pund			
Start Time	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	0	4	28	16	0	48	0	23	25	2	0	50	1	45	134	48	0	228	0	21	155	2	0	178	504
5:00 PM	0	3	19	8	0	30	0	40	23	2	0	68	0	38	142	44	0	224	0	13	139	1	0	153	475
5:15 PM	0	7	28	9	0	41	0	43	30	7	0	80	0	40	141	47	0	228	0	17	123	0	0	140	489
5:30 PM	0	4	30	10	0	44	0	39	33	4	0	92	0	33	125	32	0	190	0	16	139	2	0	157	467
Total	0	18	105	40	0	163	0	145	111	18	0	274	1	156	542	171	0	870	0	29	556	5	0	628	1935
Approach %	0.0	11.0	64.4	24.5			0.0	52.9	40.5	9.9			0.1	17.9	62.3	19.7			0.0	10.7	88.5	8.0			
Total %	0.0	6.0	5.4	2.1		8.4	0.0	7.5	5.7	6.0		14.2	0.1	8.1	28.0	8.8	-	45.0	0.0	3.5	28.7	0.3	-	32.5	
PHF	0.000	0.643	0.875	0.625		0.849	0.000	0.843	0.841	0.643		0.856	0.250	0.867	0.954	0.891	-	0.954	0.000	0.798	0.897	0.625		0.882	0.960
Lights	0	18	105	39		162	0	142	110	18		270	1	155	532	170	-	828	0	29	542	5	-	614	1904
% Lights		100.0	100.0	97.5		99.4		97.9	99.1	100.0		98.5	100.0	99.4	98.2	99.4	-	98.6		100.0	97.5	100.0	-	97.8	98.4
Buses	0	0	0	0		0	0	0	0	0		0	0	0	0	0	-	0	0	0	1	0	-	1	1
% 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	0.2	0.0	-	0.2	0.1
Single-Unit Trucks	0	0	0	1		1	0	0	1	0		1	0	1	4	1	-	9	0	0	4	0	-	4	12
% Single-Unit Trucks		0.0	0.0	2.5		9.0	•	0.0	6.0	0.0		0.4	0.0	9.0	0.7	9.0		0.7		0.0	0.7	0.0		9.0	9.0
Articulated Trucks	0	0	0	0	٠	0	0	က	0	0		3	0	0	9	0		9	0	0	6	0		6	18
% Articulated Trucks	٠	0.0	0.0	0.0		0.0		2.1	0.0	0.0		1.1	0.0	0.0	1.1	0.0	-	0.7		0.0	1.6	0.0	-	1.4	6.0
Bicycles on Road	0	0	0	0	٠	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles on Road	٠	0.0	0.0	0.0		0.0		0.0	0.0	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			٠	٠	0						0						0						0		
% Pedestrians					٠																				



Count Name: Orchard Rd with White Oak Dr Site Code: Start Date: 03/15/2022 Page No: 1

									Turn	ing M	oveme	ent Da	ţa									
			Orche	Orchard Rd					Orcharc) Rd	Orchard Rd				White Oak Dr	<u></u>			≶ ¢	White Oak Dr		
Start Time			East	Eastbound		000			Westbo	onna		u d			nogui					ntupor		
	U-Turn	Left	Thru	Right	Peds	Total	U-Turn	Left	Thru	Right	Peds	Total	U-Tum	Left	Thru	Right	Peds 7	Total Le	Left Thru	u Right	t Total	Int. Total
7:00 AM	0	-	128	3	0	132	0	4	29	4	0	75	0	5	3	7	0	15 11	-	5	17	239
7:15 AM	0	2	148	5	0	155	0	5	98	3	0	94	0	4	1	8	0 1	13 11	1 6	5	22	284
7:30 AM	0	0	152	14	0	166	0	1	96	2	0	102	0	8	3	12	0 2	23 1.	14 11	4	29	320
7:45 AM	0	4	155	21	0	180	0	10	87	7	0	104	0	24	16	23	9 0	63 6	9 22	1	32	379
Hourly Total	0	7	583	43	0	633	0	20	336	19	0	375	0	41	23	20	0 1	114 4	45 40	15	100	1222
8:00 AM	0	2	125	2	1	129	0	8	71	8	0	87	0	15	4	13	0 3	32 6	6 2	3	11	259
8:15 AM	0	1	112	5	0	118	0	4	65	4	0	73	0	2	2	7	0 1	11 11		2	16	218
8:30 AM	0	0	102	3	0	105	0	2	61	4	0	29	0	9	5	6		20 4		5	13	205
8:45 AM	1	4	107	2	0	114	0	-	72	7	0	80	0	3	1	5	0		5 4	4	13	216
Hourly Total	1	7	446	12	1	466	0	15	269	23	0	307	0	26	12	34	2 0	72 2	26 13	14	53	868
*** BREAK ***							-															
4:00 PM	0	8	123	7	0	138	0	5	153	6	0	167	0	2	4	10	0 1	16 4	1 2	3	12	333
4:15 PM	0	4	66	7	0	110	0	10	151	9	0	167	0	4	2	5	1	11 8	8 2	3	13	301
4:30 PM	0	10	105	3	0	118	0	6	151	7	0	167	0	4	3	4	0 1	11 6	9 2	1	12	308
4:45 PM	0	2	129	4	0	138	0	6	167	13	0	189	0	4	3	8	0 1	15 11		2	19	361
Hourly Total	0	27	456	21	0	504	0	33	622	35	0	069	0	14	12	27	1 5	53 32	2 15	6	26	1303
5:00 PM	0	6	125	2	2	136	0	6	157	6	0	175	0	9	1	7	0 1	14 7		1	13	338
5:15 PM	0	9	156	2	2	164	0	15	151	11	0	177	0	0	5	8	0	13 8	8 3	0	11	365
5:30 PM	0	1	108	4	2	123	-	13	150	9	0	170	0	4	4	4	0	12 8	8 4	က	15	320
5:45 PM	1	7	120	4	0	132	0	9	130	10	0	146	0	2	1	6	0 1	12 7	, 2	9	15	305
Hourly Total	1	33	209	12	9	555	1	43	588	36	0	899	0	12	11	28	0 5	51 3	30 14	10	54	1328
Grand Total	2	74	1994	88	7	2158	-	111	1815	113	0	2040	0	93	58	139	1 2	290 13	133 82	48	263	4751
Approach %	0.1	3.4	92.4	4.1		'	0.0	5.4	89.0	5.5			0.0	32.1	20.0	47.9		- 50	50.6 31.2	2 18.3	•	
Total %	0.0	1.6	42.0	1.9		45.4	0.0	2.3	38.2	2.4		42.9	0.0	2.0	1.2	2.9	9 -		2.8 1.7	1.0	5.5	
Lights	2	74	1934	85		2095	_	111	1753	107		1972	0	88	57	139	- 2	284 132	32 75	47	254	4605
% Lights	100.0	100.0	97.0	9.96		97.1	100.0	100.0	9.96	94.7		2.96		94.6	98.3	100.0	- 97	97.9	99.2 91.5	5 97.9	9.96	6.96
Buses	0	0	-	က		4	0	0	4	3		7	0	3	-	0		1	5	_	7	22
% Buses	0.0	0.0	0.1	3.4		0.2	0.0	0.0	0.2	2.7		0.3		3.2	1.7	0.0	- 1	1.4 0.	0.8 6.1	2.1	2.7	0.5
Single-Unit Trucks	0	0	27	0		27	0	0	16	3	-	19	0	2	0	0	-	2 0	0 0	0	0	48
% Single-Unit Trucks	0.0	0.0	1.4	0.0		1.3	0.0	0.0	6.0	2.7		6.0		2.2	0.0	0.0	- 0	0.7 0.	0.0 0.0	0.0	0.0	1.0
Articulated Trucks	0	0	32	0		32	0	0	42	0		42	0	0	0	0	-	0 0	0 0	0	0	74
% Articulated Trucks	0.0	0.0	1.6	0.0		1.5	0.0	0.0	2.3	0.0		2.1		0.0	0.0	0.0	- 0	0.0 0.0	0.0 0.0	0.0	0.0	1.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0		0	0 2	0	2	2
% 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 2.4	0.0	0.8	0.0
Pedestrians					7		L				0	_					_	_				



Count Name: Orchard Rd with White Oak Dr Site Code: Start Date: 03/15/2022 Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

						•	5	ב ב		_	5	2	ליאון ליויין מומלן ומכן וומכן	?	_								
			Orchard Rd	rd Rd				1	Orchard Rd	ırd Rd					White Oak Dr	ak D				White Oak Dr	ak Dr		
			Eastbound	puno					Westbound	punoc					Northbound	pund		-		Southbound	puno	•	
Start Time	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	App. Total	Int. Total
7:15 AM	0	2	148	2	0	155	0	5	98	3	0	94	0	4	1	8	0	13	11	9	2	22	284
7:30 AM	0	0	152	14	0	166	0	1	96	5	0	102	0	8	3	12	0	23	14	11	4	29	320
7:45 AM	0	4	155	21	0	180	0	10	87	7	0	104	0	24	16	23	0	63	6	22	1	32	379
8:00 AM	0	2	125	2	1	129	0	8	71	8	0	87	0	15	4	13	0	32	9	2	3	11	259
Total	0	8	580	42	1	630	0	24	340	23	0	387	0	51	24	56	0	131	40	41	13	94	1242
Approach %	0.0	1.3	92.1	6.7			0.0	6.2	87.9	5.9			0.0	38.9	18.3	42.7			42.6	43.6	13.8	-	
Total %	0.0	9.0	46.7	3.4		50.7	0.0	1.9	27.4	1.9		31.2	0.0	4.1	1.9	4.5		10.5	3.2	3.3	1.0	9.7	
PHF	0.000	0.500	0.935	0.500		0.875	0.000	0.600	0.885	0.719		0.930	0.000	0.531	0.375	609.0		0.520	0.714	0.466	0.650	0.734	0.819
Lights	0	8	562	39		609	0	24	323	21		368	0	47	23	26	-	126	40	37	12	89	1192
% Lights	•	100.0	6.96	92.9		96.7		100.0	95.0	91.3		95.1		92.2	92.8	100.0		96.2	100.0	90.2	92.3	94.7	0.96
Buses	0	0	-	3		4	0	0	0	2		2	0	3	1	0	-	4	0	4	1	5	15
% Buses		0.0	0.2	7.1		9.0		0.0	0.0	8.7		0.5		5.9	4.2	0.0	,	3.1	0.0	8.6	7.7	5.3	1.2
Single-Unit Trucks	0	0	6	0		6	0	0	5	0		5	0	-	0	0	,	-	0	0	0	0	15
% Single-Unit Trucks		0.0	1.6	0.0		1.4		0.0	1.5	0.0		1.3		2.0	0.0	0.0		0.8	0.0	0.0	0.0	0.0	1.2
Articulated Trucks	0	0	8	0		8	0	0	12	0		12	0	0	0	0	,	0	0	0	0	0	20
% Articulated Trucks		0.0	1.4	0.0		1.3		0.0	3.5	0.0		3.1		0.0	0.0	0.0	,	0.0	0.0	0.0	0.0	0.0	1.6
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0
% Bicycles on Road		0.0	0.0	0.0		0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Pedestrians					_						0						0						
% Pedestrians					100.0																		



Count Name: Orchard Rd with White Oak Dr Site Code: Start Date: 03/15/2022 Page No: 4

Turning Movement Peak Hour Data (4:45 PM)

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_			Orch	Orchard Rd			_		Orchard Rd	rd Rd					White Oak Dr	ak D				White Oak Dr	ak Dr		
_			East	Eastbound			_		Westbound	puno					Northbound	pund				Southbound	puno		
Start Time	U-Turn	Left	Thru	Right	Peds	App. Total	U-Tum	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	App. Total	Int. Total
4:45 PM	0	5	129	4	0	138	0	6	167	13	0	189	0	4	3	8	0	15	11	9	2	19	361
5:00 PM	0	6	125	2	2	136	0	6	157	6	0	175	0	9	1	7	0	14	7	5	1	13	338
5:15 PM	0	9	156	2	2	164	0	15	151	11	0	177	0	0	5	8	0	13	8	3	0	11	365
5:30 PM	0	11	108	4	2	123	1	13	150	9	0	170	0	4	4	4	0	12	8	4	3	15	320
Total	0	31	518	12	9	561	1	46	625	39	0	711	0	14	13	27	0	54	34	18	9	58	1384
Approach %	0.0	5.5	92.3	2.1		-	0.1	6.5	87.9	5.5			0.0	25.9	24.1	50.0	-		58.6	31.0	10.3	-	
Total %	0.0	2.2	37.4	6.0		40.5	0.1	3.3	45.2	2.8		51.4	0.0	1.0	6.0	2.0	-	3.9	2.5	1.3	0.4	4.2	
PHF	0.000	0.705	0.830	0.750		0.855	0.250	0.767	0.936	0.750		0.940	0.000	0.583	0.650	0.844	-	0.900	0.773	0.750	0.500	0.763	0.948
Lights	0	31	206	12		549	1	46	614	39		200	0	13	13	27		53	34	18	9	28	1360
% Lights	•	100.0	7.76	100.0		97.9	100.0	100.0	98.2	100.0		98.5		92.9	100.0	100.0		98.1	100.0	100.0	100.0	100.0	98.3
Buses	0	0	0	0		0	0	0	1	0		1	0	0	0	0	-	0	0	0	0	0	1
% Buses		0.0	0.0	0.0		0.0	0.0	0.0	0.2	0.0		0.1		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.1
Single-Unit Trucks	0	0	9	0		9	0	0	2	0		2	0	-	0	0		-	0	0	0	0	6
% Single-Unit Trucks		0.0	1.2	0.0		1.1	0.0	0.0	0.3	0.0		0.3		7.1	0.0	0.0		1.9	0.0	0.0	0.0	0.0	0.7
Articulated Trucks	0	0	9	0		9	0	0	8	0		8	0	0	0	0		0	0	0	0	0	14
% Articulated Trucks		0.0	1.2	0.0		1.1	0.0	0.0	1.3	0.0		1.1		0.0	0.0	0.0	,	0.0	0.0	0.0	0.0	0.0	1.0
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0	-	0	0	0	0	0	0
% Bicycles on Road		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Pedestrians					9	-					0		•				0					-	
% Pedestrians					100.0																		



Count Name: Orchard Rd with Tanner Rd Site Code: Start Date: 03/15/2022 Page No: 1

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Right Political Politicala	= ш	≃ ш	ann astb	ier Kd vound					Closed C Westboo	ircle					Orchard	nd Ka					Orchard	rd Ind		
1		Ė	2	Right	Peds	App. Total	U-Turn	Left		ght	Peds		U-Turn	Left				-	J-Tum	Left				
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9 10 10 0 10 <th>0</th> <th></th> <th>0</th> <th>19</th> <th>0</th> <th>19</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>161</th> <th>0</th> <th>0</th> <th>161</th> <th>0</th> <th>0</th> <th>86</th> <th>1</th> <th></th> <th>66</th>	0		0	19	0	19	0	0	0	0	0	0	0	0	161	0	0	161	0	0	86	1		66
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51 6 6 7 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 7	0		0	13	0	13	0	0	0	0	0	0	0	0	152	0	0	152	0	0	101	10		111
41 6 6 6 6 7 7 7 7 7 8 9 9 1 9 1 1 9 1 1 0 1 1 0 1 1 0	0		0	51	0	51	0	0	0	0	0	0	0	0	624	0	0	624	0	0	361	22		
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0 9 0 0 0 0 1 0	0		0	8	0	8	0	0	0	0	0	0	0	0	101	0	0	101	0	0	69	7		92
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1 1	0		0	36	0	36	0	0	0	0	0	0	0	0	468	0	0	468	0	0	295	19		314
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0 8 0 0 0 141 0 141 0 141 0 141 0 141 0 141 0 141 0 141 0 141 0 150 1	0		0	6	0	6	0	0	0	0	0	0	0	0	129	0	0	129	0	0	145	6		54
0 37 0 0 0 146 0 146 0 619 0 146 0 619 0 148 0 619 0 148 0 148 0 148 0 148 0 148 0 148 0 149 189	0		0	80	0	8	0	0	0	0	0	0	0	0	141	0	0	141	0	0	159	10		
0 1 6 0 0 146 0 146 0 146 0 146 0 146 0 146 0 146 0 146 0 146 0 146 0 146 0 146 0 146 0 148 0 149			0	37	0	37	0	0	0	0	0	0	0	0	519	0	0	519	0	0	601	37		
0 6 6 6 6 6 6 6 6 6 7 7 15 0 15 0 15 0 15 0 15 10 149 11 0 149 11 0 149 14 0 149 14 0 145 14 0 145 0 15 0 15 0 15 0 15 0 15 0 15 0 15 0 15 0 15 0 15 0 15 0		0	0	5	0	5	0	0	0	0	0	0	0	0	146	0	0	146	0	0	149	18		
0 10 0 10 0 125 0 125 0 125 0 155 125 0 155 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 115 0 115 0 115 0 115 0 115 0 115 0 115 0 115 0 115 0 0 115 0 0 115 0		0	0	9	0	9	0	0	0	0	0	0	0	0	152	0	0	152	0	0	138	11		
0 9 0 0 0 19 0 19 0 19 0 19		0	0	10	0	10	0	0	0	0	0	0	0	0	125	0	0	125	0	0	153	10		163
0 30 0 154 0 642 0 0 642 0 0 642 0 0 0 0 1851 130 0		0	0	6	0	6	0	0	0	0	0	0	0	0	119	0	0	119	0	0	115	22		
0 154 0 154 0 154 0 154 0 154 0 154 0 154 0 154 0 154 0 154 0 154 0 154 0 154 0 150		0	0	30	0	30	0	0	0	0	0	0	0	0	542	0	0	542	0	0	555	61		
0.0 1.00 0.0 <th></th> <td>0</td> <td>0</td> <td>154</td> <td>0</td> <td>154</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>2153</td> <td>0</td> <td></td> <td>2153</td> <td>0</td> <td>0</td> <td>1812</td> <td>139</td> <td></td> <td></td>		0	0	154	0	154	0	0	0	0	0	0	0	0	2153	0		2153	0	0	1812	139		
0.0 3.6 0.0 0.0 6.0 <th></th> <td>0.0</td> <td>0.0</td> <td>100.0</td> <td></td> <td>-</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>-</td> <td></td> <td>0.0</td> <td>0.0</td> <td>100.0</td> <td>0.0</td> <td>-</td> <td>-</td> <td>0.0</td> <td>0.0</td> <td>92.9</td> <td>7.1</td> <td>_</td> <td>-</td>		0.0	0.0	100.0		-	0.0	0.0	0.0	0.0	-		0.0	0.0	100.0	0.0	-	-	0.0	0.0	92.9	7.1	_	-
0 150 0 150 0 <th></th> <td>0.0</td> <td>0.0</td> <td>3.6</td> <td></td> <td>3.6</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>,</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>50.6</td> <td>0.0</td> <td></td> <td>9.09</td> <td>0.0</td> <td>0.0</td> <td>42.6</td> <td>3.3</td> <td>4</td> <td>5.8</td>		0.0	0.0	3.6		3.6	0.0	0.0	0.0	0.0	,	0.0	0.0	0.0	50.6	0.0		9.09	0.0	0.0	42.6	3.3	4	5.8
- 97.4 - 97.4 - - 97.0 - 97.0 - 96.7 96.7 97.0 - 97.0 - 97.0 - 97.0 - 97.0 - 97.0 - 96.7 90.0 - 96.7 97.0 - 96.7 90.0 - 96.7 97.0 - 97.0 97.		0	0	150		150	0	0	0	0	,	0	0	0	2088	0		2088	0	0	1748	139	-	
0 0 0 0 0 4 0 4 0 4 0 7 0 7				97.4		97.4					-	-			97.0		-	97.0				100.0	- 6	
- 0.0 - 0.0 - - 0.0 - - 0.0 - - 0.0 - - 0.0 - 0.0 - - 0.0 - 0.0 - 0.0 - 0.0 <		0	0	0		0	0	0	0	0	,	0	0	0	4	0		4	0	0	7	0		7
0 3 - 3 0				0.0		0.0									0.2		-	0.2			0.4	0.0	-	0.4
0 1.9 - 1.9 - 1.3 - 1.3 - - 1.3 - - 0.8 0.0 - 0.8 0.0 - 0.0 0		0	0	3		3	0	0	0	0	-	0	0	0	29	0	-	29	0	0	15	0	-	15
0 1 - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			•	1.9		1.9					,				1.3			1.3			8.0	0:0	,	9.0
- 0.6 - 0.6 - - - - - 1.5 - - 1.5 - - 2.3 0.0 - 2.2 0 <th></th> <td>0</td> <td>0</td> <td>-</td> <td>,</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>32</td> <td>0</td> <td>,</td> <td>32</td> <td>0</td> <td>0</td> <td>42</td> <td>0</td> <td></td> <td>42</td>		0	0	-	,	1	0	0	0	0		0	0	0	32	0	,	32	0	0	42	0		42
0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				9:0		9.0									1.5			1.5			2.3	0.0		2.2
			0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0

**Biologles on Road Strains ** Biologles on Road Strains ** Biologles on Road Strains ** Control of the Control	1 - - 0.0 - - - - - - 0.0 - - - 0.0 - - - 0.0 - - 0.0 - - 0.0 - - 0.0																		
		Road -		0.0	,	0.0					0.0		0.0		0.0	0.0		0.0	0.0
edestrians	edestrians	destrians -			0				0			0					0	-	
		edestrians -																	٠



Count Name: Orchard Rd with Tanner Rd Site Code: Start Date: 03/15/2022 Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

•						•		5		5	= = = = = = = = = = = = = = = = = = = =	3	לאואין לאואין המון במום לאואין	מומי	2										
			Tanner Rd	ər Rd		•			Closed Circ	Circle					Orchard Rd	1Rd					Orchard Rd	d Rd		•	
			Eastbound	puno					Westbound	punc					Northbound	pun					Southbound	punc			
Start Time	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:15 AM	0	0	0	19	0	19	0	0	0	0	0	0	0	0	161	0	0	161	0	0	86	1	0	66	279
7:30 AM	0	0	0	6	0	6	0	0	0	0	0	0	0	0	164	0	0	164	0	0	94	7	0	101	274
7:45 AM	0	0	0	13	0	13	0	0	0	0	0	0	0	0	152	0	0	152	0	0	101	10	0	111	276
8:00 AM	0	0	0	11	0	11	0	0	0	0	0	0	0	0	126	0	0	126	0	0	81	11	0	92	229
Total	0	0	0	52	0	52	0	0	0	0	0	0	0	0	603	0	0	603	0	0	374	29	0	403	1058
Approach %	0.0	0.0	0.0	100.0			0.0	0.0	0.0	0.0			0.0	0.0	100.0	0.0			0.0	0.0	92.8	7.2	-		
Total %	0.0	0.0	0.0	4.9		4.9	0.0	0.0	0.0	0.0		0.0	0.0	0.0	57.0	0.0	-	57.0	0.0	0.0	35.3	2.7	-	38.1	
PHF	0.000	0.000	0.000	0.684		0.684	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.919	0.000		0.919	0.000	0.000	0.926	0.659		0.908	0.948
Lights	0	0	0	51	-	51	0	0	0	0		0	0	0	585	0		585	0	0	355	29	-	384	1020
% Lights	-			98.1	-	98.1									97.0		-	97.0			94.9	100.0	-	95.3	96.4
Buses	0	0	0	0	-	0	0	0	0	0		0	0	0	4	0	-	4	0	0	4	0	-	4	8
% Buses				0.0		0.0									0.7		,	0.7			1.1	0.0		1.0	8.0
Single-Unit Trucks	0	0	0	-		-	0	0	0	0		0	0	0	8	0	,	8	0	0	4	0		4	13
% Single-Unit Trucks				1.9		1.9									1.3			1.3			1.1	0.0		1.0	1.2
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	9	0	-	9	0	0	11	0	-	11	17
% Articulated Trucks	-			0.0	-	0.0			-						1.0			1.0	-	-	2.9	0.0		2.7	1.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0		0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road				0.0		0.0									0.0			0.0			0.0	0.0		0.0	0.0
Pedestrians					0						0						0						0		
% Pedestrians																							,		



Count Name: Orchard Rd with Tanner Rd Site Code: Start Date: 03/15/2022 Page No: 4

Turning Movement Peak Hour Data (4:45 PM)

•						•		5			בוב	קמא. -	חודום וויין במא ויוטעו במא (4.40 ביואו)	מום (י	1.4	ĺ		٠						٠	
			Tanı	Tanner Rd					Closed Circle	Circle					Orchard Rd	Rd					Orchard Rd	Rd			
			East	Eastbound					Westbound	puno					Northbound	pun					Southbound	pund			
Start Time	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App.	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	0	0	0	8	0	8	0	0	0	0	0	0	0	0	141	0	0	141	0	0	159	10	0	169	318
5:00 PM	0	0	0	5	0	5	0	0	0	0	0	0	0	0	146	0	0	146	0	0	149	18	0	167	318
5:15 PM	0	0	0	9	0	9	0	0	0	0	0	0	0	0	152	0	0	152	0	0	138	11	0	149	307
5:30 PM	0	0	0	10	0	10	0	0	0	0	0	0	0	0	125	0	0	125	0	0	153	10	0	163	298
Total	0	0	0	29	0	29	0	0	0	0	0	0	0	0	564	0	0	564	0	0	599	49	0	648	1241
Approach %	0.0	0.0	0.0	100.0			0.0	0.0	0.0	0.0			0.0	0.0	100.0	0.0			0.0	0.0	92.4	9.7			
Total %	0.0	0.0	0.0	2.3		2.3	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	45.4	0.0		45.4	0.0	0.0	48.3	3.9		52.2	
PHF	0.000	0.000	0.000	0.725	-	0.725	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.928	0.000	-	0.928	0.000	0.000	0.942	0.681		0.959	926.0
Lights	0	0	0	29		29	0	0	0	0		0	0	0	554	0		554	0	0	588	49		637	1220
% Lights				100.0	-	100.0	•				-				98.2			98.2			98.2	100.0		98.3	98.3
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
Single-Unit Trucks	0	0	0	0		0	0	0	0	0	,	0	0	0	4	0		4	0	0	2	0		2	9
% Single-Unit Trucks	•			0.0		0.0									2.0			0.7			0.3	0.0		0.3	0.5
Articulated Trucks	0	0	0	0	٠	0	0	0	0	0		0	0	0	9	0		9	0	0	6	0		6	15
% Articulated Trucks	٠			0.0		0.0									1.1			1.1			1.5	0.0		4:1	1.2
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
Pedestrians	٠				0		٠				0						0						0		
% Pedestrians				٠	٠	-	٠				,	-					,				-		-	-	



Count Name: Deerpath Rd with Tanner Rd Site Code: Start Date: 03/15/2022 Page No: 1

Turning Movement Data

Tanner	Tanner Eastbou	nner						Tanner Rd Westbound		JM Br	ovem.	ũ		rpath					Deerp	Deerpath Rd Southbound			
U-Turn Left Thru Right Peds App. U-Turn Left Thru	Thru Right Peds App. U-Turn Left	Right Peds App. U-Turn Left	Peds App. U-Turn Left	U-Turn Left	Left		Thru	-	Right P	Peds	App. Total	U-Tum	Left	Thru R	Right Pe	Peds App. Total	u-Turn	m Left	Thru	Right	Peds	App. Total	nt. Total
0 6 2 85 0 93 0 0 3	2 85 0 93 0 0	0 63 0 0	93 0 0	0 0	0		8		0	0	3	0	15	27	0	0 42	0	9	64	2	0	72	210
0 5 4 83 0 92 0 0 4	4 83 0 92 0 0	0 92 0 0	92 0 0	0 0	0		4		0	0	4	0	20	32	0	0 52	0	15	77	3	0	92	243
0 18 4 86 0 108 0 1 6	4 86 0 108 0 1	0 108 0 1	108 0 1	0 1	1		9	- [2	0	6	0	22	46	0	0 68	0	9	109	-	0	116	301
0 12 0 74 0 86 0 1 8	0 74 0 86 0 1	0 86 0 1	86 0 1	0 1	1		8		0	0	6	0	35	22	_	0 93	0	13	88	8	0	105	293
0 41 10 328 0 379 0 2 21	10 328 0 379 0 2	328 0 379 0 2	379 0 2	0 2	2		21		2	0	25	0	92	162	1	0 255	0	40	339	6	0	388	1047
0 4 5 54 0 63 0 3	5 54 0 63 0 3	0 63 0 3	63 0 3	0 3	3		1	7	-	0	11	0	24	54	0	0 78	0	7	89	1	0	92	228
0 9 3 66 1 78 0 0	3 66 1 78 0	1 78 0	0 82	0		0		_	_	0	2	0	24	31	0	0 55	0	2	28	3	0	99	201
0 7 2 44 0 53 0 1	2 44 0 53 0	0 53 0	53 0	0		-		9	0	0	7	0	47	33	0	0 80	0	9	53	0	0	59	199
0 6 4 35 0 45 0 1	4 35 0 45 0	0 45 0	45 0	0		-		2	0	0	3	0	33	35	-	69 0		5	48	-	0	54	171
0 26 14 199 1 239 0 5	14 199 1 239 0	199 1 239 0	239 0	0		5		16	2	0	23	0	128	153	1	0 282		23	227	5	0	255	799
				-													_	•					
0 6 1 29 0 36 0 0	1 29 0 36 0	0 36 0	36 0	0		0		10	2	0	12	0	89	88	0	0 157	0	7	63	2	0	72	277
0 5 4 23 0 32 0 1	4 23 0 32 0	0 32 0	32 0	0		-		9	3	0	10	0	58	73	0	0 131	0	6	65	6	0	83	256
0 5 3 38 0 46 0 2	3 38 0 46 0	0 46 0	46 0	0		2		7	2	0	11	0		77	0	0 136		9	45	4	0	55	248
0 6 3 34 0 43 0 0	3 34 0 43 0	0 43 0	43 0	0		0	- 1	8	7	0	15	0	77	92	0	0 153	0	4	99	4	0	64	275
0 22 11 124 0 157 0 3	11 124 0 157 0	124 0 157 0	157 0	0		3		31	14	0	48	0	292	315	0	0 577	0	26	229	19	0	274	1056
0 5 4 32 0 41 0 0	4 32 0 41 0	0 41 0	41 0	0		0		14	0	0	14	0	75	77	0	0 152	0	4	43	9	0	53	260
0 5 0 30 0 35 0 2	0 30 0 35 0	0 35 0	35 0	0		2	- 1	12	-	0	15	0	78	91	0	0 169	0	2	54	-	0	09	279
0 6 4 33 0 43 0 0	4 33 0 43 0	0 43 0	43 0	0		0	- 1	8	2	0	10	0	65	84	_	0 150	4	7	20	8	0	65	268
0 4 2 28 0 34 0 0	2 28 0 34 0	0 34 0	34 0	0		0		17	4	0	21	0		92	0	0 129		7	32	9	0	45	229
0 20 10 123 0 153 0 2	10 123 0 153 0	123 0 153 0	153 0	0		2		51	7	0	09	0	271	328	1	0 600	0	23	179	21	0	223	1036
0 109 45 774 1 928 0 12	45 774 1 928 0	774 1 928 0	928 0	0		12	- [119	25	0	156	0		958	8	0 1714	0	112	974	54	0	1140	3938
0.0 11.7 4.8 83.4 0.0 7.7	4.8 83.4 0.0	83.4 0.0	- 0.0			7.7		76.3	16.0			0.0	43.9	55.9	0.2		0.0	9.8	85.4	4.7			
0.0 2.8 1.1 19.7 - 23.6 0.0 0.3	1.1 19.7 - 23.6 0.0	19.7 - 23.6 0.0	23.6 0.0	0.0		0.3		3.0	9.0		4.0	0.0	19.1	24.3	0.1	- 43.5	5 0.0	2.8	24.7	1.4		28.9	
0 107 44 764 - 915 0 12	44 764 - 915 0	764 - 915 0	915 0	0		12	ļ	115	25	,	152	0	741	951	3	- 1695	2	109	961	54	,	1124	3886
- 98.2 97.8 98.7 - 98.6 - 100.0	- 98.6 - 7.86 8.76	- 98.6 - 7.86	- 98.6	,	- 100.0	100.0		96.6	100.0		97.4		98.4	99.3	100.0	- 98.9	_	97.3	98.7	100.0		98.6	98.7
0 2 0 5 - 7 0 0	0 5 - 7 0	- 7 0	0	0		0		4	0		4	0	3	2	0	- 5	0	0	7	0		7	23
- 1.8 0.0 0.6 - 0.8 - 0.0	- 0.0 0.0	0.6 - 0.8	-	-	0.0	0.0		3.4	0.0		2.6		0.4	0.2	0.0	- 0.3	-	0.0	0.7	0.0	-	9.0	9.0
0 0 0 4 - 4 0 0	0 4 - 4 0	- 4 0	0	0		0		0	0		0	0	3	4	0	- 7	0	3	5	0	-	8	19
- 0.0 0.0 0.5 - 0.4 - 0.0	0.0 0.5 - 0.4 -	0.5 - 0.4	0.4			0.0		0.0	0.0		0.0		0.4	0.4	0.0	- 0.4	'	2.7	0.5	0.0	-	0.7	0.5
0 0 1 1 - 2 0 0	1 1 - 2 0	0	0	0		0	-	0	0		0	0	9	-	0	- 7	0	0	-	0		-	10
- 0.0 2.2 0.1 - 0.2 - 0.0	2.2 0.1 - 0.2 -	0.1 - 0.2	0.5	-		0.0		0.0	0.0	-	0.0		8.0	0.1	0.0	- 0.4	-	0.0	0.1	0.0		0.1	0.3
0 0 0 - 0 0 0 0	0 0 - 0 0	0 0 -	0	0		0	ı I	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					1						0					0					0	-	
% Pedestrians	٠				100.0		_																



Count Name: Deerpath Rd with Tanner Rd Site Code: Start Date: 03/15/2022 Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

								5				המא י	Jemeni Peak noui Data (7.13 Aivi	מום (<u> </u>	(-									
			Tan	Tanner Rd					Tanner Ro	ər Rd				•	Deerpath Rd	h Rd					Deerpath Rd	. Rd			
			Eas	Eastbound					Westbound	puno					Northbound	pund					Southbound	pun			
Start Time	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Tum	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Ir	Int. Total
7:15 AM	0	5	4	83	0	92	0	0	4	0	0	4	0	20	32	0	0	52	0	15	77	3	0	95	243
7:30 AM	0	18	4	98	0	108	0	-	9	2	0	6	0	22	46	0	0	89	0	9	109	1	0	116	301
7:45 AM	0	12	0	74	0	98	0	1	8	0	0	6	0	35	22	1	0	93	0	13	89	3	0	105	293
8:00 AM	0	4	5	54	0	63	0	3	7	1	0	11	0	24	54	0	0	78	0	7	89	1	0	92	228
Total	0	39	13	297	0	349	0	5	25	3	0	33	0	101	189	1	0	291	0	41	343	8	0	392	1065
Approach %	0.0	11.2	3.7	85.1	-	-	0.0	15.2	75.8	9.1			0.0	34.7	64.9	0.3	-		0.0	10.5	87.5	2.0	-		
Total %	0.0	3.7	1.2	27.9		32.8	0.0	0.5	2.3	0.3		3.1	0.0	9.5	17.7	0.1	-	27.3	0.0	3.8	32.2	0.8	-	36.8	
PHF	0.000	0.542	0.650	0.863		0.808	0.000	0.417	0.781	0.375		0.750	0.000	0.721	0.829	0.250		0.782	0.000	0.683	0.787	0.667	-	0.845	0.885
Lights	0	38	13	292		343	0	2	21	3		29	0	92	186	1		282	0	40	339	8		387	1041
% Lights	٠	97.4	100.0	98.3		98.3		100.0	84.0	100.0		87.9		94.1	98.4	100.0	-	96.9		9.76	98.8	100.0	-	98.7	97.7
Buses	0	-	0	4		5	0	0	4	0		4	0	3	2	0	-	5	0	0	2	0	-	2	16
% Buses		2.6	0.0	1.3		1.4		0.0	16.0	0.0		12.1		3.0	1.1	0.0		1.7		0.0	9.0	0.0		0.5	1.5
Single-Unit Trucks	0	0	0	0		0	0	0	0	0	,	0	0	-	-	0	,	2	0	-	-	0	,	2	4
% Single-Unit Trucks	•	0.0	0.0	0.0		0.0	-	0.0	0:0	0.0		0.0		1.0	0.5	0.0	-	0.7		2.4	0.3	0.0	-	0.5	0.4
Articulated Trucks	0	0	0	-	٠	-	0	0	0	0		0	0	2	0	0		2	0	0	-	0		-	4
% Articulated Trucks	•	0.0	0.0	0.3		0.3	-	0.0	0.0	0.0		0.0		2.0	0.0	0.0	-	0.7		0.0	0.3	0.0	-	0.3	0.4
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles on Road		0.0	0.0	0.0		0.0	٠	0.0	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	٠	٠	,		0	٠					0						0						0		
% Pedestrians	•	٠																							



Count Name: Deerpath Rd with Tanner Rd Site Code: Start Date: 03/15/2022 Page No: 4

			Int. Total	275	260	279	268	1082			0.970	1080	8.66	0	0.0	2	0.2	0	0.0	0	0.0		
			App. Total	64	53	09	65	242	-	22.4	0.931	241	9.66	0	0.0	1	0.4	0	0.0	0	0.0		
			Peds	0	0	0	0	0												-		0	
	h Rd	punc	Right	4	9	1	8	19	7.9	1.8	0.594	19	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
	Deerpath Rd	Southbound	Thru	26	43	54	20	203	83.9	18.8	906.0	202	99.5	0	0.0	1	0.5	0	0.0	0	0.0		
			Left	4	4	2	7	20	8.3	1.8	0.714	20	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
			U-Tum	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
	•		App. Total	153	152	169	150	624		57.7	0.923	623	8.66	0	0.0	1	0.2	0	0.0	0	0.0		
			Peds	0	0	0	0	0			-		-			-				-	-	0	
) Md	th Rd	puno	Right	0	0	0	1	1	0.2	0.1	0.250	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
4:45	Deerpath Rd	Northbound	Thru	92	77	91	84	328	52.6	30.3	0.901	327	2.66	0	0.0	1	0.3	0	0.0	0	0.0		
Jata (•		Left	77	75	78	65	295	47.3	27.3	0.946	295	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
Turning Movement Peak Hour Data (4:45 PM)			U-Tum	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
eak F			App. Total	15	14	15	10	54		2.0	0.900	54	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
ent F			Peds	0	0	0	0	0	-			-			-		-				-	0	
loven	er Rd	puno	Right	7	0	1	2	10	18.5	6.0	0.357	10	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
ing M	Tanner Rd	Westbound	Thru	8	14	12	8	42	77.8	3.9	0.750	42	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
Turn			Left	0	0	2	0	2	3.7	0.2	0.250	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
			U-Turn	0	0	0	0	0	0.0	0.0	0.000	0	-	0		0		0		0			
	·		App. Total	43	41	35	43	162		15.0	0.942	162	100.0	0	0.0	0	0.0	0	0.0	0	0.0		-
			Peds	0	0	0	0	0	-			-	-		-	-				-		0	
	Tanner Rd	Eastbound	Right	34	32	30	33	129	9.62	11.9	0.949	129	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
	Tann	Eastb	Thru	3	4	0	4	11	8.9	1.0	0.688	11	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
			Left	9	5	2	9	22	13.6	2.0	0.917	22	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
			U-Tum	0	0	0	0	0	0.0	0.0	0.000	0	-	0		0		0		0			
			Start Time	4:45 PM	5:00 PM	5:15 PM	5:30 PM	Total	Approach %	Total %	PHF	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road	% Bicycles on Road	Pedestrians	% Pedestrians



Count Name: Deerpath Rd with W Mooseheart Rd Site Code: Start Date: 03/15/2022 Page No: 1

Turning Movement Data

_	_	•		_		5)	ğ							_
			w Mooseneart Kd	-	•			Deerpath Kd					Deerpam Kd			
Start Time	U-Tum	Left	Westbound	Peds	App. Total	U-Turn	Thru	Northbound Right	Peds	App. Total	U-Tum	Left	Southbound	Peds	App. Total	Int. Total
7:00 AM	0	3	· "	0	9	0	25	2 0	0	27	0	4	86	0	06	123
7:15 AM	0	-	0	0	-	0	40	е	0	43	0	5	106	0	111	155
7:30 AM	0	2	ю	0	5	0	65	6	0	74	0	12	115	0	127	206
7:45 AM	0	3	12	0	15	0	61	8	0	69	0	5	84	0	88	173
Hourly Total	0	6	18	0	27	0	191	22	0	213	0	26	391	0	417	657
8:00 AM	0	1	0	0	1	0	49	0	0	49	0	1	89	0	69	119
8:15 AM	0	0	2	0	2	0	38	3	0	41	0	8	72	0	75	118
8:30 AM	0	0	1	0	1	0	43	1	0	44	0	3	46	0	49	94
8:45 AM	0	1	1	0	2	0	35	2	0	37	0	0	22	0	22	96
Hourly Total	0	2	4	0	9	0	165	9	0	171	0	7	243	0	250	427
*** BREAK ***	-	-	-	-	-	-	-	-		-	-	-	-		-	-
4:00 PM	0	2	8	0	10	0	89	1	0	06	0	8	29	0	75	175
4:15 PM	0	0	2	0	2	0	83	8	0	86	0	3	80	0	83	171
4:30 PM	0	1	9	0	7	0	62	1	0	80	0	10	55	0	65	152
4:45 PM	0	1	8	0	6	0	84	4	0	88	0	3	53	0	56	153
Hourly Total	0	4	24	0	28	0	335	6	0	344	0	24	255	0	279	651
5:00 PM	0	4	3	0	7	0	98	_	0	87	0	2	29	0	69	163
5:15 PM	0	0	4	0	4	0	94	2	0	96	0	9	58	0	64	164
5:30 PM	0	8	8	0	9	0	88	2	0	90	0	5	22	0	62	158
5:45 PM	0	0	_	0	-	0	93	0	0	93	0	_	48	0	49	143
Hourly Total	0	7	11	0	18	0	361	5	0	366	0	14	230	0	244	628
Grand Total	0	22	57	0	79	0	1052	42	0	1094	0	71	1119	0	1190	2363
Approach %	0.0	27.8	72.2	-	-	0.0	96.2	3.8		-	0.0	6.0	94.0	-	-	-
Total %	0.0	6.0	2.4	-	3.3	0.0	44.5	1.8		46.3	0.0	3.0	47.4		50.4	
Lights	0	22	55		77	0	1045	40		1085	0	70	1103		1173	2335
% Lights	,	100.0	96.5	-	97.5		99.3	95.2		99.2		98.6	98.6		98.6	98.8
Buses	0	0	2		2	0	2	2		4	0	_	8		6	15
% Buses	,	0.0	3.5		2.5		0.2	4.8		0.4		1.4	0.7		0.8	9.0
Single-Unit Trucks	0	0	0	-	0	0	3	0		3	0	0	5	-	5	8
% Single-Unit Trucks		0.0	0.0	-	0.0		0.3	0.0		0.3		0.0	0.4		0.4	0.3
Articulated Trucks	0	0	0		0	0	2	0		2	0	0	2		2	4
% Articulated Trucks		0.0	0.0		0.0		0.2	0.0		0.2		0.0	0.2		0.2	0.2
Bicycles on Road	0	0	0		0	0	0	0		0	0	0	_		1	1
% Bicycles on Road	'	0.0	0.0		0.0		0.0	0.0		0.0	1	0.0	0.1		0.1	0.0
Pedestrians	-	1	1	0	1		1		0	-	i		1	0		
% Pedestrians																



Count Name: Deerpath Rd with W Mooseheart Rd Site Code: Start Date: 03/15/2022 Page No: 2

					Turning	Turning Movement Peak Hour Data (7:15 AM)	ent Pea	k Hour [)ata (7:	15 AM)						
		_	W Mooseheart Rd	-				Deerpath Rd	•	•			Deerpath Rd			
C treto			Westbound					Northbound					Southbound			
Otale in a	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:15 AM	0	1	0	0	1	0	40	3	0	43	0	5	106	0	111	155
7:30 AM	0	2	3	0	5	0	65	6	0	74	0	12	115	0	127	206
7:45 AM	0	3	12	0	15	0	61	8	0	69	0	5	84	0	89	173
8:00 AM	0	1	0	0	1	0	49	0	0	49	0	1	89	0	69	119
Total	0	7	15	0	22	0	215	20	0	235	0	23	373	0	396	653
Approach %	0.0	31.8	68.2		-	0.0	91.5	8.5		-	0.0	5.8	94.2		-	
Total %	0.0	1.1	2.3		3.4	0.0	32.9	3.1		36.0	0.0	3.5	57.1		60.6	
PHF	0.000	0.583	0.313		0.367	0.000	0.827	0.556		0.794	0.000	0.479	0.811	-	0.780	0.792
Lights	0	7	14		21	0	213	19		232	0	22	369		391	644
% Lights	,	100.0	93.3		95.5	,	99.1	95.0		98.7		95.7	98.9		98.7	98.6
Buses	0	0	1		1	0	2	1		3	0	1	2	-	3	7
% Buses		0.0	6.7	-	4.5	-	6.0	5.0	_	1.3	-	4.3	0.5	-	0.8	1.1
Single-Unit Trucks	0	0	0		0	0	0	0		0	0	0	1		1	1
% Single-Unit Trucks		0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.3	-	0.3	0.2
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	1		1	1
% Articulated Trucks	,	0.0	0.0		0.0	,	0.0	0.0		0.0		0.0	0.3		0.3	0.2
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road		0.0	0.0		0.0		0.0	0.0		0.0		0.0	0.0		0.0	0.0
Pedestrians	-			0	-	-	-	-	0	-	-	-	-	0	-	
% Pedestrians				-	-	-	-	-		-	-	-	-	-	-	



Count Name: Deerpath Rd with W Mooseheart Rd Site Code: Start Date: 03/15/2022 Page No: 3

Turning Movement Beak Hour Data (4:45 PM)

					Iurning	Mover	ent Pea	urning Movement Peak Hour Data (4:45)ata (4:	45 PM)						
		_	W Mooseheart Rd	~	-			Deerpath Rd					Deerpath Rd			
H + C+C			Westbound					Northbound					Southbound			
Start Time	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Tum	Left	Thru	Peds	App. Total	Int. Total
4:45 PM	0	1	8	0	6	0	84	4	0	88	0	3	53	0	56	153
5:00 PM	0	4	3	0	7	0	86	1	0	87	0	2	29	0	69	163
5:15 PM	0	0	4	0	4	0	94	2	0	96	0	9	58	0	64	164
5:30 PM	0	3	3	0	9	0	88	2	0	06	0	5	57	0	62	158
Total	0	8	18	0	26	0	352	6	0	361	0	16	235	0	251	638
Approach %	0.0	30.8	69.2			0.0	97.5	2.5			0.0	6.4	93.6		-	
Total %	0.0	1.3	2.8	-	4.1	0.0	55.2	1.4		56.6	0.0	2.5	36.8		39.3	-
PHF	0.000	0.500	0.563	-	0.722	0.000	0.936	0.563		0.940	0.000	0.667	0.877		0.909	0.973
Lights	0	8	18		26	0	351	6		360	0	16	233		249	635
% Lights	,	100.0	100.0	,	100.0		99.7	100.0		2.66		100.0	99.1		99.2	99.5
Buses	0	0	0	-	0	0	0	0		0	0	0	0		0	0
% Buses		0.0	0.0		0.0		0.0	0.0		0.0		0.0	0.0		0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	1	0	-	1	0	0	1		1	2
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.3	0.0		0.3	-	0.0	0.4		0.4	0.3
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	0
% Articulated Trucks	,	0.0	0.0	,	0.0	,	0.0	0.0		0.0		0.0	0.0		0.0	0.0
Bicycles on Road	0	0	0	,	0	0	0	0		0	0	0	_		1	-
% Bicycles on Road	,	0.0	0.0	,	0.0		0.0	0.0		0.0		0.0	0.4		0.4	0.2
Pedestrians	,	'	•	0	'	,		'	0					0	-	
% Pedestrians				1		•			1	-	-		-	-		

Site Plan



SITE STATISTICS

MULTIFAMILY

TWO STORY WALKUP BUILDINGS WITH 20 UNIT CONFIGURATIONS ALONG WITH A CLUBHOUSE AND POOL

CLUBHOUSE - 4,942 SF

20 UNIT BUILDING - 25,797 SF (1,072 SF/UNIT*)
* SF/UNIT DOES NOT INCLUDE GARAGE

STUDIO ONE BEDROOM TWO BEDROOM THREE BEDROOM 26 104 104

OVERALL UNIT COUNT 260

SITE AREA: 21.7 ACRES (12 UNITS/ACRE)

PARKING

ON SITE STALLS ENCLOSED STALLS

426 (1.64 STALLS/UNIT) 172 (0.66 STALLS/UNIT)

TOTAL STALLS

598 (2.3 STALLS/UNIT)

TYPICAL PARKING STALL DIMENSIONS: 9' X 18.5'

LOT COVERAGE

945,303 SQFT (21.7ACRES)
198,416 SQFT (21%)

SETBACKS

YARD REGULATIONS		CURRENT SETBACK
FRONT YARD	25 FT	25 FT
REAR YARD	30 FT	30 FT
INTERIOR SIDE YARD	10 FT	25 FT
CORNER SIDE YARD	30 FT	30 FT
ORCHARD ROAD LANDSCAPE BUFFER	35 FT	35 FT
DEDICATION TO ORCHARD R.O.W.	15FT	15FT
MOOSEHEART RD LANDSCAPE BUFFER	50 FT	50 FT

SCALE 1"=100'

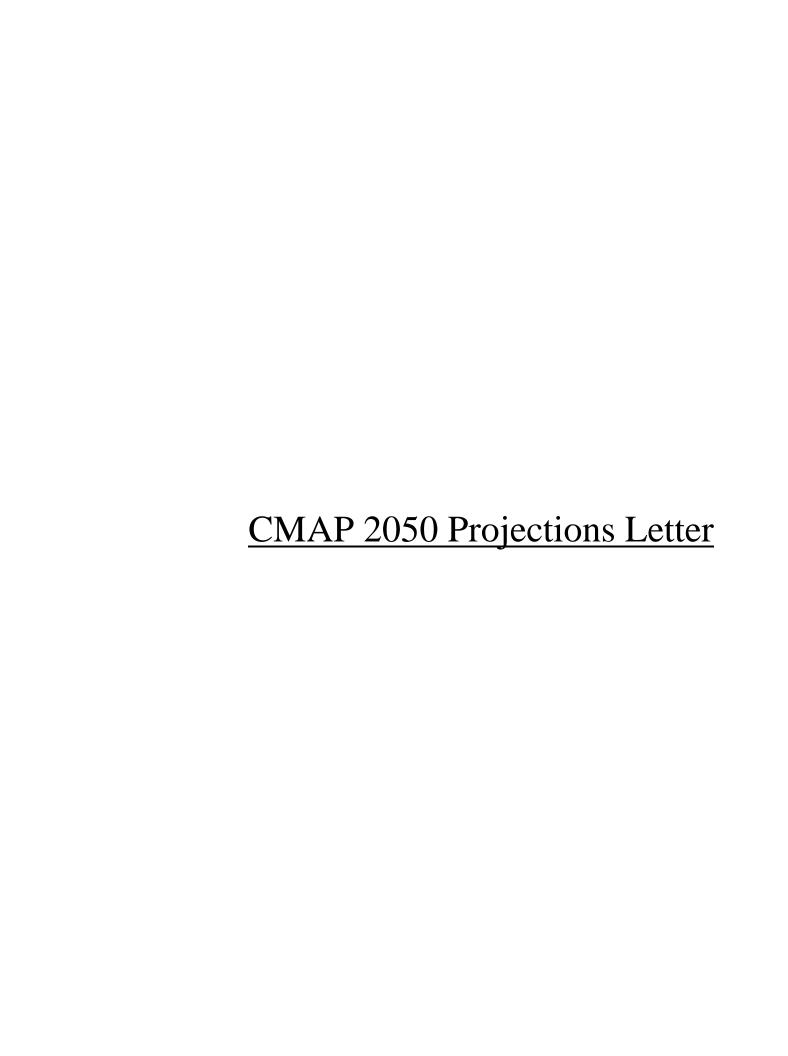


MULTIFAMILY DEVELOPMENT

North Aurora, Illinois

02 FEBRUARY 2022







433 West Van Buren Street Suite 450 Chicago, IL 60607

> 312-454-0400 cmap.illinois.gov

March 17, 2022

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

Subject: Orchard Road - Mooseheart Road - Deerpath Road

IDOT

Dear Mr. May:

In response to a request made on your behalf and dated March 16, 2022, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Orchard Rd north of Oak St	12,400	17,600
Orchard Rd south of Oak St	27,800	33,700
Oak St west of Orchard Rd	3,900	6,200
Oak St east of Orchard Rd	6,600	8,200
Tanner Rd west of Orchard Rd	2,650	4,200
Deerpath Rd north of Tanner Rd	7,450	11,800
Deerpath Rd between Tanner Rd and Oak St	10,100	13,300
Deerpath Rd south of Oak St	6,950	11,000

Traffic projections are developed using existing ADT data provided in the request letter and the results from the December 2021 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

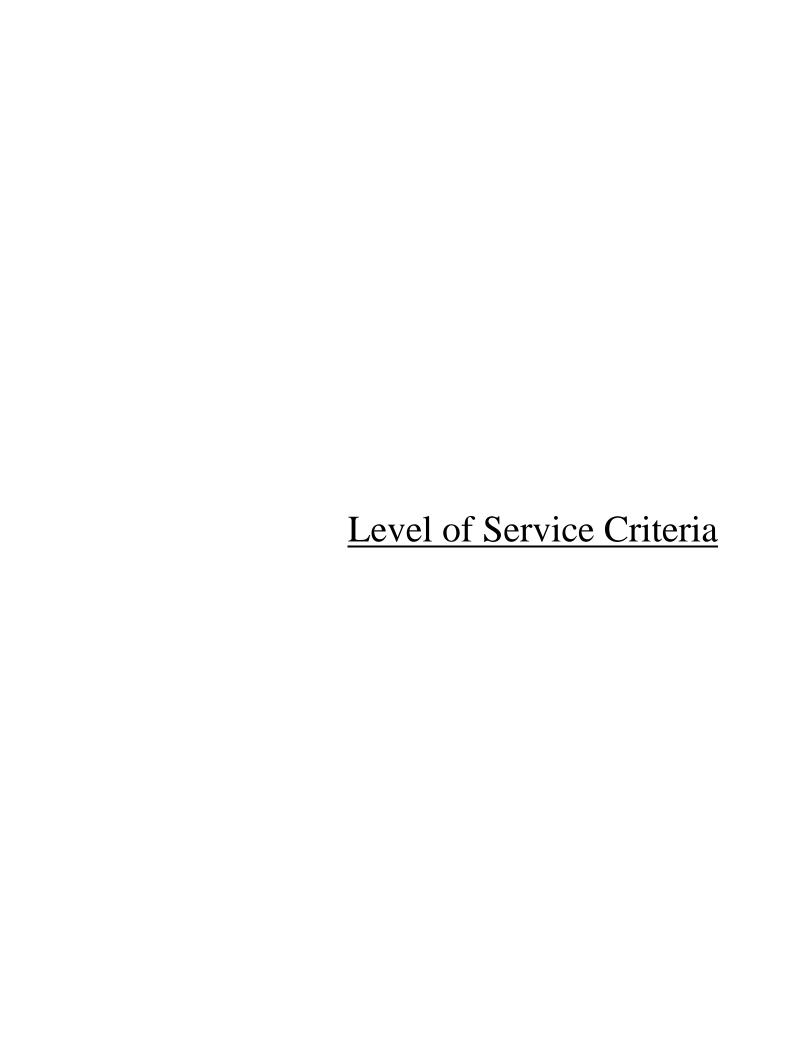
Sincerely,

Jose Rodriguez, PTP, AICP

Senior Planner, Research & Analysis

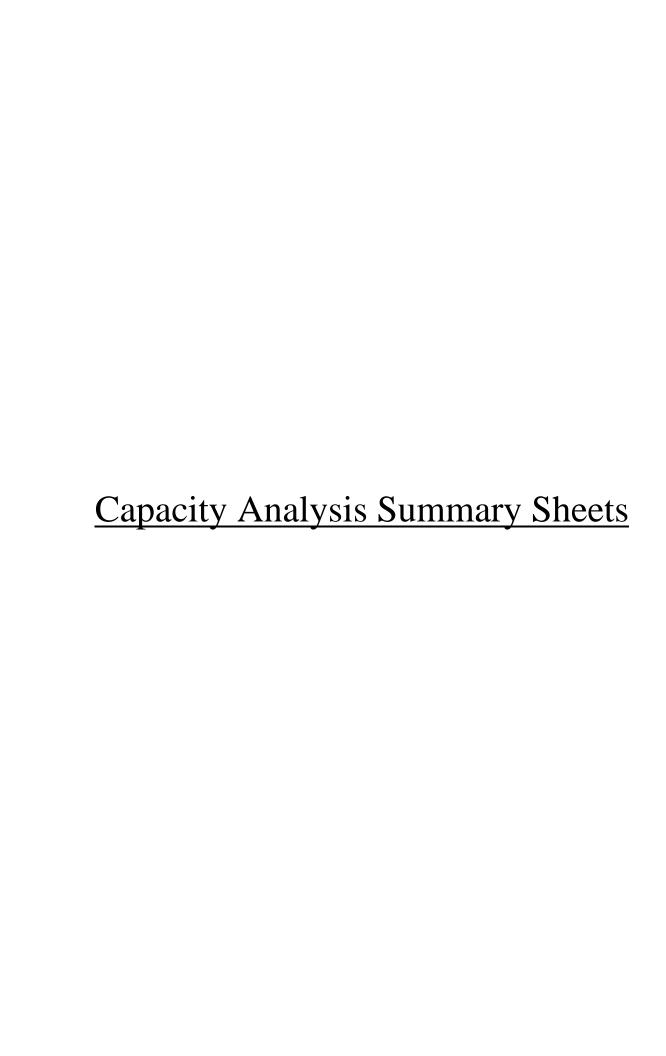
cc: Rios (IDOT)

 $S: \label{lem:coups} Research Analysis \ 2022_Forecast Traffic \ North Aurora \ ka-11-22 \ ka-11-22. docx \ north Aurora \ north Aurora \ ka-11-22 \ ka-11-22. docx \ north Aurora \ north Aurora$



LEVEL OF SERVICE CRITERIA

LEVEL OF SI	ERVICE CRITERIA Signalized Intersections	
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
В	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
С	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
Е	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0
	Unsignalized Intersections	
	Level of Service Average Total De	elay (SEC/VEH)
	A 0 -	10
	B > 10	- 15
	C > 15	- 25
	D > 25	- 35
	E > 35	- 50
	F > 5	0
Source: Highwa	y Capacity Manual, 2010.	



	٠	→	•	•	+	•	•	†	<i>></i>	/	+	-√
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ		7	1,1	1	7	77	^	7	ሻሻ	^	7
Traffic Volume (vph)	31	143	86	136	69	14	51	585	102	33	389	5
Future Volume (vph)	31	143	86	136	69	14	51	585	102	33	389	5
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	265		200	240		245	250		250
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	185			235			235			240		
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3273	1980	1538	3400	1869	1615	3303	3725	1495	3400	3619	808
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3273	1980	1538	3400	1869	1615	3303	3725	1495	3400	3619	808
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			95			55			112			55
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		597			2321			1682			1100	
Travel Time (s)		9.0			35.2			22.9			15.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	1%	5%	3%	7%	0%	6%	2%	8%	3%	5%	100%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	157	95	149	76	15	56	643	112	36	427	5
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	7.5	14.0	7.5	7.5	14.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5
Total Split (s)	18.0	26.0	20.0	18.0	26.0	17.0	20.0	69.0	18.0	17.0	66.0	18.0
Total Split (%)	13.8%	20.0%	15.4%	13.8%	20.0%	13.1%	15.4%	53.1%	13.8%	13.1%	50.8%	13.8%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0
All-Red Time (s)	0.5	1.5	0.5	0.5	1.5	0.5	0.5	1.5	0.5	0.5	1.5	0.5
Lost Time Adjust (s)												
Total Lost Time (s)				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0 3.5	0.0 6.0	0.0 3.5	0.0 3.5	0.0 6.0	0.0 3.5	0.0 3.5	0.0 6.0	0.0 3.5
Leau/Lay	0.0 3.5	0.0 6.0	0.0		6.0		0.0 3.5 Lead	6.0			6.0	3.5
Lead/Lag Lead-Lag Optimize?	0.0 3.5 Lead	0.0 6.0 Lag	0.0 3.5 Lead	3.5 Lead	6.0 Lag	3.5 Lead	3.5 Lead	6.0 Lag	3.5 Lead	3.5 Lead	6.0 Lag	3.5 Lead
Lead-Lag Optimize?	0.0 3.5 Lead Yes	0.0 6.0	0.0 3.5 Lead Yes	3.5 Lead Yes	6.0 Lag Yes	3.5 Lead Yes	3.5 Lead Yes	6.0 Lag Yes	3.5 Lead Yes	3.5 Lead Yes	6.0 Lag Yes	3.5 Lead Yes
	0.0 3.5 Lead	0.0 6.0 Lag Yes	0.0 3.5 Lead	3.5 Lead	6.0 Lag	3.5 Lead	3.5 Lead	6.0 Lag	3.5 Lead	3.5 Lead	6.0 Lag	3.5 Lead

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.21	0.65	0.23	0.54	0.22	0.03	0.31	0.28	0.10	0.22	0.20	0.01
Control Delay	62.1	66.1	8.3	64.4	46.8	0.1	63.1	13.4	1.4	59.0	13.0	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.1	66.1	8.3	64.4	46.8	0.1	63.1	13.4	1.4	59.0	13.0	0.4
LOS	Е	Е	Α	Ε	D	Α	Ε	В	Α	Е	В	Α
Approach Delay		46.4			54.8			15.2			16.5	
Approach LOS		D			D			В			В	
Queue Length 50th (ft)	14	128	0	63	57	0	23	130	0	15	85	0
Queue Length 95th (ft)	32	194	42	97	99	0	46	200	19	33	130	m0
Internal Link Dist (ft)		517			2241			1602			1020	
Turn Bay Length (ft)	200			265		200	240		245	250		250
Base Capacity (vph)	365	308	522	379	341	574	419	2287	1179	353	2152	621
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.51	0.18	0.39	0.22	0.03	0.13	0.28	0.09	0.10	0.20	0.01

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 25.7 Intersection LOS: C
Intersection Capacity Utilization 46.2% ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 1: Orchard Road & Oak Street



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Ť	^	7	Ť	† †	7	ň	f)		ň	f)	
Traffic Volume (vph)	8	580	42	24	340	23	51	24	56	40	41	13
Future Volume (vph)	8	580	42	24	340	23	51	24	56	40	41	13
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	125		125	125		125	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	200			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.895			0.964	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3689	1509	1805	3619	1482	1671	1680	0	1805	1672	0
Flt Permitted	0.509			0.365			0.714			0.694		
Satd. Flow (perm)	967	3689	1509	694	3619	1482	1256	1680	0	1319	1672	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			117		68			16	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		2475			2166			268			249	
Travel Time (s)		33.8			29.5			7.3			6.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	7%	0%	5%	9%	8%	4%	0%	0%	10%	8%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	707	51	29	415	28	62	97	0	49	66	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	7.0	21.5	21.5	7.0	21.5	21.5	14.0	14.0		14.0	14.0	
Total Split (s)	11.0	35.0	35.0	11.0	35.0	35.0	19.0	19.0		19.0	19.0	
Total Split (%)	16.9%	53.8%	53.8%	16.9%	53.8%	53.8%	29.2%	29.2%		29.2%	29.2%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.5	6.5	4.0	6.5	6.5	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	0.0	0.0		0.0	0.0	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Act Effct Green (s)	46.5	43.0	43.0	47.6	45.1	45.1	9.1	9.1		9.1	9.1	
Actuated g/C Ratio	0.72	0.66	0.66	0.73	0.69	0.69	0.14	0.14		0.14	0.14	
Totaliou gro Hullo	0.72	0.00	0.00	0.70	0.07	0.07	V. 17	0.17		V. 17	0.17	

2: White Oak Drive & Orchard Road

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.01	0.29	0.05	0.05	0.17	0.03	0.35	0.33		0.26	0.27	
Control Delay	5.8	10.3	3.6	3.8	6.0	0.0	30.0	13.5		27.4	21.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	5.8	10.3	3.6	3.8	6.0	0.0	30.0	13.5		27.4	21.9	
LOS	А	В	Α	Α	Α	Α	С	В		С	С	
Approach Delay		9.8			5.5			19.9			24.2	
Approach LOS		Α			А			В			С	
Queue Length 50th (ft)	1	81	1	3	26	0	23	10		18	18	
Queue Length 95th (ft)	12	258	23	10	68	0	47	38		39	41	
Internal Link Dist (ft)		2395			2086			188			169	
Turn Bay Length (ft)	125		125	125		125						
Base Capacity (vph)	788	2438	1037	628	2508	1063	251	390		263	347	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.01	0.29	0.05	0.05	0.17	0.03	0.25	0.25		0.19	0.19	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 56 (86%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 10.6
Intersection Capacity Utilization 39.9%

Intersection LOS: B
ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: White Oak Drive & Orchard Road



Part		۶	→	•	•	+	•	•	†	<i>></i>	/	+	-√
Figure F	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Firality (Volume (vph)		ሻሻ	•	#	7575	*	7	75	44	7	16.95	44	
Future Volume (vph)													
Lane Width (ft)	· 1 ·												
Storage Length (ff)													
Storage Length (ft) 200													
Storage Lanes	, ,	200		0	265		200	240		245	250		250
Taper Length (ft)													
Lane Utll. Factor 0.97		185			235			235			240		
Ped Bike Factor Fit			1.00	1.00		1.00	1.00		0.95	1.00		0.95	1.00
Filt Protected 0,950 0													
Filt Protected				0.850			0.850			0.850			0.850
Satid. Flow (prot) 3502 2000 1568 3433 1980 1615 3467 3725 1599 3502 3725 1615 Fli Permitted 0.950 0.9		0.950			0.950			0.950			0.950		
Fit Permitted			2000	1568		1980	1615		3725	1599		3725	1615
Satd. Flow (perm) Sato 2000 1568 3433 1980 1615 3467 3725 1599 3502 3725 1615 Right Turn on Red													
Page			2000	1568		1980	1615		3725	1599		3725	1615
Said. Flow (RTOR)													
Link Speed (mph)													
Travel Time (s)			45			45			50			50	
Travel Time (s)													
Confil Peds. (#/hr)													
Confile Bikes (#/hr) Peak Hour Factor 0.96													
Peak Hour Factor 0.96 0.	, ,												
Growth Factor 100%		0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)													
Bus Blockages (#/hr)													
Parking (#/hr)													
Mid-Block Traffic (%) 0% 0% 0% 0% 0% 0% 0% 10% 10% 10% 10% 10% 10% 11% 11% 22 164 644 210 82 661 5 Turn Type Prot NA pm+ov													
Shared Lane Traffic (%) Lane Group Flow (vph) 19 109 42 178 116 22 164 644 210 82 661 5 Turn Type			0%			0%			0%			0%	
Lane Group Flow (vph) 19 109 42 178 116 22 164 644 210 82 661 5 Turn Type Prot NA pm+ov Prot NA													
Turn Type Prot NA pm+ov Prot NA	` ,	19	109	42	178	116	22	164	644	210	82	661	5
Protected Phases 7 4 5 3 8 1 5 2 3 1 6 7 Permitted Phases 7 4 5 3 8 1 5 2 3 1 6 7 Switch Phase Switch Phase Minimum Initial (s) 3.0 8.0 3.0 8.0 3.0													
Permitted Phases 7 4 5 3 8 1 5 2 3 1 6 7 7 5 5 3 8 1 5 2 3 1 6 7 7 5 5 5 5 5 5 5 5							•						•
Detector Phase 7 4 5 3 8 1 5 2 3 1 6 7 Switch Phase Minimum Initial (s) 3.0 8.0 3.0 8.0 3.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 <td></td> <td>6</td>													6
Switch Phase Minimum Initial (s) 3.0 8.0 3.0 8.0 3.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 15.0 3.0 3.0 17.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 7.5 21.0 3.0 4.5 3.0 3.0		7	4		3	8		5	2		1	6	
Minimum Initial (s) 3.0 8.0 3.0 3.0 8.0 3.0 3.0 15.0 3.0 15.0 3.0 Minimum Split (s) 7.5 14.0 7.5 7.5 14.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 Total Split (s) 17.0 23.0 23.0 21.0 27.0 18.0 23.0 68.0 21.0 18.0 63.0 17.0 Total Split (%) 13.1% 17.7% 17.7% 16.2% 20.8% 13.8% 17.7% 52.3% 16.2% 13.8% 48.5% 13.1% Yellow Time (s) 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0		-	•				•	_	_		-		-
Minimum Split (s) 7.5 14.0 7.5 7.5 14.0 7.5 7.5 21.0 7.5 21.0 7.5 Total Split (s) 17.0 23.0 23.0 21.0 27.0 18.0 23.0 68.0 21.0 18.0 63.0 17.0 Total Split (%) 13.1% 17.7% 17.7% 16.2% 20.8% 13.8% 17.7% 52.3% 16.2% 13.8% 48.5% 13.1% Yellow Time (s) 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 <td></td> <td>3.0</td> <td>8.0</td> <td>3.0</td> <td>3.0</td> <td>8.0</td> <td>3.0</td> <td>3.0</td> <td>15.0</td> <td>3.0</td> <td>3.0</td> <td>15.0</td> <td>3.0</td>		3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Total Split (s) 17.0 23.0 23.0 21.0 27.0 18.0 23.0 68.0 21.0 18.0 63.0 17.0 Total Split (%) 13.1% 17.7% 17.7% 16.2% 20.8% 13.8% 17.7% 52.3% 16.2% 13.8% 48.5% 13.1% Yellow Time (s) 3.0 4.5 3.0 3.0 4.	. ,												
Total Split (%) 13.1% 17.7% 16.2% 20.8% 13.8% 17.7% 52.3% 16.2% 13.8% 48.5% 13.1% Yellow Time (s) 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 All-Red Time (s) 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0													
Yellow Time (s) 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 All-Red Time (s) 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 Lost Time Adjust (s) 0.0 <													
All-Red Time (s) 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.0 <td></td>													
Lost Time Adjust (s) 0.0													
Total Lost Time (s) 3.5 6.0 2.5													
Lead/LagLeadLagLeadLagLeadLagLeadLagLeadLagLeadLeadLagLeadLeadLagLeadLeadLagLeadLeadLagLead <t< td=""><td>• • • • • • • • • • • • • • • • • • • •</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	• • • • • • • • • • • • • • • • • • • •												
Lead-Lag Optimize?Yes <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>													
Recall Mode None None None None None None C-Min None C-Min None Act Effct Green (s) 5.7 12.9 29.9 11.6 22.2 36.1 11.0 78.6 96.2 7.9 75.6 87.3													
Act Effct Green (s) 5.7 12.9 29.9 11.6 22.2 36.1 11.0 78.6 96.2 7.9 75.6 87.3													
, ,													
Actuated g/C Ratio 0.04 0.10 0.23 0.09 0.17 0.28 0.08 0.60 0.74 0.06 0.58 0.67													

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.12	0.55	0.10	0.58	0.34	0.04	0.56	0.29	0.17	0.38	0.31	0.00
Control Delay	61.2	65.8	8.0	64.4	50.4	0.1	64.3	13.6	1.1	57.0	13.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.2	65.8	8.0	64.4	50.4	0.1	64.3	13.6	1.1	57.0	13.0	0.0
LOS	Е	Е	Α	Е	D	Α	Ε	В	Α	Е	В	Α
Approach Delay		49.2			54.8			19.2			17.7	
Approach LOS		D			D			В			В	
Queue Length 50th (ft)	8	89	0	75	90	0	69	129	0	35	143	0
Queue Length 95th (ft)	21	146	2	111	142	0	105	198	23	61	194	m0
Internal Link Dist (ft)		517			2241			1602			1020	
Turn Bay Length (ft)	200			265		200	240		245	250		250
Base Capacity (vph)	363	262	521	462	346	586	520	2252	1301	390	2165	1211
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.42	0.08	0.39	0.34	0.04	0.32	0.29	0.16	0.21	0.31	0.00

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 125 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

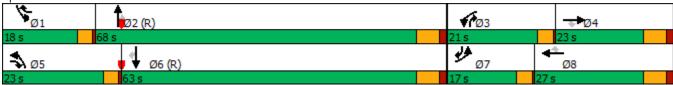
Intersection Signal Delay: 26.0
Intersection Capacity Utilization 46.0%

Intersection LOS: C
ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 1: Orchard Road & Oak Street



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	† †	7	*	^	7	ሻ	f)		ሻ	f	
Traffic Volume (vph)	31	614	12	47	719	39	14	13	27	34	18	6
Future Volume (vph)	31	614	12	47	719	39	14	13	27	34	18	6
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	125		125	125		125	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	200			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.900			0.964	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3725	1615	1805	3725	1615	1687	1710	0	1805	1832	0
Flt Permitted	0.364			0.393			0.755			0.755		
Satd. Flow (perm)	692	3725	1615	747	3725	1615	1341	1710	0	1434	1832	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			117		28			6	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		2475			2166			268			249	
Travel Time (s)		33.8			29.5			7.3			6.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	7%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	646	13	49	757	41	15	42	0	36	25	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	7.0	21.5	21.5	7.0	21.5	21.5	14.0	14.0		14.0	14.0	
Total Split (s)	11.0	35.0	35.0	11.0	35.0	35.0	19.0	19.0		19.0	19.0	
Total Split (%)	16.9%	53.8%	53.8%	16.9%	53.8%	53.8%	29.2%	29.2%		29.2%	29.2%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.5	6.5	4.0	6.5	6.5	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Act Effct Green (s)	49.6	46.0	46.0	50.7	48.1	48.1	7.7	7.7		7.8	7.8	
Actuated g/C Ratio	0.76	0.71	0.71	0.78	0.74	0.74	0.12	0.12		0.12	0.12	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.05	0.24	0.01	0.07	0.27	0.03	0.10	0.19		0.21	0.11	
Control Delay	4.2	8.9	0.9	3.0	6.4	0.1	25.8	15.6		28.1	21.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	4.2	8.9	0.9	3.0	6.4	0.1	25.8	15.6		28.1	21.8	
LOS	А	Α	Α	Α	Α	Α	С	В		С	С	
Approach Delay		8.5			5.9			18.3			25.5	
Approach LOS		Α			Α			В			С	
Queue Length 50th (ft)	3	66	0	4	48	0	5	5		13	7	
Queue Length 95th (ft)	33	281	4	13	132	0	20	29		36	25	
Internal Link Dist (ft)		2395			2086			188			169	
Turn Bay Length (ft)	125		125	125		125						
Base Capacity (vph)	653	2638	1178	697	2759	1226	268	364		286	371	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.05	0.24	0.01	0.07	0.27	0.03	0.06	0.12		0.13	0.07	

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 2 (3%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 45

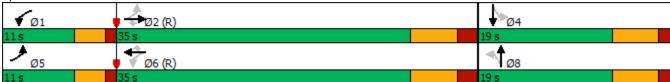
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.27

Intersection Signal Delay: 8.1 Intersection Capacity Utilization 44.5% Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: White Oak Drive & Orchard Road



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ		7	ሻሻ	1	7	ሻሻ	^	7	ሻሻ	^	7
Traffic Volume (vph)	34	157	94	149	76	15	56	641	112	36	426	5
Future Volume (vph)	34	157	94	149	76	15	56	641	112	36	426	5
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	265		200	240		245	250		250
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	185			235			235			240		
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3273	1980	1538	3400	1869	1615	3303	3725	1495	3400	3619	808
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3273	1980	1538	3400	1869	1615	3303	3725	1495	3400	3619	808
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103			55			123			55
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		597			2321			1682			1100	
Travel Time (s)		9.0			35.2			22.9			15.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	1%	5%	3%	7%	0%	6%	2%	8%	3%	5%	100%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	173	103	164	84	16	62	704	123	40	468	5
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	7.5	14.0	7.5	7.5	14.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5
Total Split (s)	18.0	26.0	20.0	18.0	26.0	17.0	20.0	69.0	18.0	17.0	66.0	18.0
Total Split (%)	13.8%	20.0%	15.4%	13.8%	20.0%	13.1%	15.4%	53.1%	13.8%	13.1%	50.8%	13.8%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0
All-Red Time (s)	0.5	1.5	0.5	0.5	1.5	0.5	0.5	1.5	0.5	0.5	1.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	6.4	17.0	30.3	11.1	23.3	35.8	7.3	78.1	95.2	6.5	75.6	88.0
Actuated g/C Ratio	0.05	0.13	0.23	0.09	0.18	0.28	0.06	0.60	0.73	0.05	0.58	0.68

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.23	0.67	0.24	0.57	0.25	0.03	0.33	0.31	0.11	0.24	0.22	0.01
Control Delay	62.3	66.2	7.8	64.5	47.1	0.1	63.3	14.7	1.4	61.1	14.3	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.3	66.2	7.8	64.5	47.1	0.1	63.3	14.7	1.4	61.1	14.3	0.4
LOS	Е	Е	Α	Е	D	Α	Е	В	Α	Ε	В	Α
Approach Delay		46.5			55.0			16.2			17.9	
Approach LOS		D			Е			В			В	
Queue Length 50th (ft)	15	141	0	69	62	0	26	151	0	17	97	0
Queue Length 95th (ft)	34	209	43	105	105	0	50	230	20	38	152	m1
Internal Link Dist (ft)		517			2241			1602			1020	
Turn Bay Length (ft)	200			265		200	240		245	250		250
Base Capacity (vph)	365	312	538	379	338	569	419	2238	1163	353	2104	611
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.55	0.19	0.43	0.25	0.03	0.15	0.31	0.11	0.11	0.22	0.01

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

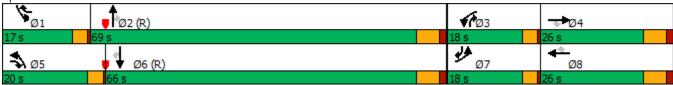
Maximum v/c Ratio: 0.67

Intersection Signal Delay: 26.6 Intersection Capacity Utilization 48.9% ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 1: Orchard Road & Oak Street



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	† †	7	*	^	7	ሻ	1>		ሻ	1>	
Traffic Volume (vph)	9	635	46	26	372	25	55	26	61	44	45	14
Future Volume (vph)	9	635	46	26	372	25	55	26	61	44	45	14
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	125		125	125		125	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	200			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.895			0.965	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3689	1509	1805	3619	1482	1671	1680	0	1805	1674	0
Flt Permitted	0.490			0.333			0.710			0.689		
Satd. Flow (perm)	931	3689	1509	633	3619	1482	1249	1680	0	1309	1674	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			117		74			17	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		2475			2166			268			249	
Travel Time (s)		33.8			29.5			7.3			6.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	7%	0%	5%	9%	8%	4%	0%	0%	10%	8%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	774	56	32	454	30	67	106	0	54	72	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	7.0	21.5	21.5	7.0	21.5	21.5	14.0	14.0		14.0	14.0	
Total Split (s)	11.0	35.0	35.0	11.0	35.0	35.0	19.0	19.0		19.0	19.0	
Total Split (%)	16.9%	53.8%	53.8%	16.9%	53.8%	53.8%	29.2%	29.2%		29.2%	29.2%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.5	6.5	4.0	6.5	6.5	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Act Effct Green (s)	46.2	42.7	42.7	47.4	44.8	44.8	9.4	9.4		9.4	9.4	
Actuated g/C Ratio	0.71	0.66	0.66	0.73	0.69	0.69	0.14	0.14		0.14	0.14	

2: White Oak Drive & Orchard Road

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.01	0.32	0.05	0.06	0.18	0.03	0.37	0.35		0.29	0.28	
Control Delay	5.0	11.8	4.0	3.9	6.1	0.0	30.3	13.3		27.7	22.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	5.0	11.8	4.0	3.9	6.1	0.0	30.3	13.3		27.7	22.0	
LOS	А	В	Α	Α	Α	Α	С	В		С	С	
Approach Delay		11.2			5.7			19.9			24.4	
Approach LOS		В			Α			В			С	
Queue Length 50th (ft)	2	130	1	3	30	0	24	11		19	20	
Queue Length 95th (ft)	6	270	27	10	75	0	49	40		41	44	
Internal Link Dist (ft)		2395			2086			188			169	
Turn Bay Length (ft)	125		125	125		125						
Base Capacity (vph)	762	2423	1031	588	2496	1058	249	395		261	348	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.01	0.32	0.05	0.05	0.18	0.03	0.27	0.27		0.21	0.21	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 56 (86%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 11.4 Intersection Capacity Utilization 41.7% Intersection LOS: B
ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: White Oak Drive & Orchard Road



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ		7	ሻሻ	^	7	ሻሻ	^	7	ሻሻ	^	7
Traffic Volume (vph)	20	115	44	187	122	23	172	677	221	87	695	5
Future Volume (vph)	20	115	44	187	122	23	172	677	221	87	695	5
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	265		200	240		245	250		250
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	185			235			235			240		
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3502	2000	1568	3433	1980	1615	3467	3725	1599	3502	3725	1615
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3502	2000	1568	3433	1980	1615	3467	3725	1599	3502	3725	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			84			84			230			113
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		597			2321			1682			1100	
Travel Time (s)		9.0			35.2			22.9			15.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	3%	2%	1%	0%	1%	2%	1%	0%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	120	46	195	127	24	179	705	230	91	724	5
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	7.5	14.0	7.5	7.5	14.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5
Total Split (s)	17.0	23.0	23.0	21.0	27.0	18.0	23.0	68.0	21.0	18.0	63.0	17.0
Total Split (%)	13.1%	17.7%	17.7%	16.2%	20.8%	13.8%	17.7%	52.3%	16.2%	13.8%	48.5%	13.1%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0
All-Red Time (s)	0.5	1.5	0.5	0.5	1.5	0.5	0.5	1.5	0.5	0.5	1.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	5.8	13.6	31.1	12.2	23.5	37.7	11.6	76.9	95.2	8.3	73.6	85.4
Actuated g/C Ratio	0.04	0.10	0.24	0.09	0.18	0.29	0.09	0.59	0.73	0.06	0.57	0.66

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.14	0.57	0.10	0.61	0.36	0.05	0.58	0.32	0.19	0.41	0.34	0.00
Control Delay	61.2	65.8	1.6	64.3	49.4	0.2	64.3	14.9	1.2	58.2	14.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.2	65.8	1.6	64.3	49.4	0.2	64.3	14.9	1.2	58.2	14.7	0.0
LOS	Е	Е	Α	Ε	D	Α	Ε	В	Α	Е	В	Α
Approach Delay		49.5			54.4			20.0			19.4	
Approach LOS		D			D			В			В	
Queue Length 50th (ft)	8	98	0	82	98	0	75	149	0	38	166	0
Queue Length 95th (ft)	23	158	7	120	152	0	112	228	25	69	207	m0
Internal Link Dist (ft)		517			2241			1602			1020	
Turn Bay Length (ft)	200			265		200	240		245	250		250
Base Capacity (vph)	363	265	530	462	360	601	520	2204	1287	390	2110	1188
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.45	0.09	0.42	0.35	0.04	0.34	0.32	0.18	0.23	0.34	0.00

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 125 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 26.9
Intersection Capacity Utilization 48.5%

Intersection LOS: C
ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 1: Orchard Road & Oak Street



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	† †	7	*	† †	7	ሻ	f)		ሻ	f	
Traffic Volume (vph)	34	672	13	51	787	43	15	14	30	37	20	7
Future Volume (vph)	34	672	13	51	787	43	15	14	30	37	20	7
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	125		125	125		125	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	200			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.898			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3725	1615	1805	3725	1615	1687	1706	0	1805	1828	0
Flt Permitted	0.340			0.368			0.741			0.741		
Satd. Flow (perm)	646	3725	1615	699	3725	1615	1316	1706	0	1408	1828	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			117		32			7	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		2475			2166			268			249	
Travel Time (s)		33.8			29.5			7.3			6.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	7%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	707	14	54	828	45	16	47	0	39	28	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	7.0	21.5	21.5	7.0	21.5	21.5	14.0	14.0		14.0	14.0	
Total Split (s)	11.0	35.0	35.0	11.0	35.0	35.0	19.0	19.0		19.0	19.0	
Total Split (%)	16.9%	53.8%	53.8%	16.9%	53.8%	53.8%	29.2%	29.2%		29.2%	29.2%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.5	6.5	4.0	6.5	6.5	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?												
	Yes	Yes	Yes	Yes	Yes	res						
Recall Mode	Yes None	Yes C-Min	Yes C-Min	Yes None	Yes C-Min	Yes C-Min	None	None		None	None	
Recall Mode Act Effct Green (s)	Yes None 49.4	Yes C-Min 45.8	Yes C-Min 45.8	None 50.6	C-Min 48.0	C-Min 48.0	None 7.8	None 7.8		None 7.9	None 7.9	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.06	0.27	0.01	0.08	0.30	0.04	0.10	0.20		0.23	0.12	
Control Delay	3.8	10.7	8.0	3.1	6.6	0.0	25.8	15.2		28.4	21.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	3.8	10.7	8.0	3.1	6.6	0.0	25.8	15.2		28.4	21.3	
LOS	А	В	Α	Α	Α	Α	С	В		С	С	
Approach Delay		10.1			6.1			17.9			25.4	
Approach LOS		В			Α			В			С	
Queue Length 50th (ft)	4	118	0	5	55	0	6	5		14	8	
Queue Length 95th (ft)	12	291	4	14	149	0	21	31		38	27	
Internal Link Dist (ft)		2395			2086			188			169	
Turn Bay Length (ft)	125		125	125		125						
Base Capacity (vph)	621	2627	1173	664	2749	1222	263	366		281	371	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.06	0.27	0.01	0.08	0.30	0.04	0.06	0.13		0.14	0.08	

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 2 (3%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.30

Intersection Signal Delay: 8.9 Intersection LOS: A Intersection Capacity Utilization 46.5% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: White Oak Drive & Orchard Road



Part		۶	→	•	•	+	•	•	†	<i>></i>	/	+	-√
Figure F	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)		75	*	#	7575	*	#	7575	44	7	7575	44	
Future Volume (vph) 34 157 70 149 76 190 38 668 112 48 482 5 684 Future (vphp) 1900 2000 190													
Lane Width (file)	· · · ·												
Strate Length (ft)													
Storage Length (ft)													
Storage Lanes	, ,	200		0	265		200	240		245	250		250
Taper Length (ft)													
Real Bulli Factor 1,00 1											240		
Ped Bike Factor Fit			1.00	1.00		1.00	1.00		0.95	1.00		0.95	1.00
Filt Protected 0,950 0,850 0,850 0,950 0													
Fit Protected				0.850			0.850			0.850			0.850
Sald. Flow (prot) 3273 1980 1538 3400 1669 1615 3303 3725 1495 3400 3619 808 Fli Permitted 0.950		0.950			0.950			0.950			0.950		
Fit Permitted			1980	1538		1869	1615	3303	3725	1495		3619	808
Satida Flow (perm) 3273 1980 1538 3400 1869 1615 3303 3725 1495 3400 3619 808 Right Turn on Red													
Page			1980	1538		1869	1615		3725	1495		3619	808
Said. Flow (RTOR)													
Link Speed (mph)													
Travel Time (s) 9.0 9.0 35.2 22.9 15.0			45			45			50			50	
Travel Time (s)													
Confil Peds (#/hr)	` ,												
Confile Bikes (#/hr) Peak Hour Factor 0.91 0.90 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.91													
Peak Hour Factor 0.91 0.	, ,												
Growth Factor 100%		0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)													
Bus Blockages (#/hr)													
Parking (#/hr)													
Mid-Block Traffic (%) 0% 0% 0% 0% 0% 0% 0% Shared Lane Traffic (%) Cancer Traffic (%) Can													
Shared Lane Traffic (%) Lane Group Flow (vph) 37 173 77 164 84 21 42 734 123 53 530 5 Turn Type Prot NA pm+ov Prot NA <td></td> <td></td> <td>0%</td> <td></td> <td></td> <td>0%</td> <td></td> <td></td> <td>0%</td> <td></td> <td></td> <td>0%</td> <td></td>			0%			0%			0%			0%	
Lane Group Flow (vph) 37 173 77 164 84 21 42 734 123 53 530 5 Turn Type Prot NA pm+ov Prot NA													
Turn Type Prot NA pm+ov Prot NA	` ,	37	173	77	164	84	21	42	734	123	53	530	5
Protected Phases 7 4 5 3 8 1 5 2 3 1 6 7 Permitted Phases 7 4 5 3 8 1 5 2 3 1 6 7 Switch Phase Switch Phase Minimum Initial (s) 3.0 8.0 3.0 8.0 3.0													
Permitted Phases 7							•						•
Detector Phase 7 4 5 3 8 1 5 2 3 1 6 7 Switch Phase Minimum Initial (s) 3.0 8.0 3.0 8.0 3.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5													6
Switch Phase Minimum Initial (s) 3.0 8.0 3.0 8.0 3.0		7	4		3	8		5	2		1	6	
Minimum Initial (s) 3.0 8.0 3.0 3.0 8.0 3.0 3.0 15.0 3.0 15.0 3.0 Minimum Split (s) 7.5 14.0 7.5 7.5 14.0 7.5 7.5 21.0 7.5 7.5 21.0 7.5 Total Split (s) 18.0 26.0 20.0 18.0 26.0 17.0 20.0 69.0 18.0 17.0 66.0 18.0 Total Split (%) 13.8% 20.0% 15.4% 13.1% 15.4% 53.1% 13.8% 13.1% 50.8% 13.8% Yellow Time (s) 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5		-	•						_		-		-
Minimum Split (s) 7.5 14.0 7.5 7.5 14.0 7.5 7.5 21.0 7.5 21.0 7.5 Total Split (s) 18.0 26.0 20.0 18.0 26.0 17.0 20.0 69.0 18.0 17.0 66.0 18.0 Total Split (%) 13.8% 20.0% 15.4% 13.8% 20.0% 13.1% 15.4% 53.1% 13.8% 13.1% 50.8% 13.8% Yellow Time (s) 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 <td></td> <td>3.0</td> <td>8.0</td> <td>3.0</td> <td>3.0</td> <td>8.0</td> <td>3.0</td> <td>3.0</td> <td>15.0</td> <td>3.0</td> <td>3.0</td> <td>15.0</td> <td>3.0</td>		3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Total Split (s) 18.0 26.0 20.0 18.0 26.0 17.0 20.0 69.0 18.0 17.0 66.0 18.0 Total Split (%) 13.8% 20.0% 15.4% 13.1% 20.0% 13.1% 15.4% 53.1% 13.8% 13.1% 50.8% 13.8% Yellow Time (s) 3.0 4.5 3.0 3.0 4.	` ,												
Total Split (%) 13.8% 20.0% 15.4% 13.8% 20.0% 13.1% 15.4% 53.1% 13.8% 13.1% 50.8% 13.8% Yellow Time (s) 3.0 4.5 3.0 3.0 4.5													
Yellow Time (s) 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 3.0 4.5 3.0 All-Red Time (s) 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.0<													
All-Red Time (s) 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.5 1.5 0.5 0.0 <td></td>													
Lost Time Adjust (s) 0.0													
Total Lost Time (s) 3.5 6.0 7.2 7.2 7.2 7.2 7.2													
Lead/LagLeadLagLeadLagLeadLagLeadLagLeadLagLeadLeadLagLeadLeadLagLeadLeadLagLeadLeadLagLeadLeadLagLeadLeadLagLeadLeadLeadLeadLeadLeadLeadLeadLeadLeadLeadLeadLeadLeadLea	, , ,												
Lead-Lag Optimize?Yes <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>													
Recall Mode None None None None None None None C-Min None C-Min None Act Effct Green (s) 6.4 17.0 29.6 11.1 23.3 36.3 6.6 77.7 94.8 6.9 78.0 90.4													
Act Effct Green (s) 6.4 17.0 29.6 11.1 23.3 36.3 6.6 77.7 94.8 6.9 78.0 90.4													
, ,													
Actuated g/C Ratio 0.05 0.13 0.23 0.09 0.18 0.28 0.05 0.60 0.73 0.05 0.60 0.70	Actuated g/C Ratio	0.05	0.13	0.23	0.09	0.18	0.28	0.05	0.60	0.73	0.05	0.60	0.70

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.23	0.67	0.19	0.57	0.25	0.04	0.25	0.33	0.11	0.29	0.24	0.01
Control Delay	62.3	66.2	8.7	64.5	47.1	0.2	62.4	15.1	1.5	62.0	13.9	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.3	66.2	8.7	64.5	47.1	0.2	62.4	15.1	1.5	62.0	13.9	0.2
LOS	Е	Е	Α	Ε	D	Α	Е	В	Α	Е	В	Α
Approach Delay		50.3			54.0			15.5			18.1	
Approach LOS		D			D			В			В	
Queue Length 50th (ft)	15	141	0	69	62	0	18	160	0	22	111	0
Queue Length 95th (ft)	34	209	38	105	105	0	37	244	21	45	164	m0
Internal Link Dist (ft)		517			2241			1602			1020	
Turn Bay Length (ft)	200			265		200	240		245	250		250
Base Capacity (vph)	365	312	520	379	338	569	419	2226	1159	353	2171	625
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.55	0.15	0.43	0.25	0.04	0.10	0.33	0.11	0.15	0.24	0.01

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

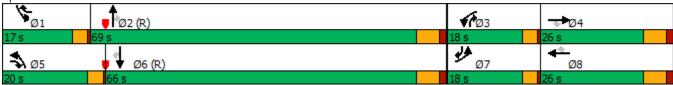
Intersection Signal Delay: 26.2
Intersection Capacity Utilization 46.0%

Intersection LOS: C
ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 1: Orchard Road & Oak Street



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	^	7	*	^	7	ሻ	1>		ሻ	1>	
Traffic Volume (vph)	9	659	46	26	379	25	55	26	61	44	45	14
Future Volume (vph)	9	659	46	26	379	25	55	26	61	44	45	14
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	125		125	125		125	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	200			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.895			0.965	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3689	1509	1805	3619	1482	1671	1680	0	1805	1674	0
Flt Permitted	0.486			0.320			0.710			0.689		
Satd. Flow (perm)	923	3689	1509	608	3619	1482	1249	1680	0	1309	1674	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			117		74			17	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		2475			2166			268			249	
Travel Time (s)		33.8			29.5			7.3			6.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	7%	0%	5%	9%	8%	4%	0%	0%	10%	8%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	804	56	32	462	30	67	106	0	54	72	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	7.0	21.5	21.5	7.0	21.5	21.5	14.0	14.0		14.0	14.0	
Total Split (s)	11.0	35.0	35.0	11.0	35.0	35.0	19.0	19.0		19.0	19.0	
Total Split (%)	16.9%	53.8%	53.8%	16.9%	53.8%	53.8%	29.2%	29.2%		29.2%	29.2%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.5	6.5	4.0	6.5	6.5	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Act Effct Green (s)	46.2	42.7	42.7	47.4	44.8	44.8	9.4	9.4		9.4	9.4	
Actuated g/C Ratio	0.71	0.66	0.66	0.73	0.69	0.69	0.14	0.14		0.14	0.14	

2: White Oak Drive & Orchard Road

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.02	0.33	0.05	0.06	0.19	0.03	0.37	0.35		0.29	0.28	
Control Delay	5.0	12.2	3.7	3.9	6.2	0.0	30.3	13.3		27.7	22.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	5.0	12.2	3.7	3.9	6.2	0.0	30.3	13.3		27.7	22.0	
LOS	А	В	Α	А	Α	Α	С	В		С	С	
Approach Delay		11.5			5.7			19.9			24.4	
Approach LOS		В			Α			В			С	
Queue Length 50th (ft)	2	149	2	3	30	0	24	11		19	20	
Queue Length 95th (ft)	3	268	23	10	76	0	49	40		41	44	
Internal Link Dist (ft)		2395			2086			188			169	
Turn Bay Length (ft)	125		125	125		125						
Base Capacity (vph)	758	2423	1031	572	2496	1058	249	395		261	348	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.01	0.33	0.05	0.06	0.19	0.03	0.27	0.27		0.21	0.21	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 56 (86%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 11.5
Intersection Capacity Utilization 41.7%

Intersection LOS: B
ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: White Oak Drive & Orchard Road



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1/1	1	7	1,1	1	7	1,4	^	7	1,4	^	7
Traffic Volume (vph)	20	115	29	187	122	35	122	760	221	94	729	5
Future Volume (vph)	20	115	29	187	122	35	122	760	221	94	729	5
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	265		200	240		245	250		250
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	185			235			235			240		
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3502	2000	1568	3433	1980	1615	3467	3725	1599	3502	3725	1615
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3502	2000	1568	3433	1980	1615	3467	3725	1599	3502	3725	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			84			84			230			113
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		597			2321			1682			1100	
Travel Time (s)		9.0			35.2			22.9			15.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	3%	2%	1%	0%	1%	2%	1%	0%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	120	30	195	127	36	127	792	230	98	759	5
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	7.5	14.0	7.5	7.5	14.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5
Total Split (s)	17.0	23.0	23.0	21.0	27.0	18.0	23.0	68.0	21.0	18.0	63.0	17.0
Total Split (%)	13.1%	17.7%	17.7%	16.2%	20.8%	13.8%	17.7%	52.3%	16.2%	13.8%	48.5%	13.1%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0
All-Red Time (s)	0.5	1.5	0.5	0.5	1.5	0.5	0.5	1.5	0.5	0.5	1.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	5.8	13.6	29.2	12.2	23.5	38.0	9.6	76.7	94.9	8.5	75.6	87.4
Actuated g/C Ratio	0.04	0.10	0.22	0.09	0.18	0.29	0.07	0.59	0.73	0.07	0.58	0.67

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.14	0.57	0.07	0.61	0.36	0.07	0.50	0.36	0.19	0.43	0.35	0.00
Control Delay	61.2	65.8	0.3	64.3	49.4	0.3	64.2	15.5	1.2	59.3	14.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.2	65.8	0.3	64.3	49.4	0.3	64.2	15.5	1.2	59.3	14.2	0.0
LOS	Е	Е	Α	Ε	D	Α	Е	В	Α	Ε	В	Α
Approach Delay		53.8			52.6			18.0			19.3	
Approach LOS		D			D			В			В	
Queue Length 50th (ft)	8	98	0	82	98	0	54	173	0	42	168	0
Queue Length 95th (ft)	23	158	0	120	152	0	86	263	25	74	217	m0
Internal Link Dist (ft)		517			2241			1602			1020	
Turn Bay Length (ft)	200			265		200	240		245	250		250
Base Capacity (vph)	363	265	530	462	360	601	520	2197	1284	390	2165	1211
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.45	0.06	0.42	0.35	0.06	0.24	0.36	0.18	0.25	0.35	0.00

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 125 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

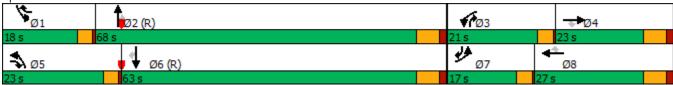
Intersection Signal Delay: 25.7
Intersection Capacity Utilization 48.6%

Intersection LOS: C
ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 1: Orchard Road & Oak Street



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	† †	7	*	^	7	ሻ	1>		ሻ	1>	
Traffic Volume (vph)	34	687	13	51	812	43	15	14	30	37	20	7
Future Volume (vph)	34	687	13	51	812	43	15	14	30	37	20	7
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	125		125	125		125	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	200			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.898			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3725	1615	1805	3725	1615	1687	1706	0	1805	1828	0
Flt Permitted	0.329			0.360			0.741			0.741		
Satd. Flow (perm)	625	3725	1615	684	3725	1615	1316	1706	0	1408	1828	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			117		32			7	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		2475			2166			268			249	
Travel Time (s)		33.8			29.5			7.3			6.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	7%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	723	14	54	855	45	16	47	0	39	28	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	7.0	21.5	21.5	7.0	21.5	21.5	14.0	14.0		14.0	14.0	
Total Split (s)	11.0	35.0	35.0	11.0	35.0	35.0	19.0	19.0		19.0	19.0	
Total Split (%)	16.9%	53.8%	53.8%	16.9%	53.8%	53.8%	29.2%	29.2%		29.2%	29.2%	
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.5	6.5	4.0	6.5	6.5	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Act Effct Green (s)	49.4	45.8	45.8	50.6	48.0	48.0	7.8	7.8		7.9	7.9	
Actuated g/C Ratio	0.76	0.70	0.70	0.78	0.74	0.74	0.12	0.12		0.12	0.12	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.06	0.28	0.01	0.08	0.31	0.04	0.10	0.20		0.23	0.12	
Control Delay	3.8	11.0	0.3	3.1	6.7	0.0	25.8	15.2		28.4	21.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	3.8	11.0	0.3	3.1	6.7	0.0	25.8	15.2		28.4	21.3	
LOS	А	В	Α	Α	А	Α	С	В		С	С	
Approach Delay		10.4			6.2			17.9			25.4	
Approach LOS		В			А			В			С	
Queue Length 50th (ft)	6	139	0	5	57	0	6	5		14	8	
Queue Length 95th (ft)	8	284	m2	14	155	0	21	31		38	27	
Internal Link Dist (ft)		2395			2086			188			169	
Turn Bay Length (ft)	125		125	125		125						
Base Capacity (vph)	607	2627	1173	654	2749	1222	263	366		281	371	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.06	0.28	0.01	0.08	0.31	0.04	0.06	0.13		0.14	0.08	

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 2 (3%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.31 Intersection Signal Delay: 9.1

Intersection LOS: A ICU Level of Service A

Intersection Capacity Utilization 47.1%

Analysis Period (min) 15

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





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		7	î,		7	†	7	7	f)	
Traffic Vol, veh/h	39	13	297	5	25	3	101	193	1	41	343	8
Future Vol, veh/h	39	13	297	5	25	3	101	193	1	41	343	8
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	3	0	2	0	16	0	6	2	0	2	1	0
Mvmt Flow	44	15	334	6	28	3	113	217	1	46	385	9
Number of Lanes	0	1	0	1	1	0	1	1	1	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			1			2			3		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			3			1			2		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	3			2			2			1		
HCM Control Delay	28.3			12.4			15.8			31		
HCM LOS	D			В			С			D		

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2	
Vol Left, %	100%	0%	0%	11%	100%	0%	100%	0%	
Vol Thru, %	0%	100%	0%	4%	0%	89%	0%	98%	
Vol Right, %	0%	0%	100%	85%	0%	11%	0%	2%	
Sign Control	Stop								
Traffic Vol by Lane	101	193	1	349	5	28	41	351	
LT Vol	101	0	0	39	5	0	41	0	
Through Vol	0	193	0	13	0	25	0	343	
RT Vol	0	0	1	297	0	3	0	8	
Lane Flow Rate	113	217	1	392	6	31	46	394	
Geometry Grp	8	8	8	8	8	8	8	8	
Degree of Util (X)	0.259	0.46	0.002	0.757	0.014	0.078	0.1	0.799	
Departure Headway (Hd)	8.216	7.633	6.879	6.946	9.2	8.887	7.844	7.297	
Convergence, Y/N	Yes								
Cap	436	471	518	522	388	401	456	497	
Service Time	5.984	5.4	4.646	4.7	6.992	6.679	5.607	5.06	
HCM Lane V/C Ratio	0.259	0.461	0.002	0.751	0.015	0.077	0.101	0.793	
HCM Control Delay	13.9	16.8	9.7	28.3	12.1	12.4	11.5	33.3	
HCM Lane LOS	В	С	Α	D	В	В	В	D	
HCM 95th-tile Q	1	2.4	0	6.6	0	0.3	0.3	7.4	

Intersection						
Int Delay, s/veh	0.6					
		MDD	NET	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	, A	4=	^	0.0		4
Traffic Vol, veh/h	7	15	215	20	23	385
Future Vol, veh/h	7	15	215	20	23	385
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	7	1	5	4	1
Mvmt Flow	9	19	272	25	29	487
Major/Minor N	linor1	Λ.	Noior1		Major	
	/linor1		/lajor1		Major2	
Conflicting Flow All	830	285	0	0	297	0
Stage 1	285	-	-	-	-	-
Stage 2	545	-	-	-	-	-
Critical Hdwy	6.4	6.27	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy		3.363	-	-	2.236	-
Pot Cap-1 Maneuver	343	742	-	-	1253	-
Stage 1	768	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	332	742	-	-	1253	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	768	-	_	_	-	-
Stage 2	566	-	_	_	-	_
5.ago 2	500					
A	MD		ND		C.D.	
Approach	WB		NB		SB	
HCM Control Delay, s	12.1		0		0.4	
HCM LOS	В					
Minor Lane/Major Mvm	t	NBT	NRRV	WBLn1	SBL	SBT
		NDT				301
Capacity (veh/h)			-	000	1253	-
HCM Control Polov (c)		-		0.052		-
HCM Control Delay (s)		-	-		7.9	0
HCM Lane LOS		-	-	В	A	Α
HCM 95th %tile Q(veh)		-	-	0.2	0.1	-

Intersection						
Int Delay, s/veh	0.5					
		LDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	0		0	^	^	7
Traffic Vol, veh/h	0	52	0	630	375	29
Future Vol, veh/h	0	52	0	630	375	29
Conflicting Peds, #/hr	0	0	0	0	0	_ 0
	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	215
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	3	5	0
Mvmt Flow	0	55	0	663	395	31
Major/Minor Mi	nor2	N	/lajor1	Λ	/lajor2	
Conflicting Flow All	-	198	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	810	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	810	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	_	-	-
J. 1. J.						
			NE		0.0	
Approach	EB		NB		SB	
HCM Control Delay, s	9.8		0		0	
HCM LOS	Α					
Minor Lane/Major Mvmt		NBT E	RI n1	SBT		
		INDI L	810	- 100		
Capacity (veh/h) HCM Lane V/C Ratio						
		-	0.068	-		
HCM Long LOS		-	9.8	-		
HCM CERP O(4112 O(4212)		-	A	-		
HCM 95th %tile Q(veh)		-	0.2	-		

Intersection												
Intersection Delay, s/veh	20.8											
Intersection LOS	С											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		7	ĵ.		Ţ	†	7	7	f)	
Traffic Vol, veh/h	22	11	129	2	42	10	295	417	1	20	263	19
Future Vol, veh/h	22	11	129	2	42	10	295	417	1	20	263	19
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	23	11	133	2	43	10	304	430	1	21	271	20
Number of Lanes	0	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	13.9	12	24	18.7
HCM LOS	В	В	С	С

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2	
Vol Left, %	100%	0%	0%	14%	100%	0%	100%	0%	
Vol Thru, %	0%	100%	0%	7%	0%	81%	0%	93%	
Vol Right, %	0%	0%	100%	80%	0%	19%	0%	7%	
Sign Control	Stop								
Traffic Vol by Lane	295	417	1	162	2	52	20	282	
LT Vol	295	0	0	22	2	0	20	0	
Through Vol	0	417	0	11	0	42	0	263	
RT Vol	0	0	1	129	0	10	0	19	
Lane Flow Rate	304	430	1	167	2	54	21	291	
Geometry Grp	8	8	8	8	8	8	8	8	
Degree of Util (X)	0.587	0.771	0.002	0.341	0.005	0.121	0.044	0.578	
Departure Headway (Hd)	6.946	6.456	5.729	7.358	8.803	8.154	7.7	7.16	
Convergence, Y/N	Yes								
Cap	523	563	628	489	407	440	466	503	
Service Time	4.646	4.156	3.429	5.101	6.556	5.906	5.439	4.9	
HCM Lane V/C Ratio	0.581	0.764	0.002	0.342	0.005	0.123	0.045	0.579	
HCM Control Delay	19	27.6	8.4	13.9	11.6	12	10.8	19.3	
HCM Lane LOS	С	D	Α	В	В	В	В	С	
HCM 95th-tile Q	3.7	7	0	1.5	0	0.4	0.1	3.6	

Intersection						
Int Delay, s/veh	0.6					
		14/55		NES	05:	05=
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥		₽			र्स
Traffic Vol, veh/h	8	18	440	9	16	294
Future Vol, veh/h	8	18	440	9	16	294
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	8	19	454	9	16	303
				-		
	1inor1		/lajor1		Major2	
Conflicting Flow All	794	459	0	0	463	0
Stage 1	459	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	_	2.2	_
Pot Cap-1 Maneuver	360	606	_	-	1109	_
Stage 1	641	-	_	_	-	_
Stage 2	729	_	_	_	_	_
Platoon blocked, %	127					
	354	606		<u>-</u>	1109	-
Mov Cap-1 Maneuver				-		
Mov Cap-2 Maneuver	354	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	12.7		0		0.4	
HCM LOS	12.7 B		U		0.4	
TICIVI LUS	D					
Minor Lane/Major Mvmt		NBT	NBRV	WBLn1	SBL	SBT
Capacity (veh/h)			_		1109	_
HCM Lane V/C Ratio		_			0.015	_
HCM Control Delay (s)					8.3	0
HCM Lane LOS			-	12.7 B	0.3 A	A
HCM 95th %tile Q(veh)		-		0.2	0	
HOW YOUR WINE U(VEN)		-	-	0.2	U	-

Intersection						
Int Delay, s/veh	0.2					
		ED5	ND	NOT	ODT	000
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		7		^	^	7
Traffic Vol, veh/h	0	29	0	657	690	49
Future Vol, veh/h	0	29	0	657	690	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	215
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	30	0	670	704	50
	· ·			0,0	, , ,	
	/linor2		/lajor1		/lajor2	
Conflicting Flow All	-	352	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	_	3.3	-	_	_	_
Pot Cap-1 Maneuver	0	650	0	-	-	0
Stage 1	0	-	0	_	-	0
Stage 2	0	_	0	_	_	0
Platoon blocked, %	J			_	_	Ū
Mov Cap-1 Maneuver	_	650	_	_	_	_
Mov Cap-1 Maneuver	_	030				
Stage 1	-	-	_	-	-	-
	-	-	-	•	•	-
Stage 2	-	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	10.8		0		0	
HCM LOS	В					
110101 200						
Minor Lane/Major Mvm	i	NBT E	BLn1	SBT		
Capacity (veh/h)		-	650	-		
HCM Lane V/C Ratio		-	0.046	-		
HCM Control Delay (s)		-	10.8	-		
HCM Lane LOS		-	В	-		
HCM 95th %tile Q(veh)		-	0.1	-		
/ 54. / 54. 64.			3.1			

Intersection	
Intersection Delay, s/veh	37.2
Intersection LOS	57.2 F
intersection LOS	L

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ሻ	ĵ»		ሻ	†	7	ሻ	ĵ.	
Traffic Vol, veh/h	43	14	325	5	27	3	111	211	1	45	376	9
Future Vol, veh/h	43	14	325	5	27	3	111	211	1	45	376	9
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	3	0	2	0	16	0	6	2	0	2	1	0
Mvmt Flow	48	16	365	6	30	3	125	237	1	51	422	10
Number of Lanes	0	1	0	1	1	0	1	1	1	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			1			2			3		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			3			1			2		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	3			2			2			1		
HCM Control Delay	42.5			13.2			18.4			48.7		
HCM LOS	Е			В			С			Е		

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2	
Vol Left, %	100%	0%	0%	11%	100%	0%	100%	0%	
Vol Thru, %	0%	100%	0%	4%	0%	90%	0%	98%	
Vol Right, %	0%	0%	100%	85%	0%	10%	0%	2%	
Sign Control	Stop								
Traffic Vol by Lane	111	211	1	382	5	30	45	385	
LT Vol	111	0	0	43	5	0	45	0	
Through Vol	0	211	0	14	0	27	0	376	
RT Vol	0	0	1	325	0	3	0	9	
Lane Flow Rate	125	237	1	429	6	34	51	433	
Geometry Grp	8	8	8	8	8	8	8	8	
Degree of Util (X)	0.304	0.539	0.002	0.872	0.016	0.09	0.116	0.925	
Departure Headway (Hd)	8.771	8.185	7.327	7.316	9.966	9.656	8.349	7.798	
Convergence, Y/N	Yes								
Cap	413	443	485	494	361	372	432	467	
Service Time	6.471	5.885	5.127	5.112	7.684	7.374	6.049	5.498	
HCM Lane V/C Ratio	0.303	0.535	0.002	0.868	0.017	0.091	0.118	0.927	
HCM Control Delay	15.3	20	10.1	42.5	12.8	13.3	12.1	53	
HCM Lane LOS	С	С	В	Е	В	В	В	F	
HCM 95th-tile Q	1.3	3.1	0	9.3	0	0.3	0.4	10.7	

Intersection						
Int Delay, s/veh	0.7					
		WDD	NDT	NDD	CDI	CDT
	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥	1/	}	22	٥٢	4
Traffic Vol, veh/h	8	16	235	22	25	421
Future Vol, veh/h	8	16	235	22	25	421
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	7	1	5	4	1
Mvmt Flow	10	20	297	28	32	533
Major/Minor M	linor1	N	Major1	N	Major2	
Conflicting Flow All	908	311	0	0	325	0
Stage 1	311	-	-	-	-	-
Stage 2	597	_	_	_	_	_
Critical Hdwy	6.4	6.27	_	_	4.14	_
Critical Hdwy Stg 1	5.4	0.27	_		4.14	
Critical Hdwy Stg 2	5.4	-	_		_	
Follow-up Hdwy		3.363	_		2.236	_
Pot Cap-1 Maneuver	308	718	-	-	1224	-
Stage 1	748	710	-	-	1224	
Stage 2	554	-	-	-	-	-
Platoon blocked, %	334	-	-	-	-	_
	297	718	-	-	1224	-
Mov Cap-1 Maneuver	297		-	-	1224	-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	534	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	12.9		0		0.4	
HCM LOS	В					
N.C. and an a /N.C. an N.C. work		NDT	MDDM	VDI 1	CDI	CDT
Minor Lane/Major Mvmt		NBT		VBLn1	SBL	SBT
Capacity (veh/h)		-	-		1224	-
HCM Lane V/C Ratio		-		0.062		-
HCM Control Delay (s)		-	-		8	0
110141						
HCM Lane LOS HCM 95th %tile Q(veh)		-	-	B 0.2	0.1	A -

Intersection						
Int Delay, s/veh	0.5					
		EDD	NDI	NDT	CDT	CDD
	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	0	7	0	^	^	7
Traffic Vol, veh/h	0	57	0	690	411	32
Future Vol, veh/h	0	57	0	690	411	32
Conflicting Peds, #/hr	0	0	0	0	0	0
	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	215
Veh in Median Storage, #	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	3	5	0
Mvmt Flow	0	60	0	726	433	34
Major/Minor MA	nor	N.	laior1	N	Jaior?	
	nor2		/lajor1		/lajor2	
Conflicting Flow All	-	217	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	787	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	787	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	_	-	-
Stage 2	_	_	_	_	_	_
Approach	EB		NB		SB	
HCM Control Delay, s	10		0		0	
HCM LOS	В					
Minor Lane/Major Mvmt		NBT E	RI n1	SBT		
		וטוו ב		JDT		
Capacity (veh/h)		-	787	-		
HCM Carted Dates (2)		-	0.076	-		
		-	10	-		
HCM Control Delay (s)						
HCM Control Delay (s) HCM Lane LOS HCM 95th %tile Q(veh)		-	B 0.2	-		

Intersection												
Intersection Delay, s/veh	27.4											
Intersection LOS	D											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		7	ĵ.		7	†	7	7	ĵ.	
Traffic Vol, veh/h	24	12	141	2	46	11	323	457	1	22	288	21
Future Vol, veh/h	24	12	141	2	46	11	323	457	1	22	288	21

Lane Configurations		4			î.		ሻ	- ↑	7	ሻ	₽	
Traffic Vol, veh/h	24	12	141	2	46	11	323	457	1	22	288	21
Future Vol, veh/h	24	12	141	2	46	11	323	457	1	22	288	21
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	25	12	145	2	47	11	333	471	1	23	297	22
Number of Lanes	0	1	0	1	1	0	1	1	1	1	1	0
Approach	EB			WB			NB			SB		

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	15.4	12.8	33.1	23
HCM LOS	С	В	D	С

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2	
Vol Left, %	100%	0%	0%	14%	100%	0%	100%	0%	
Vol Thru, %	0%	100%	0%	7%	0%	81%	0%	93%	
Vol Right, %	0%	0%	100%	80%	0%	19%	0%	7%	
Sign Control	Stop								
Traffic Vol by Lane	323	457	1	177	2	57	22	309	
LT Vol	323	0	0	24	2	0	22	0	
Through Vol	0	457	0	12	0	46	0	288	
RT Vol	0	0	1	141	0	11	0	21	
Lane Flow Rate	333	471	1	182	2	59	23	319	
Geometry Grp	8	8	8	8	8	8	8	8	
Degree of Util (X)	0.665	0.877	0.002	0.391	0.005	0.14	0.051	0.662	
Departure Headway (Hd)	7.19	6.699	5.97	7.716	9.255	8.603	8.026	7.485	
Convergence, Y/N	Yes								
Cap	503	542	599	467	386	416	446	484	
Service Time	4.931	4.44	3.711	5.466	7.019	6.366	5.772	5.23	
HCM Lane V/C Ratio	0.662	0.869	0.002	0.39	0.005	0.142	0.052	0.659	
HCM Control Delay	23.1	40.3	8.7	15.4	12.1	12.8	11.2	23.8	
HCM Lane LOS	С	Е	Α	С	В	В	В	С	
HCM 95th-tile Q	4.8	9.8	0	1.8	0	0.5	0.2	4.8	

Intersection						
Int Delay, s/veh	0.6					
		MDD	NET	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥		₽			4
Traffic Vol, veh/h	9	20	482	10	18	322
Future Vol, veh/h	9	20	482	10	18	322
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	9	21	497	10	19	332
N A = ' = 1/N A ! = 1	1	_	1-1	_	4-1	
	/linor1		/lajor1		Major2	
Conflicting Flow All	872	502	0	0	507	0
Stage 1	502	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	324	573	-	-	1068	-
Stage 1	612	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	317	573	_	_	1068	-
Mov Cap-2 Maneuver	317	-	_	_	-	_
Stage 1	612	_	_	-	-	_
Stage 2	688	_	_	_	_	
Jiaye z	000			-	_	-
Approach	WB		NB		SB	
HCM Control Delay, s	13.4		0		0.4	
HCM LOS	В					
Minor Lanc/Major Mum	+	NIDT	NDD	M/DI n1	CDI	CDT
Minor Lane/Major Mvm	t e	NBT		VBLn1	SBL	SBT
Capacity (veh/h)		-	-		1068	-
HCM Lane V/C Ratio		-		0.065		-
HCM Control Delay (s)		-	-		8.4	0
HCM Lane LOS		-	-	В	Α	Α
HCM 95th %tile Q(veh)		-	-	0.2	0.1	-

Intersection						
Int Delay, s/veh	0.2					
		EDD.	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		7		^	^	7
Traffic Vol, veh/h	0	32	0	719	756	54
Future Vol, veh/h	0	32	0	719	756	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	215
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	33	0	734	771	55
Major/Minor M	linor2		Noior1		/lajor2	
			/lajor1			
Conflicting Flow All	-	386	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	618	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	618	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
J The state of the						
Annroach	ED		ND		CD	
Approach	EB		NB		SB	
HCM Control Delay, s	11.2		0		0	
HCM LOS	В					
Minor Lane/Major Mvmt		NBT E	EBLn1	SBT		
Capacity (veh/h)			618			
HCM Lane V/C Ratio			0.053	-		
HCM Control Delay (s)		_	11.2			
HCM Lane LOS		_	11.2 B	-		
HCM 95th %tile Q(veh)		-	0.2			
HOW FOUT MILE Q(VEH)		-	0.2	-		

Intersection LOS	D											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ň	ĵ.		7	†	7	ň	f)	
Traffic Vol, veh/h	45	14	325	5	27	3	111	193	1	23	352	12
Future Vol, veh/h	45	14	325	5	27	3	111	193	1	23	352	12
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	3	0	2	0	16	0	6	2	0	2	1	0
Mvmt Flow	51	16	365	6	30	3	125	217	1	26	396	13
Number of Lanes	0	1	0	1	1	0	1	1	1	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			1			2			3		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			3			1			2		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	3			2			2			1		
HCM Control Delay	38.2			12.8			16.6			39.6		
HCM LOS	Е			В			С			Е		

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2	
Vol Left, %	100%	0%	0%	12%	100%	0%	100%	0%	
Vol Thru, %	0%	100%	0%	4%	0%	90%	0%	97%	
Vol Right, %	0%	0%	100%	85%	0%	10%	0%	3%	
Sign Control	Stop								
Traffic Vol by Lane	111	193	1	384	5	30	23	364	
LT Vol	111	0	0	45	5	0	23	0	
Through Vol	0	193	0	14	0	27	0	352	
RT Vol	0	0	1	325	0	3	0	12	
Lane Flow Rate	125	217	1	431	6	34	26	409	
Geometry Grp	8	8	8	8	8	8	8	8	
Degree of Util (X)	0.294	0.475	0.002	0.849	0.015	0.087	0.058	0.858	
Departure Headway (Hd)	8.477	7.892	7.136	7.083	9.624	9.315	8.113	7.556	
Convergence, Y/N	Yes								
Cap	423	455	499	509	374	387	440	479	
Service Time	6.263	5.678	4.921	4.852	7.324	7.015	5.893	5.336	
HCM Lane V/C Ratio	0.296	0.477	0.002	0.847	0.016	0.088	0.059	0.854	
HCM Control Delay	14.8	17.7	9.9	38.2	12.5	12.9	11.4	41.4	
HCM Lane LOS	В	С	Α	Е	В	В	В	Е	
HCM 95th-tile Q	1.2	2.5	0	8.8	0	0.3	0.2	8.8	

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	WBIX	1	HUIK	ODL	4
Traffic Vol, veh/h	8	16	243	22	25	423
Future Vol, veh/h	8	16	243	22	25	423
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	310p -	None		None	-	None
			-	None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	7	1	5	4	1
Mvmt Flow	10	20	308	28	32	535
Major/Minor N	/linor1	Λ	/lajor1		Major2	
Conflicting Flow All	921	322	0	0	336	0
	322					
Stage 1		-	-	-	-	-
Stage 2	599	-	-	-	-	-
Critical Hdwy	6.4	6.27	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy		3.363	-	-	2.236	-
Pot Cap-1 Maneuver	303	707	-	-	1212	-
Stage 1	739	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	291	707	-	-	1212	-
Mov Cap-2 Maneuver	291	-	-	-	-	-
Stage 1	739	-	-	-	-	-
Stage 2	532	_	_	_	-	_
Jugo Z	002					
Approach	WB		NB		SB	
HCM Control Delay, s	13		0		0.4	
HCM LOS	В					
Minor Lanc/Major Mum	+	NIDT	NDD	M/DI n1	CDI	SBT
Minor Lane/Major Mvm	t e	NBT	NRKA	VBLn1	SBL	SRI
Capacity (veh/h)		-	-	479	1212	-
HCM Lane V/C Ratio		-	-	0.063		-
HCM Control Delay (s)		-	-	13	8.1	0
HCM Lane LOS		-	-	В	Α	Α
HCM 95th %tile Q(veh)		-	-	0.2	0.1	-
. ,						

Intersection						
Int Delay, s/veh	0.3					
		EDD	VIDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	0	7	0	^	^	7
Traffic Vol, veh/h	0	35	0	721	501	32
Future Vol, veh/h	0	35	0	721	501	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	215
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	3	5	0
Mvmt Flow	0	37	0	759	527	34
Major/Minor N	linor2	N	/lajor1	١	/lajor2	
Conflicting Flow All	-	264	-	0	-	0
Stage 1	_	-	_	-	_	-
Stage 2	_	_	_	_	_	_
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	0.94	-	_	-	_
Critical Hdwy Stg 2	-		-			
Follow-up Hdwy	-	3.32	-	-	-	-
		734				
Pot Cap-1 Maneuver	0		0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %		70.4		-	-	
Mov Cap-1 Maneuver	-	734	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	10.2		0		0	
HCM LOS	10.2 B		U		U	
HCIVI LUS	Б					
Minor Lane/Major Mvmt	Ì	NBT E	EBLn1	SBT		
Capacity (veh/h)		-	734	-		
HCM Lane V/C Ratio		-	0.05	-		
HCM Control Delay (s)		-	10.2	-		
HCM Lane LOS		_	В	-		
HCM 95th %tile Q(veh)		_	0.2	-		
HOW FOUT FOUT Q(VCH)			0.2			

Intersection							
Int Delay, s/veh	1.3						
		CED	NIEL	NET	CIMT	CIMD	J
Movement Lang Configurations	SEL	SER	NEL	NET	SWT	SWR	
Lane Configurations	\	7	21	^	^	Ť	
Traffic Vol, veh/h	24	90	31	690	441	7	
Future Vol, veh/h	24	90	31	690	441	7	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	75	0	240	-	-	240	
Veh in Median Storage		-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	95	95	95	95	95	95	
Heavy Vehicles, %	0	0	0	2	2	0	
Mvmt Flow	25	95	33	726	464	7	
Major/Minor N	/linor2	N	/lajor1	ı	Major2		
Conflicting Flow All	893	232	471	0	- viajoi 2	0	
Stage 1	464	232	4/1	U	-	-	
	404		-	-	-		
Stage 2	6.8	6.9	4.1			-	
Critical Hdwy				-	-	-	
Critical Hdwy Stg 1	5.8	-	-	-	-	-	
Critical Hdwy Stg 2	5.8	-	-	-	-	-	
Follow-up Hdwy	3.5	3.3	2.2	-	-	-	
Pot Cap-1 Maneuver	285	776	1101	-	-	-	
Stage 1	605	-	-	-	-	-	
Stage 2	630	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	276	776	1101	-	-	-	
Mov Cap-2 Maneuver	276	-	-	-	-	-	
Stage 1	587	-	-	-	-	-	
Stage 2	630	-	-	-	-	-	
Approach	SE		NE		SW		
HCM Control Delay, s	12.2		0.4		0		
HCM LOS	12.2 B		0.4		U		
TIGIVI EUS	D						
Minor Lane/Major Mvm	t	NEL	NET:	SELn1	SELn2	SWT	
Capacity (veh/h)		1101	-	276	776	-	
HCM Lane V/C Ratio		0.03	-	0.092	0.122	-	
HCM Control Delay (s)		8.4	-	19.4	10.3	-	
HCM Lane LOS		Α	_	С	В	-	
HCM 95th %tile Q(veh)		0.1	-	0.3	0.4	-	

Intersection						
Int Delay, s/veh	1					
	•	MDD	NDT	NDD	CD!	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		7	ĵ»			4
Traffic Vol, veh/h	3	26	239	2	48	383
Future Vol, veh/h	3	26	239	2	48	383
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	75	0	-	-	-	-
Veh in Median Storage	e, # O	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	2	0	0	2
Mvmt Flow	3	27	252	2	51	403
WWW.CT IOW	J	_,	202	_	01	100
	Minor1		/lajor1	1	Major2	
Conflicting Flow All	758	253	0	0	254	0
Stage 1	253	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	_	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	_	2.2	_
Pot Cap-1 Maneuver	378	791	_	_	1323	_
Stage 1	794	-	_	_	-	_
Stage 2	610		_	_	_	_
Platoon blocked, %	010					_
Mov Cap-1 Maneuver	359	791	-	_	1323	-
	359		-	-	1323	-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	10.3		0		0.9	
HCM LOS	10.3 B		U		0.7	
TIGIVI LOG	U					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1V	VBLn2	SBL
Capacity (veh/h)			-	359	791	1323
HCM Lane V/C Ratio			_	0.009		
HCM Control Delay (s)		_	_		9.7	7.8
HCM Lane LOS		_	_	C	Α	Α.
HCM 95th %tile Q(veh))		_	_	0.1	0.1
HOW FOUT WITH Q(VEH)	1	_		U	U. I	U. I

Intersection Int Delay, s/veh	4.5					
			14/5-	14/55	05:	055
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	7		ĵ.		¥	
Traffic Vol, veh/h	4	46	23	10	68	6
Future Vol, veh/h	4	46	23	10	68	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage,	, # -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	48	24	11	72	6
0.6 1 10.61						
	/lajor1		Major2		/linor2	
Conflicting Flow All	35	0	-	0	86	30
Stage 1	-	-	-	-	30	-
Stage 2	-	-	-	-	56	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1589	-	-	-	920	1050
Stage 1	-	-	-	-	998	-
Stage 2	_					
Platoon blocked, %		-	-	-	972	_
		-	-	-	972	-
	1589	-	-			- 1050
Mov Cap-1 Maneuver	1589	-	-	-	917	1050
Mov Cap-1 Maneuver Mov Cap-2 Maneuver	-	-	-	- - -	917 917	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1	-	-	- -	-	917 917 995	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver	-	-	-	- - -	917 917	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1	-	-	- -	- - -	917 917 995	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1	-	-	- -	- - -	917 917 995	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach	- - -	-	- - -	- - -	917 917 995 972	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s	-	-	- - - - WB	- - -	917 917 995 972 SB	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach	- - -	-	- - - - WB	- - -	917 917 995 972 SB	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS	EB 0.6	-	- - - - WB	-	917 917 995 972 SB 9.2 A	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt	EB 0.6	- - - -	- - - - WB	- - -	917 917 995 972 SB	- - - SBLn1
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h)	EB 0.6	- - - - EBL 1589	- - - - WB	-	917 917 995 972 SB 9.2 A	SBLn1 927
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio	EB 0.6	EBL 1589 0.003	- - - - WB	-	917 917 995 972 SB 9.2 A	SBLn1 927 0.084
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h)	EB 0.6	- - - - EBL 1589	- - - - WB 0	- - - - - WBT	917 917 995 972 SB 9.2 A	SBLn1 927
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio	EB 0.6	EBL 1589 0.003	- - - - WB 0	- - - - - - WBT	917 917 995 972 SB 9.2 A	SBLn1 927 0.084

9: Proposed Roadway & Right-In/Right-Out Access

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		†	î,			7
Traffic Vol, veh/h	0	114	28	10	0	5
Future Vol, veh/h	0	114	28	10	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	- -	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage,		0	0	-	0	-
Grade, %	+ - -	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	120	29	11	0	5
Major/Minor Ma	ajor1	N	Major2	N	/linor2	
Conflicting Flow All	- -	0	-	0	_	35
Stage 1	_	-	_	-	-	-
Stage 2	-	_	_	_	-	_
Critical Hdwy	_	_	_	_	_	6.2
Critical Hdwy Stg 1	_	_	_	_	-	0.2
			-			
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	1044
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	1044
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		8.5	
HCM LOS					Α	
Minor Lane/Major Mvmt		EBT	WBT	WBR S	SBLn1	
Capacity (veh/h)					1044	
HCM Lane V/C Ratio		_	-		0.005	
HCM Control Delay (s)				_	8.5	
HCM Lane LOS		-	-	-	6.5 A	
HCM 95th %tile Q(veh)		-	-		0	
HOW YOU WILLE (Vell)		-	-	-	U	

NB

15.1

Conflicting Approach Right
Conflicting Lanes Right

HCM Control Delay

HCM LOS

3

C

EΒ

21.3

C

Intersection												
Intersection Delay, s/veh	22.5											
Intersection LOS	С											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		7	f)		ň	†	7	7	f)	
Traffic Vol, veh/h	29	12	141	2	46	11	323	407	1	11	273	24
Future Vol, veh/h	29	12	141	2	46	11	323	407	1	11	273	24
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	30	12	145	2	47	11	333	420	1	11	281	25
Number of Lanes	0	1	0	1	1	0	1	1	1	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			1			2			3		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			3			1			2		
O (1' 1' A D' 1'	NID			C D			MD					

SB

12.5

2

В

WB

25.7

2

D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2	
Vol Left, %	100%	0%	0%	16%	100%	0%	100%	0%	
Vol Thru, %	0%	100%	0%	7%	0%	81%	0%	92%	
Vol Right, %	0%	0%	100%	77%	0%	19%	0%	8%	
Sign Control	Stop								
Traffic Vol by Lane	323	407	1	182	2	57	11	297	
LT Vol	323	0	0	29	2	0	11	0	
Through Vol	0	407	0	12	0	46	0	273	
RT Vol	0	0	1	141	0	11	0	24	
Lane Flow Rate	333	420	1	188	2	59	11	306	
Geometry Grp	8	8	8	8	8	8	8	8	
Degree of Util (X)	0.657	0.771	0.002	0.393	0.005	0.137	0.025	0.626	
Departure Headway (Hd)	7.108	6.617	5.888	7.537	9.04	8.388	7.912	7.362	
Convergence, Y/N	Yes								
Cap	509	545	608	478	396	427	453	490	
Service Time	4.846	4.355	3.626	5.283	6.798	6.146	5.655	5.105	
HCM Lane V/C Ratio	0.654	0.771	0.002	0.393	0.005	0.138	0.024	0.624	
HCM Control Delay	22.5	28.3	8.6	15.1	11.8	12.5	10.9	21.7	
HCM Lane LOS	С	D	А	С	В	В	В	С	
HCM 95th-tile Q	4.7	7	0	1.8	0	0.5	0.1	4.2	

Intersection						
Int Delay, s/veh	0.6					
		MDD	NET	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥	00	}	4.0	4.0	4
Traffic Vol, veh/h	9	20	487	10	18	330
Future Vol, veh/h	9	20	487	10	18	330
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	9	21	502	10	19	340
N A /N A	n		1 1 1		4 1 0	
	/linor1		//ajor1		Major2	
Conflicting Flow All	885	507	0	0	512	0
Stage 1	507	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	318	570	-	-	1064	-
Stage 1	609	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Platoon blocked, %			_	_		_
Mov Cap-1 Maneuver	311	570	-	-	1064	-
Mov Cap-2 Maneuver	311	-	_	_	-	_
Stage 1	609					_
Stage 2	682	-	_		_	_
Stayt 2	002	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	13.5		0		0.4	
HCM LOS	В					
		NET	NES	NDI 1	051	05=
Minor Lane/Major Mvm	t	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-		1064	-
HCM Lane V/C Ratio		-	-	0.066	0.017	-
HCM Control Delay (s)		-	-	13.5	8.4	0
HCM Lane LOS		-	-	В	Α	Α
HCM 95th %tile Q(veh)		-	-	0.2	0.1	-

Intersection						
Int Delay, s/veh	0.1					
		EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	0	7	0	^	^	7
Traffic Vol, veh/h	0	21	0	814	808	54
Future Vol, veh/h	0	21	0	814	808	54
Conflicting Peds, #/hr	0	0	0	0	0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	215
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	21	0	831	824	55
Major/Minor N	linor2	١	/lajor1	N	/lajor2	
Conflicting Flow All	-	412	- najoi i	0	11ajui 2 -	0
	-	412		-	-	-
Stage 1			-			
Stage 2	-	- / 0	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	595	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	595	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	11.3		0		0	
HCM LOS	В					
Minor Lane/Major Mvmt		NBT E	EBLn1	SBT		
Capacity (veh/h)		-	595	-		
HCM Lane V/C Ratio		_	0.036	-		
HCM Control Delay (s)		_	11.3	_		
HCM Lane LOS		_	В	_		
HCM 95th %tile Q(veh)			0.1	_		
1.5W 75W 75W 75W Q(VCH)			0.1			

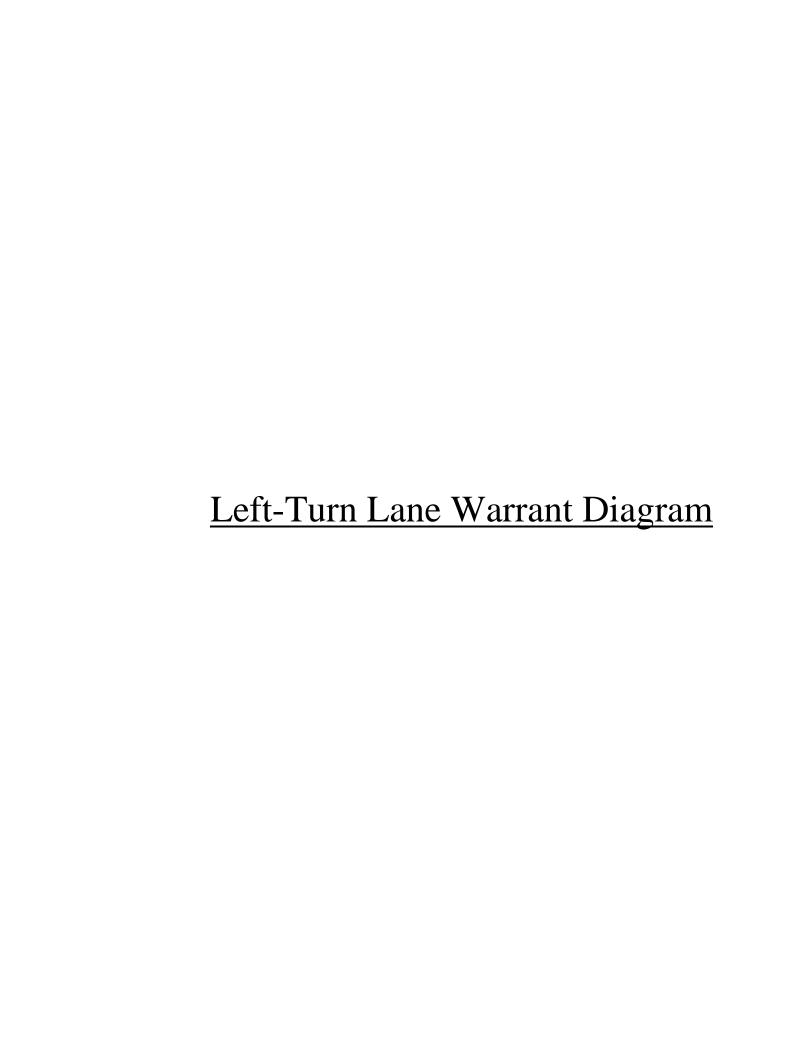
Int Delay, s/veh	Intersection						
Movement		1.3					
Traffic Vol, veh/h			CED	NIEL	NET	CVACT	CIVID
Traffic Vol, veh/h 15 52 95 719 809 25 Future Vol, veh/h 15 52 95 719 809 25 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free RT Channelized - None - None - None Storage Length 75 0 240 - 240 Veh in Median Storage, # 0 - 0 0 - 240 Veh in Median Storage, # 0 - 0 0 - 240 Veh in Median Storage, # 0 - 0 0 - 240 Veh in Median Storage, # 0 - 0 0 - 240 Veh in Median Storage, # 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
Future Vol, veh/h 15 52 95 719 809 25 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free RT Channelized - None - None - None Storage Length 75 0 240 - - 240 Veh in Median Storage, # 0 - - 0 0 - - 240 Veh in Median Storage, # 0 - - 0 0 - - 240 Veh in Median Storage, # 0 - - 0 0 - - - - 240 Veh in Median Storage, # 0 - 0 0 0 - - - - - - - - - - - - - - - - -							
Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free Pato 240 0							
Sign Control Stop Stop Free Free Free Free Free Free Free RT Channelized - None - None - None Storage Length 75 0 240 - 240 - 240 Veh in Median Storage, # 0							
RT Channelized - None - None - None Storage Length 75 0 240 - 240 Veh in Median Storage, # 0							
Storage Length 75 0 240 - - 240 Veh in Median Storage, # 0 - - 0 0 - Grade, % 0 - - 0 0 - Peak Hour Factor 95 95 95 95 95 Heavy Vehicles, % 0 0 0 2 2 0 Mwnt Flow 16 55 100 757 852 26 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 1431 426 878 0 - 0 Stage 1 852 - - - - - - Stage 2 579 -							
Veh in Median Storage, # 0							
Grade, % 0 - - 0 0 - Peak Hour Factor 95 95 95 95 95 95 Heavy Vehicles, % 0 0 0 2 2 0 Mwmt Flow 16 55 100 757 852 26 Major1 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 1431 426 878 0 - 0 Stage 1 852 - - - - - Stage 2 579 - - - - - Critical Hdwy 6.8 6.9 4.1 - - - Critical Hdwy Stg 1 5.8 - - - - - Critical Hdwy Stg 2 5.8 - - - - - Follow-up Hdwy 3.5 3.3 2.2 - - -							
Peak Hour Factor 95							
Meavy Vehicles, % 0 0 0 2 2 0 Mvmt Flow 16 55 100 757 852 26 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 1431 426 878 0 - 0 Stage 1 852 - - - - - - Stage 2 579 - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Momental Flow 16 55 100 757 852 26 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 1431 426 878 0 - 0 Stage 1 852 - - - - - Stage 2 579 - - - - - Critical Hdwy 6.8 6.9 4.1 - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Major/Minor Minor2 Major1 Major2 Conflicting Flow All 1431 426 878 0 - 0 Stage 1 852 - - - - - Stage 2 579 - - - - - Critical Hdwy 6.8 6.9 4.1 - - - Critical Hdwy Stg 1 5.8 - - - - - Critical Hdwy Stg 2 5.8 - - - - - Critical Hdwy Stg 2 5.8 - - - - - Follow-up Hdwy 3.5 3.3 2.2 - - - Pot Cap-1 Maneuver 128 582 778 - - - Stage 1 383 - - - - - Mov Cap-1 Maneuver 111 582 778 - - - Mov Cap-2 Maneuver 11							
Conflicting Flow All 1431 426 878 0 - 0 Stage 1 852 - - - - - Stage 2 579 - - - - - - Critical Hdwy 6.8 6.9 4.1 -	Mvmt Flow	16	55	100	757	852	26
Conflicting Flow All 1431 426 878 0 - 0 Stage 1 852 - - - - - Stage 2 579 - - - - - - Critical Hdwy 6.8 6.9 4.1 -							
Conflicting Flow All 1431 426 878 0 - 0 Stage 1 852 - - - - Stage 2 579 - - - - Critical Hdwy 6.8 6.9 4.1 - - - Critical Hdwy Stg 1 5.8 - - - - - - Critical Hdwy Stg 2 5.8 -	Major/Minor N	/linor2		/laior1	ı	Maior2	
Stage 1 852 - - - - Stage 2 579 - - - - Critical Hdwy 6.8 6.9 4.1 - - - Critical Hdwy Stg 1 5.8 - - - - - - Critical Hdwy Stg 2 5.8 -							0
Stage 2 579 - - - - - Critical Hdwy 6.8 6.9 4.1 - - - Critical Hdwy Stg 1 5.8 - - - - - Critical Hdwy Stg 2 5.8 -					U		
Critical Hdwy Stg 1 5.8				-			
Critical Hdwy Stg 1 5.8				/ 1	-		-
Critical Hdwy Stg 2 5.8					-		-
Follow-up Hdwy 3.5 3.3 2.2 Stage 1 383					-	-	-
Pot Cap-1 Maneuver 128 582 778 Stage 1 383							-
Stage 1 383 -					-	-	-
Stage 2 529 - - - - Platoon blocked, % - - - - Mov Cap-1 Maneuver 111 582 778 - - Mov Cap-2 Maneuver 111 - - - - Stage 1 334 - - - - Stage 2 529 - - - - Approach SE NE SW HCM Control Delay, s 18.7 1.2 0	•			118			-
Platoon blocked, % Mov Cap-1 Maneuver 111 582 778 Mov Cap-2 Maneuver 111 Stage 1 334 Stage 2 529 Approach SE NE SW HCM Control Delay, s 18.7 1.2 0			-	-	-	-	-
Mov Cap-1 Maneuver 111 582 778 - - Mov Cap-2 Maneuver 111 - - - - Stage 1 334 - - - - Stage 2 529 - - - - Approach SE NE SW HCM Control Delay, s 18.7 1.2 0		529	-	-			-
Mov Cap-2 Maneuver 111 - - - - Stage 1 334 - - - - Stage 2 529 - - - - Approach SE NE SW HCM Control Delay, s 18.7 1.2 0		111	E0.2	770	-	-	-
Stage 1 334 -				118	-	-	-
Stage 2 529 - - - - - Approach SE NE SW HCM Control Delay, s 18.7 1.2 0			-	-	-	-	-
Approach SE NE SW HCM Control Delay, s 18.7 1.2 0			-	-	-	-	-
HCM Control Delay, s 18.7 1.2 0	Stage 2	529	-	-	-	-	-
HCM Control Delay, s 18.7 1.2 0							
HCM Control Delay, s 18.7 1.2 0	Approach	SE		NE		SW	
5 .		18.7					
· · · · ·							
Mineral and Made Manual NET OF LACEL OF CHAT COME	N (1) 1 /D (1) - D (1		NICI	NICT	CEL 4	OFL 0	CVACT
Minor Lane/Major Mvmt NEL NET SELn1 SELn2 SWT SWR		Ţ.					SWI
Capacity (veh/h) 778 - 111 582							-
HCM Lane V/C Ratio 0.129 - 0.142 0.094				-			-
HCM Control Delay (s) 10.3 - 42.7 11.8				-			-
HCM Lane LOS B - E B				-			-
HCM 95th %tile Q(veh) 0.4 - 0.5 0.3	HCM 95th %tile Q(veh)		0.4	-	0.5	0.3	-

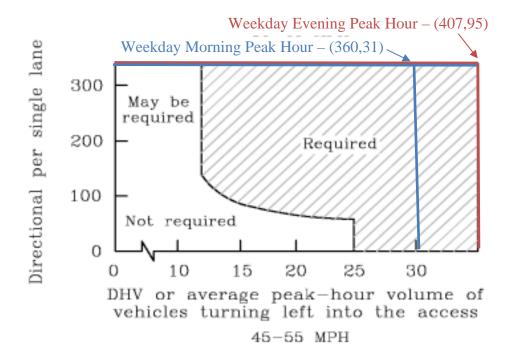
Intersection							
Int Delay, s/veh	1.1						
					0=:		
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	<u>ች</u>	7	ĵ»			4	
Traffic Vol, veh/h	3	55	442	5	34	305	
Future Vol, veh/h	3	55	442	5	34	305	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	75	0	-	-	-	-	
Veh in Median Storage	, # 0	-	0	-	-	0	
Grade, %	0	-	0	-	-	0	
Peak Hour Factor	95	95	95	95	95	95	
Heavy Vehicles, %	0	0	2	0	0	2	
Mvmt Flow	3	58	465	5	36	321	
WWW. Figure 1000		00	100		00	021	
	Minor1		/lajor1		Major2		
Conflicting Flow All	861	468	0	0	470	0	
Stage 1	468	-	-	-	-	-	
Stage 2	393	-	-	-	-	-	
Critical Hdwy	6.4	6.2	-	-	4.1	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	3.3	-	_	2.2	_	
Pot Cap-1 Maneuver	329	599	-	_	1102	-	
Stage 1	634	-	_	_	-	_	
Stage 2	686	_	_	_	_	_	
Platoon blocked, %	000		_	_		_	
Mov Cap-1 Maneuver	316	599	_	_	1102		
Mov Cap-1 Maneuver	316			-			
		-	-	-	-	-	
Stage 1	634	-	-	-	-	-	
Stage 2	659	-	-	-	-	-	
Approach	WB		NB		SB		
HCM Control Delay, s	11.9		0		0.8		
HCM LOS	В						
Minor Lane/Major Mvm	t	NBT	NBRV	VBLn1V	VBLn2	SBL	
Capacity (veh/h)		-	-	316	599	1102	
HCM Lane V/C Ratio		-	-	0.01	0.097	0.032	
HCM Control Delay (s)		-	-	16.5	11.7	8.4	
HCM Lane LOS		-	-	С	В	Α	
HCM 95th %tile Q(veh)		-	-	0	0.3	0.1	
					5.5		

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ች		₽		N/F	
Traffic Vol, veh/h	13	26	54	35	41	4
Future Vol, veh/h	13	26	54	35	41	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage	e,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mymt Flow	14	27	57	37	43	4
WWW. TOW	• •	21	01	01	10	•
	Major1		/lajor2		/linor2	
Conflicting Flow All	94	0	-	0	131	76
Stage 1	-	-	-	-	76	-
Stage 2	-	-	-	-	55	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	_	-	5.4	-
Critical Hdwy Stg 2	-	_	_	_	5.4	-
Follow-up Hdwy	2.2	_	_	_	3.5	3.3
Pot Cap-1 Maneuver	1513	_	_	_	868	991
Stage 1	-	_	_	_	952	- // [
Stage 2	_	_	-	_	973	_
Platoon blocked, %		-	-	-	713	_
Mov Cap-1 Maneuver	1513	-	-	-	860	991
		-	-			
Mov Cap-2 Maneuver	-	-	-	-	860	-
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	973	-
Approach	EB		WB		SB	
HCM Control Delay, s	2.5		0		9.4	
HCM LOS	2.0				A	
1.5111 E00					, ,	
Minor Lane/Major Mvm	nt	EBL	EBT	WBT	WBR:	SBLn1
Capacity (veh/h)		1513	-	-	-	870
HCM Lane V/C Ratio		0.009	-	-	-	0.054
HCM Control Delay (s)		7.4	-	-	-	9.4
HCM Lane LOS		Α	-	-	-	Α
HCM 95th %tile Q(veh)	0	-	-	-	0.2
, 5 , 6 6	,	·				J.L

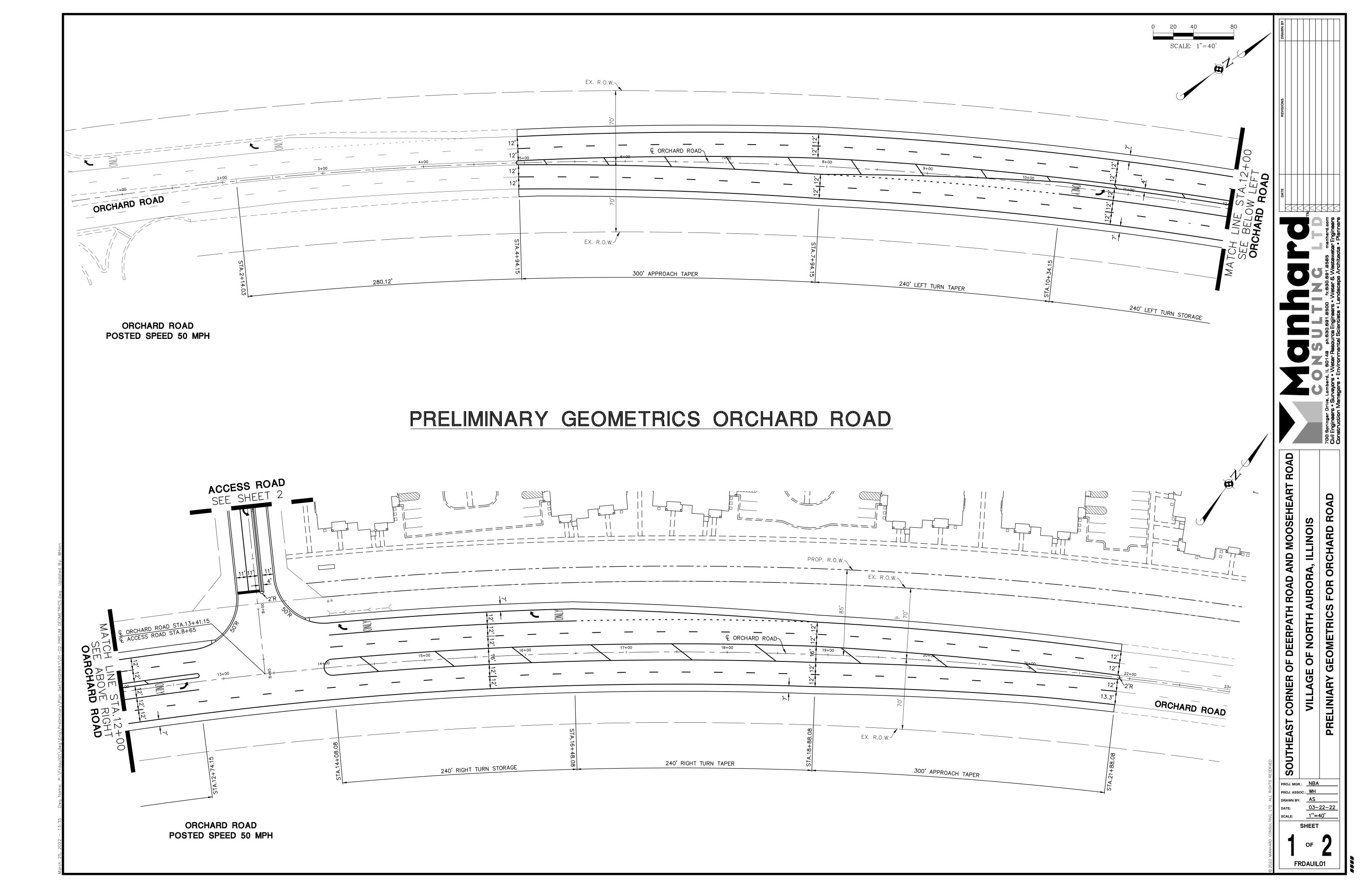
HCM 6th TWSC

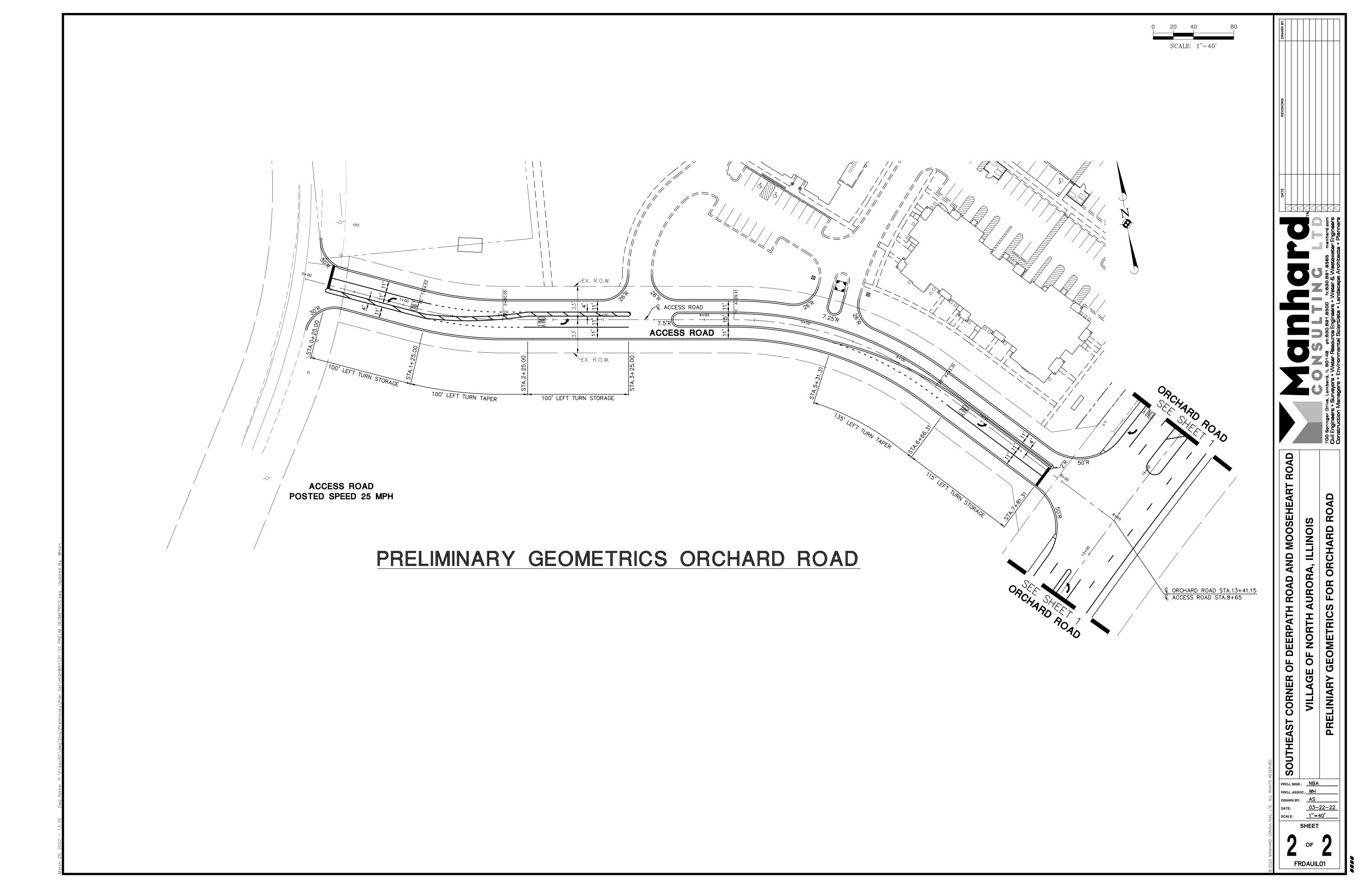
Intersection						
Int Delay, s/veh	0.2					
		EDT	WDT	WIDD	CDI	CDD
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	0	<u></u>	^}	٥٢	0	7
Traffic Vol, veh/h	0	67	85	35	0	4
Future Vol, veh/h	0	67	85	35	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage,	# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	71	89	37	0	4
Major/Minor	loior1		/oicr2		liner?	
	lajor1		/lajor2		/linor2	400
Conflicting Flow All	-	0	-	0	-	108
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	951
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	_	-	-	951
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	_	-	-	-
Stage 2	_	_	_	_	_	_
Jiago Z						
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		8.8	
HCM LOS					Α	
Minor Lang/Major Mumt		EDT	\\/DT	WDD C	DI n1	
Minor Lane/Major Mvmt		EBT	WBT	WBR S		
Capacity (veh/h)		-	-	-	951	
Capacity (veh/h) HCM Lane V/C Ratio		EBT - -	WBT - -	-	951 0.004	
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		-	-	-	951 0.004 8.8	
Capacity (veh/h) HCM Lane V/C Ratio		-	-	-	951 0.004	





Orchard Road Left-Turn Lane Warrant at the Proposed Public Roadway





FIRST AMENDMENT TO THE ANNEXATION AGREEMENT BETWEEN VILLAGE OF NORTH AURORA AND STANLEY L. ZEPELAK TRUST

THIS AMENDMENT to the Annexation Agreement by and between the Village of North Aurora and the Stanley L. Zepelak Trust approved by Ordinance No. 12-11-19-01 dated November 19, 2012 (the "Annexation Agreement"), is hereby entered into by the Village of North Aurora, an Illinois Municipal corporation (the "Village"), the Stanley L. Zepelak Trust under a certain agreement dated April 26, 1989, (the "Owners") and Fiduciary Real Estate Development, Inc., a Wisconsin business corporation (the "Developer").

WITNESSETH:

WHEREAS, Owners are the Owners of Record of the Property legally described in Exhibit "A", which is attached hereto and made a part hereof (hereinafter sometimes referred to as "Property"); and

WHEREAS, the Property is located in the Village of North Aurora, Kane County, Illinois (hereinafter sometimes referred to as the "County"), and was annexed pursuant to the Annexation Agreement by Ordinance No. 12-11-19-02, dated November 19, 2012, and Zoned R-4 General Residential District subject as part of a Planned Unit Development by Ordinance No. 12-11-19-03; and

WHEREAS, the Property is further subject to Ordinance No. 13-01-07-02, Being an Ordinance Annexing the Stanley L. Zepelak Trust Property located West of Orchard Road, North of Tanner road and East of Deerpath Road to the Village of North Aurora on January 7, 2013, and zoned pursuant to Ordinance No 13-01-07-03, Being an Ordinance Zoning and Granting a Special Use Planned Unit Development for Commercial and Multi-Family Use for the Property located West of Orchard Road, North of Tanner road and East of Deerpath Road to the Village of North Aurora (the "PUD Ordinance") on the same date; and

WHEREAS, a Petition for amendment to the Annexation Agreement and PUD Ordinance has been or will be filed in accordance with law; and

WHEREAS, the Owners and Developer desire to amend the Annexation Agreement and PUD Ordinance upon the terms and conditions hereinafter set forth; and

WHEREAS, Owners and Developer have signed this Amendment and represent that no other parties have any right, title, interest or claim in the Property at the time of execution of this Amendment; and

WHEREAS, this Amendment is made pursuant to the provisions of 65 ILCS 5/11-15.1-1 through 11-15.1-5; and

WHEREAS, all notices, publications, procedures, public hearings, and other matters required for the consideration, approval, and execution of this Amendment have been given, made, held and performed as required by the Illinois Municipal Code and all other applicable statutes of the State of Illinois and Ordinances of the Village; and

WHEREAS, the annexation and development of the Property for the use and purposes provided herein will promote sound planning, will aid in developing the Village as a balanced community and will assist the Village in realizing the purpose of the Comprehensive Plan of the Village of North Aurora; and

WHEREAS, the President and Board of Trustees of the Village have, by a vote of twothirds (2/3) of the Corporate Authorities currently holding office, directed the President to execute and the Village Clerk to attest this Amendment on behalf of the Village;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, it is hereby agreed by and between the Village and Owners/Developer and shall be applicable only as to the Property specifically identified herein as follows:

- A. <u>RECITALS</u>. The representations and recitations set forth in the foregoing Recitals are material to this Agreement and are hereby incorporated into and become a part of this Agreement as though they were fully set forth in this Paragraph 1.
- B. AMENDMENT TO THE **ANNEXATION AGREEMENT**. Section 2 of the Annexation is clarified and amended for the Property as follows:

Owners/Developer have made proper application to the Village for Amendment to the Annexation Agreement affecting the Property. The Property is already annexed to the Village of North Aurora subject to applicable statutes, local ordinances and codes and the terms and conditions of Annexation Agreement as amended herein. This Amendment to the Annexation Agreement shall modify the Annexation only to the extent that this Amendment deviates explicitly from the Annexation Agreement or as necessarily implied from the explicit deviations from the Annexation Agreement in this Amendment. If any provisions of the Annexation Agreement cannot be reconciled and harmonized with this Amendment, this Amendment shall control.

- C. **ZONING**. Section 3 of the Annexation is clarified and amended for the Property as follows:
 - 1. Owners/Developer have made proper application to the Village for Amendment to PUD Ordinance. Immediately upon approval of the Amendment to the Annexation Agreement, without the need for additional public hearing, the Amended PUD Ordinance affecting the R-4 General Residential District area north of the access road to be provided onto Orchard Road, may be approved.

- 2. It is the intention of the Parties that the Owners/Developer shall enjoy and shall be subject to all of the provisions of R-4 Residential District regulations on the Property, consistent with the provisions of the Planned Unit Development section of the Village's Zoning Ordinance except as otherwise specifically provided and consistent with the terms of this Amendment to the Annexation Agreement and the Amendment to the PUD Ordinance in the form attached hereto and incorporated herein by reference as Exhibit "B". The final site plans and engineering plans shall be processed administratively without further public hearing or Board approval, provided that there is no material deviation from the provisions of this amendment to the Annexation Agreement and Amendment to the PUD Ordinance attached as Exhibit B.
- D. <u>SITE PLAN APPROVAL PROCESS</u>: Section 5 of the Annexation is clarified and amended for the Property only as follows:

The preliminary development plans and plat attached hereto and incorporated herein by reference as Exhibit "C" (the "Preliminary Development Plans") and the site plan attached hereto and incorporated herein by reference as Exhibit "D" (the "Preliminary Site Plan") (together the "Preliminary Plans") are hereby approved for the Property. The development plans and final site plan may be submitted to the Community Development Director for review and may be approved as the Final Development Plans and Final Site Plan (together the "Final Plans") without the need for more formal approval if the revisions, if any, ore substantially consistent with the Preliminary Plans. If the Final Plans are not substantially consistent with the Preliminary Plans, they must be approved after review by the Planning Commission and Board of Trustees (but without the need for a public hearing) which review shall be based on the zoning and subdivision control requirements in place at the time and limited to and based only on the following standards. The standards for review and approval of Final Plans shall be consistent with the Annexation Agreement as revised by this Amendment and the Amended PUD Ordinance consistent with the Preliminary Plans approved and incorporated herein, subject to the changes in this Paragraph D, including the following:

1 Circulation. Section 5.B of the Annexation Agreement is revised by adding the following:

Any revisions to the Preliminary Plans to accommodate any required Kane County traffic improvements or easement restrictions adjacent to Orchard Road shall be deemed be a technical change to the development plans and may be approved administratively by the Community Development Director.

- **2. Pedestrian Pathways**. Section 5.C of the Annexation Agreement is revised by incorporating the terms and conditions of the Amended PUD Ordinance consistent with the Preliminary Plans approved and incorporated herein.
- **3.** <u>Site Plan Engineering</u>: Section 5.D of the Annexation Agreement is revised by adding the following:

- a. The final engineering for the Property shall be in substantial compliance with the Final Subdivision Engineering as approved by the Village Engineer.
- b. If the petitioner is required to make any minor changes to the plat to accommodate engineering comments, such changes shall be deemed a "Technical Change" to the plat that can be approved administratively by the Community Development Director.
- **4. Site Plan Landscaping.** Section 5.E of the Annexation Agreement is revised by incorporating the terms and conditions of the Amended PUD Ordinance consistent with the Preliminary Plans approved and incorporated herein.
- <u>5.</u> Architecture. The building elevations, materials, and design elements for the Development shall be consistent with the Preliminary Plans approved with this Amendment and the Amended PUD Ordinance consistent with the Preliminary Plans approved and incorporated herein.
- **E. REQUIRED IMPROVEMENTS.** Section 7 of the Annexation Amendment clarified and amended for the Property only as follows:
 - 1. **Required Improvements**. Section 7.A of the Annexation Agreement is clarified and amended only as follows as follows:

Required improvements shall be constructed as provided in the Annexation Agreement except as specifically revised by this Amendment incorporating the terms of the Amended PUD Ordinance consistent with the Preliminary Plans approved and incorporated herein.

- 2. **Recapture**. Section 7.E of the Annexation Agreement is clarified and amended only as follows:
 - a. Section 7.E1 of the Annexation Agreement is clarified and amended only as follows:

There are no off-site public improvements required specifically by the Village to be constructed by Developer to serve the Property that will also benefit other property, except for any road improvements required by Kane County that may benefit other properties. The burden is on the Developer whether to seek recapture of the proportionate cost of those improvements from properties that will benefit from them through the Village, by initiating the process to establish a recapture agreement with the Village or pursuing other methods of allocating the cost directly with the benefitting property owners as provided in Section 7.H of the Annexation Agreement, as modified herein. The Village will not initiate the process. The determination of the benefitting properties and the allocable costs to be recaptured shall be determined by the Village Engineer in cooperation with the Developer, and must be reduced to writing in a recapture agreement mutually agreed and signed by both parties substantially consistent with the Annexation Agreement.

b. **Sanitary Sewer and Orchard Road Recapture.** Section 7.E.2 of the Annexation Agreement is clarified and amended only as follows:

Owners and/or Developer hereby acknowledge their obligation to pay their proportionate share of the following costs:

- (1) The recapture requirements for sanitary sewer extension improvements owed to Richmar Realty have been satisfied, and no further obligations exist regarding the recapture requirements for sanitary sewer extension improvements owed to Richmar Realty.
- (2) The sanitary sewer extension provided to the Property by Fox Valley West Properties, the developer of the Auto Mall property, still apply and shall be paid as provided in the Annexation Agreement.
- 3. <u>Access to the Property from Orchard Road</u>. Section 7.H of the Annexation Agreement is clarified and amended only as follows:

The Owner shall dedicate up to eighty feet (80') of right of way to the Village and construct the extension of the Deerpath Connector Road as generally illustrated in Exhibit I to the Annexation Agreement. The Village hereby agrees that it shall only require an eighty-foot (80') right-of-way, with ten-foot (10') roadway and public utility easements on each side, unless greater right-of-way is required by Kane County. The Owner/Developer shall be entitled to reimbursement through a sales tax rebate agreement as provided in Section 8 of the Annexation Agreement if Kane County requires the dedication of the Deerpath Connector Road to be oversized.

Full access to Orchard Road shall be deferred until Kane County confirms full access and signalization is warranted

If the County requires off-site improvements in connection with development of the Property, the Developer shall perform those improvements and may enter into a recapture agreement with the Village to recapture the allocable cost of such improvements from properties that directly benefit thereby, including the Mango Creek Property, as provided in Section E.1 of the Annexation Agreement.

F. <u>DEVELOPMENT OF THE PROPERTY</u>. Section 9 of the Annexation Agreement is clarified and amended only as follows:

Development of the Property shall be undertaken consistent with the Annexation Agreement, as amended by this Amendment, the PUD Ordinance, as amended by Amended PUD Ordinance consistent with the Preliminary Plans approved and incorporated herein, and all the ordinances, codes and regulations of the Village of North Aurora.

G. <u>DEDICATION OF COMMON FACILITIES</u>. Section 11 of the Annexation Agreement is clarified and amended for the Property as follows:

The Owner/Developer shall construct, repair, restore and maintain all streets and drives, parking lots, retention and detention basins, water mains, sanitary sewer lines, storm sewer lines, surface drainage facilities, electric facilities and any other Common Improvements, common areas or common facilities for the Property consistent with the Preliminary Plans that are not conveyed to and accepted by the Village. Those Common Facilities are public improvements as defined and required by the Subdivision Control Ordinance, but they are intended for the special benefit of the Property and the development on the Property alone or in conjunction with the property to be developed to the South of the Deerpath Connector Road. The Common Facilities may be conveyed or transferred to an owners'/tenants' association on condition that, any such dedication, conveyance or transfer may only be after the establishment of an association and covenants created for the purpose of providing for and funding the maintenance of the Common Facilities that will constitute a covenant running with the land and shall be binding upon successors in title and/or possession. Upon each separate conveyance the then current owners of record of the property being so conveyed shall be released from all obligations under this Agreement arising after the date of such conveyance, as to the portion of the Property conveyed for which such an association and covenants have been created.

H. MAINTENANCE OF COMMON FACILITIES. Section 12 of the Annexation Agreement is clarified and amended for the Property as follows:

The Common Facilities shall be maintained by an association of owners and/or tenants created for that purpose and pursuant to covenants that are recorded and run with the land. Owner/Developer shall create at least one association for the Property covering the entire Property for purposes of the maintenance of Common Facilities. These Common Facilities include, but may not be limited to: the stormwater control areas and related landscaping and any landscaping and any monument signage and other improvements that Owners/Developer designate to be for the common benefit of all of the properties in the development. The association shall be responsible for the cost of constructing, reconstructing, repairing, restoring, or maintaining such Common Facilities from financing generated by association assessments. The Village will establish a backup Special Service Area as the Village deems advisable covering the Common Facilities that specially serve the Property. In the event the Village determines that the Common Facilities are not being reasonably and adequately maintained, the Village may repair, restore, and maintain the Common Facilities and be reimbursed the cost for that maintenance by levying taxes within the Special Service Area to pay for such costs, together with the costs to establish the Special Service area and for administration of those services. In no event shall any occupancy permits by issued for any building constructed on the Property until the covenants are recorded, an association is incorporated and in good standing, and the Special Service Area is established for the Property as required herein.

- I. **INCORPORATION OF ANNEXATION AGREEMENT TERMS**. All of the terms and conditions and provisions of the Annexation Agreement, except as modified or inconsistent with the terms of this Amendment, shall remain in full force and effect.
- J. <u>BINDING EFFECT AND TERM</u>. This Amendment to the Annexation Agreement shall be binding upon and inure to the benefit of the parties hereto, successors in

interest, assignees, lessees, and upon any successor municipal authorities of the Village and successor municipalities for the period of twenty (20) years from the date hereof.

- K. <u>COVENANT RUNNING WITH THE LAND</u>. This Amendment to the Annexation Agreement constitutes a covenant running with the land and is binding upon the parties hereto, all grantees, successors in interest, assigns and lessees, and successor Village Board.
- L. <u>HOLD HARMLESS AND INDEMNIFICATION</u>. In the event a claim is made against the Village, by a party other than the Owners and Developer, or if the Village is made a party-defendant in any legal proceeding arising out of or in connection with the annexation, zoning, or the development of the Property, the then Owners and /or Developer shall defend the Village and hold the Village harmless from all claims, liabilities, losses, taxes, judgments, costs and fees, including expenses and reasonable attorney fees, in connection therewith. The Village shall reasonably cooperate in the defense of such proceedings.
- M. <u>AMENDMENT</u>. This Amendment to the Annexation Agreement may be further amended by the procedures established by law, in force from time to time, such as permit its initial approval. Village and the owners of record of any portion of the Property, even if not the Owners or Developer named herein, may agree to modify this Agreement with respect to such portion of the Property.
- N. <u>SEPARABILITY</u>. The provisions hereof shall be deemed to be separable; and if any section, paragraph, clause, provisions or item herein shall be held invalid, the invalidity of such section, paragraph, clause, provision, or item shall not affect any other provision of this Amendment to the Annexation Agreement.
- O. <u>COOPERATION</u>. Village, Owner, and Developer shall do all things necessary or appropriate to carry out the terms and provisions of this Amendment to the Annexation Agreement and to aid and assist each other in carrying out the terms and objectives of this Amendment to the Annexation Agreement and the intentions of the parties as reflected by said terms.
- P. <u>NOTICE</u>. Unless otherwise notified in writing, all notices, requests and demands shall be in writing and shall be delivered personally or be mailed by certified mail, return receipt requested, postage prepaid, addressed as follows:

If to Village: Village Community Development Director

VILLAGE OF NORTH AURORA

25 East State Street North Aurora, IL 60542

With a copy to: Kevin G. Drendel

Drendel & Jansons Law Group

111 Flinn Street Batavia, IL 60510

	If to Owners:	Stanley L. Zepelak Trust c/o Stanley L. Zepelak, Lucaya Asset Management, LLC 17753 Lucaya Drive Lakewood Ranch, FL 34202
	With a copy to:	John F. Philipchuck Dommermuth, Cobine, West, Gensler, Philipchuck, Corrigan and Bernhard, Ltd. 123 Water Street Naperville, IL 60540
	If to Developer:	Anthony DeRosa Fiduciary Real Estate Development, Inc. 789 North Water Street, Suite 200 Milwaukee, WI 53202
	With a copy to:	
Q. in the Kane C		s Amendment to the Annexation Agreement may be recorded eds Office by either party.
Developer and no promises, a	romises, inducements, d the Village relative	ENT . This Amendment to the Annexation Agreement sets agreements, conditions and understandings between Owners, to the Property and the subject matter thereof, and there are or understandings, either oral or written, express or implied, set forth.
		, the parties have set their hands and seals on the date first
above written		VILLAGE OF NORTH AURORA, ILLINOIS an Illinois Municipal Corporation
		By:
ATTEST:		By: Village President
Village Clerk		_
		OWNER: STANLEY L. ZEPELAK TRUST Under a certain Agreement dated April 26, 1989
		By:Stanley I. Zepelak, Trustee

DEVELOPER: FIDUCIARY REAL ESTATE DEVELOPMENT, INC.

	ву:		
	Anthony DeRos	a, its	
STATE OF ILLINOIS)		
) SS		
COUNTY OF)		
I,	, a Notar	y Public in and for s	aid County in the Stat
aforesaid, DO HEREBY CERT	IFY, that	y I dolle ili did for se	of
, an II	linois	, who is pers	onally known to me to
be the same person whose nan	ne is subscribed to the	foregoing instrume	nt, appeared before m
this day in person and acknowl			
free and voluntary act as said_		ee and voluntary act	of said limited liability
company for the uses and purpo	oses therein set forth.		
GIVEN under my hand and No	tarial Seal this	day of	2012
OTVETV under my mand and tvo		day or	
			_
Notary Public			
My commission expires		·	

EXHIBITS

- A Legal Description
- B Amendment to Zoning/PUD Ordinance
- C. Preliminary Plans
- D. Preliminary Site Plan

Exhibit A – Legal Description

THAT PART OF THE SOUTHWEST FRACTIONAL OUARTER AND THE SOUTHEAST SECTION 31, TOWNSHIP 38 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF DEER OAKS SUBDIVISION; THENCE NORTHEASTERLY ALONG THE EASTERLY LINE OF SAID SUBDIVISION, BEING THE CENTERLINE OF DEERPATH ROAD, 105.60 FEET; THENCE NORTHEASTERLY, 255.30 FEET ALONG SAID CENTERLINE, ON THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 758.54 FEET, SAID ARC FORMING A CHORD THAT MEASURES 170 DEGREES 21' 29" COUNTERCLOCKWISE FROM THE LAST DESCRIBED COURSE AND MEASURES 254.10 FEET; THENCE NORTHEASTERLY, ALONG CENTERLINE, AT AN ANGLE OF 170 DEGREES 21' 29", MEASURED COUNTERCLOCKWISE FROM SAID CHORD, 1051.31 FEET; THENCE NORTHEASTERLY, ALONG SAID CENTERLINE, 145.30 FEET, ON THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 557.15 FEET, SAID ARC FORMING A CHORD THAT MEASURES 172 DEGREES 31' 44' CLOCKWISE FROM THE LAST DESCRIBED COURSE AND MEASURES 144.89 FEET; EASTERLY AT AN ANGLE OF 110 DEGREES 21' 49", MEASURED COUNTERCLOCKWISE FROM SAID CHORD, 40.95 FEET TO THE EASTERLY RIGHT OF WAY LINE OF DEERPATH ROAD FOR THE POINT OF BEGINNING; THENCE SOUTHEASTERLY, AT AN ANGLE OF 159 DEGREES 40' 44" MEASURED CLOCKWISE FROM THE CHORD FORMED BY THE LAST DESCRIBED ARC, 78.24 FEET; THENCE SOUTHEASTERLY, 77.49 FEET, ON THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 300.00 FEET, SAID ARC FORMING A CHORD THAT MEASURES 172 DEGREES 36' CLOCKWISE FROM THE LAST DESCRIBED COURSE AND MEASURES 77.28 FEET; THENCE SOUTHEASTERLY AT AN ANGLE OF 172 DEGREES 36', MEASURED CLOCKWISE FROM SAID CHORD, 228.86 FEET; THENCE SOUTHEASTERLY, 235.14 FEET, ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 366.0 FEET, SAID ARC FORMING A CHORD THAT MEASURES 161 DEGREES 35' 42" COUNTERCLOCKWISE FROM THE LAST DESCRIBED COURSE AND MEASURES 231.11 FEET; THENCE SOUTHEASTERLY AT AN ANGLE OF 161 DEGREES 35' 42", MEASURED COUNTERCLOCKWISE FROM THE LAST DESCRIBED CHORD, 117.91 FEET; THENCE EASTERLY AT AN ANGLE OF 135 DEGREES 25' 11" MEASURED CLOCKWISE FROM THE LAST DESCRIBED COURSE, 45.78 FEET TO THE WESTERLY RIGHT OF WAY LINE OF ORCHARD ROAD; THENCE NORTHEASTERLY ALONG SAID RIGHT OF WAY LINE, 1356.64 FEET, ON A CURVE TO THE RIGHT HAVING A RADIUS OF 3889.80 FEET, SAID ARC FORMING A CHORD THAT MEASURES 145 DEGREES 31' 56" COUNTERCLOCKWISE FROM THE LAST DESCRIBED COURSE AND MEASURES 1349.77 FEET, TO AN OLD CLAIM LINE THENCE NORTHERLY, AT AN ANGLE OF 126 DEGREES 26' DEGREES 26' 48" MEASURED CLOCKWISE FROM SAID CHORD, ALONG SAID OLD CLAIM LINE, 235.00 FEET TO THE CENTERLINE OF MOOSEHEART ROAD; THENCE WESTERLY AT AN ANGLE OF DEGREES 10' 56" MEASURED CLOCKWISE FROM SAID OLD CLAIM LINE ALONG SAID CENTERLINE, 1644.08 FEET; THENCE SOUTHERLY, AT AN ANGLE OF 96 DEGREES 38", MEASURED CLOCKWISE FROM SAID CENTERLINE, 380.48 FEET; THENCE SOUTHERLY AT AN ANGLE OF 178 DEGREES OF 38', MEASURED COUNTERCLOCKWISE FROM THE LAST DESCRIBED COURSE, 195.0 FEET; THENCE WESTERLY AT RIGHT ANGLE TO THE LAST DESCRIBED COURSE, 182.46 FEET TO THE POINT OF BEGINNING, ALL IN BATAVIA TOWNSHIP, KANE COUNTY, ILLINOIS.

Commonly known as: Vacant Land Orchard Road Farm – West of

Orchard Road, North of Tanner Road,

Kane County, Illinois

Exhibit B – AMENDMENT TO ZONINIG/PUD ORDINANCE



EXHIBIT C – PRELIMINARY PLANS



EXHIBIT D - PRELIMINARY SITE PLAN



ORDINANCE NO.

AN ORDINANCE AMENDING ORDINANCE NO. 13-01-07-03 ZONING AND GRANTING A SPECIAL USE AS PLANNED UNIT DEVELOPMENT FOR COMMERCIAL AND MULTI-FAMILY USE FOR THE PROPERTY LOCATED WEST OF ORCHARD ROAD, NORTH OF TANNER ROAD AND EAST OF DEERPATH ROAD IN THE VILLAGE OF NORTH AURORA

WHEREAS, the Trustee of the Stanley L. Zepelak Trust under a certain agreement dated April 26, 1989, hereinafter called "Owners" and/or "Petitioners" has filed an application to amend the Annexation Agreement by and between the Village of North Aurora and the Stanley L. Zepelak Trust approved by Ordinance No. 12-11-19-01 dated November 19, 2012 (the "Annexation Agreement") for certain property legally described in Exhibit "A" attached to the Amendment to the Annexation Agreement (hereinafter referred to as the "Property") entered into by the Village of North Aurora, an Illinois Municipal corporation (the "Village"), the Stanley L. Zepelak Trust under a certain agreement dated April 26, 1989, (the "Owners") and Fiduciary Real Estate Development, Inc., a Wisconsin business corporation (the "Developer") (hereinafter referred to as the "Annexation Agreement Amendment")"

WHEREAS, a petition requesting an amendment to the B-2 General Commercial, R-4 General Residential District and Mixed Use PUD Development approved by Ordinance No. 12-11-19-03 as modified by Ordinance No. 13-01-07-02 for just the Property has been filed with the Village, by the Owners and Developer; and

WHEREAS, the petitioners desire to develop the Property as a planned unit development in the R-4 General Residential District for the area north of the access road to be provided onto Orchard Road identified in the Annexation Agreement Amendment; and

WHEREAS, a public hearing was held on the application before the Plan Commission of the Village of North Aurora (hereinafter referred to as the "Plan Commission"), on March 1, 2022, pursuant to the requirements of the North Aurora Municipal Code and the Illinois Municipal Code; and

WHEREAS, the Plan Commission has recommended approval of the application with certain flexibility and subject to certain conditions, as indicated in the Plan Commission Minutes of the same date as the hearing (hereinafter referred to as the "Plan Commission Minutes"); and

WHEREAS, the President and Board of Trustees of the Village have concluded that the reasons set forth in the Plan Commission Report for the recommendation of approval are well founded and are consistent with the Zoning Ordinance and other Ordinances of the Village; and

41 42.

43

WHEREAS, the Petitioners have submitted all documentation required by the Village for its review of the proposed development; and

		Page 2 of 7						
1		EREAS, the Annexation Agreement Amendment sets forth an orderly process for the						
2 3	Village's administration of the development of the Property pursuant to the Development Plans identified in and approved by the Annexation Agreement Amendment; and							
4								
5	WH	EREAS, the President and the Board of Trustees of the Village of North Aurora have						
6		determined that the best interests of the Village will be attained by granting to the Property the						
7 8		for a planned development pursuant to the Development Plans identified in and the Annexation Agreement Amendment.						
9								
10 11		W, THEREFORE, BE IT ORDAINED BY THE VILLAGE BOARD OF THE OF NORTH AURORA, KANE COUNTY, ILLINOIS, as follows:						
12								
13 14	1. REC	CITALS						
15	The	representations and recitations set forth in the foregoing Recitals are material to this						
16		and are hereby incorporated into and become a part of this Ordinance as though they						
17		et forth in this Section 1						
18	J							
19	2. LAN	ND USE REQUIREMENT.						
20								
21	The	Property shall be developed subject to the following deviations from the North						
22	Aurora Mu	Aurora Municipal Code and operated in compliance with this Ordinance and all applicable						
23	ordinances	of the Village that are not in conflict with this Ordinance, except as provided for in						
24	the Annexa	tion Agreement, as amended:						
25								
26	2.1	The Property shall be developed substantially consistent with the Development						
27		Plans attached to and approved by the Annexation Agreement Amendment.						
28								
29	2.2	It is understood between the parties that office uses are generally permitted within						
30		the R-4 General Residential District.						
31								
32	2.3	The Property shall be developed consistent with the Preliminary Development						
33		Plans and Preliminary Site Plan approved by and attached to the Annexation						
34		Agreement Amendment for the Property as finalized pursuant to the process						
35		identified in the Annexation Agreement Amendment.						
36	2.4	The following deviations from the general requirements of the D.4 Canaral						
37 38	2.4	The following deviations from the general requirements of the R-4 General Residential District and subdivision control provisions of the North Aurora						
		Municipal Code and conditions are hereby approved for the Property:.						
39 40		Mumerpar Code and conditions are nereby approved for the Property						
40		2.4.1 Parking.						
42		2.1.1 1 mains.						
43		2.4.3.1 Parking shall be provided consistent with the Preliminary Plans						
		Taking shall be provided combinent with the Tremminary Trains						

be at least twenty-four (24) feet in width; and

1 2 3

5

approved by and attached to the Annexation Agreement Amendment and this Amendment to the PUD Ordinance;

2.4.1.2 Within the off-street parking facilities two-way traffic aisles shall

6			
7		2.4.1.3	3 One parking lot island shall be provided between every ten (10)
8			parking spaces.
9			
10		2.4.14	A total of 172 enclosed parking spaces shall be provided
11			representing 66% of the total number of residential units (260),
12			provided that some units have more than one enclosed parking
13			space.
14			
15	2.4.2	Lands	caping.
16			
17		2.4.2.1	If Kane County prohibits the planting of parkway trees along
18			Orchard Road, the petitioner shall plant additional trees within the
19			landscaped buffer along Orchard Road at a ratio of one (1) tree for
20			every two (2) parkway trees. Such changes shall also be deemed to
21			be a "Technical Change" to the development plans;
22			to the recomment change to the development plans,
23		2.4.2.2	2 The petitioner shall accommodate to the greatest extent possible
24			the health of the existing trees, including their canopy and root
25			systems, on the residential properties located directly to the west;
26			systems, on the residential properties reduced directly to the west,
27		2423	3 All planted parkway trees shall be the species and sizes specifically
28		2.1.2.5	identified in Chapter 16.12.190.C.8 of the Subdivision Ordinance;
29			identified in Chapter 10.12.170.2.0 of the Subdivision Ordinance,
30		2424	The required 50' landscaped buffer on Orchard Road may be
31		2.1.2.	reduced to 35' to accommodate the additional 15' right-of-way
32			required by Kane County the terms of which right-of-way
33			dedication are included in the Intergovernmental Agreement
34			between the Village and Kane County.
35			between the vinage and Rane County.
36	2 4 3	Pedest	rian Pathways
37	2.4.3	1 caest	Han Lanways
38		2 4 3 1	Pedestrian pathways shall be constructed consistent with the
39		2.4.3.1	Preliminary Plans approved by and attached to the Annexation
40			Agreement Amendment and Amendment to the PUD Ordinance;
40 41			rigicoment rinonament and rinonament to the 1 OD Ordinance,
42		2432	2 The pedestrian walkway along Orchard Road shall either become a
+2 43		۷.≒۰۶۰۷	public sidewalk (public access easement) or be moved into the
T.J			public sidewark (public access casement) of the moved into the

1			adjacent right-of-way.
2			
3		2.4.4	Dumpsters. All dumpsters located on the subject property shall be
4 5			enclosed per Section 14.11.A of the Zoning Ordinance.
6		2.4.5	Photometrics. A photometric plan shall be submitted and approved by the
7			Village Community Development Director in keeping with Village
8			ordinances and codes the prior to building permit issuance.
9			
10		2.4.6	Architecture: The building elevations, materials, and design elements shall
11			be consistent with the Preliminary Plans approved by and attached to the
12			Annexation Agreement Amendment.
13			
14	3.	SITE I	DEVELOPMENT STANDARDS:
15			
16			opment standards of the North Aurora Code for planned unit developments
17			e Property, except as modified by the provisions of this Amendment to the
18	PUD Ordina	nce and o	of the Annexation Agreement Amendment.
19			
20	4.	FINAI	L PLAN APPROVAL, DEVELOPMENT PROCESS.
21			
22		-	an approval shall be handled pursuant to the Annexation Agreement
23			e development process shall be handled per the Annexation Agreement
24	Amendment	and this	Ordinance in keeping with the Village ordnances and codes.
25	E	INICOI	DDOD ATION OF DROVISIONS OF ANNEW ATION ACREMENT
26	5.	INCO	RPORATION OF PROVISIONS OF ANNEXATION AGREEMENT.
27	The	onnlicah	le provisions of the Annexation Agreement Amendment are hereby
28 29			s if fully set forth herein, and shall be construed as a part of the substance of
30	this Ordinar		the event of a conflict between this Ordinance and the Annexation
31			of the Annexation Agreement Amendment shall supersede and prevail over
32	the terms of		
33	the terms of	uns Ordi	mance.
34	6.	INCOL	RPORATION OF THE PROVISIONS OF THE PUD ORDINANCE.
35	0.	11.00.	
36	All tl	ne terms	and provisions of the PUD Ordinance and the general provisions of the
37			Code, Subdivision Code and other codes and ordinances not amended by
38		_	nexation Agreement Amendment shall remain in force and effect.
39			
40	7.	COME	PLIANCE WITH STATE STATUTES.
41			
42	In the	e event t	hat any one or more provisions of this Ordinance do not comply with any
43			ons of the Illinois Compiled Statute and the governing rules of the Water

1	Pollution Control Board	or the Federal or State Environi	mental Protection Agencies, then the			
2	Village, Owner, and all of their respective successors and assigns, agree to cooperate to comply					
3	with said provisions which shall include, but not be limited to, the passage of resolutions and					
4	ordinances to accomplish	such compliance.				
5						
6	9. CONFLIC	T IN REGULATIONS AND ORD	JINANCES.			
7 8	The provisions of	this Ordinance shall supersede the	provisions of any ordinance, code, or			
9	1	which may be in conflict with the	•			
10	regulation of the vinage v	which may be in commet with the p	provisions of this Ordinance.			
11	10. INCORPO	RATION OF EXHIBITS.				
12						
13	All exhibits attach	ned to this Ordinance and attache	ed to the Annexation Agreement and			
14	Annexation Agreement	Amendment are hereby incorpor	ated herein and made a part of the			
15	substance hereof.					
16						
17			remain in effect until amended in the			
18	manner provided by law of	or extinguished under the terms of	this Ordinance.			
19						
20	11. EFFECTIV	/E DATE.				
21	TT - 11 0 1					
22			and after its passage and approval in			
23	accordance with law and i	ipon the approval of the Annexati	on Agreement at the same meeting.			
24	DDESENTED to	the Doord of Trustees of the Vil	lace of North Assess Vone County			
2526	Illinois, this day of		lage of North Aurora, Kane County,			
27	initiois, this day or	, 2022.				
28	PASSED by the B	oard of Trustees of the Village of	North Aurora, Kane County, Illinois,			
29	this day of		Troiti ratora, Rane County, Inmois,			
30	uns <u>un</u> un					
31	Mark Carroll	Laura C	Curtis			
32	Mark Gaffino	Mark G	Guethle			
33	Michael Lowery	Caroly	n Salazar			
33	Wienaci Edwery					
34	APPROVED and	signed by me as the President of t	he Board of Trustees of the Village of			
35		aty, Illinois, this day of				
36	,		•			
37						
38			Village President			

ATTEST:

39 40

Village Clerk



Page	7	of	7

1	
2	EXHIBIT 1
3	
4	
5	
6	Plan Commission Meeting Minutes, Findings & Recommendation



VILLAGE OF NORTH AURORA PLAN COMMISSION MEETING MINUTES MARCH 1, 2022

CALL TO ORDER

Chairman Mike Brackett called the meeting to order.

ROLL CALL

In attendance: Chairman Mike Brackett, Commissioners, Anna Tuohy, Aaron Anderson, Scott Branson, Alexander Negro, Richard Newell, and Doug Botkin

Not in attendance: Mark Bozik and Tom Lenkart

Staff in attendance: Village Administrator Steve Bosco, Community & Economic Development

Director Mike Toth and Planner David Hansen

Also in attendance: Kevin Drendel, Village Attorney

APPROVAL OF MINUTES

1. Approval of Plan Commission Minutes dated February 1, 2022

Motion for approval made by Commissioner Newell and seconded by Commissioner Branson. All in favor. **Motion approved**.

PUBLIC HEARING

- 1. <u>Petition #22-02:</u> The petitioner, Fiduciary Real Estate Development, Inc., requests the following actions in the R-4 General Residence District, Planned Unit Development for the vacant tract of land situated west of Orchard Road, south of West Mooseheart Road and east of Deerpath Road:
 - a) Special Use Planned Unit Development Amendment with deviations to the Planned Unit Development and Zoning Ordinance
 - b) Preliminary Final Plat of Subdivision
 - c) Site Plan Approval

Chairman Mike Brackett called the public hearing to order.

Chairman Brackett explained Mike Toth will introduce the petition, which will be followed by the petitioner's presentation and public comments. The Plan Commission will then close the public hearing and discuss the petition amongst Commissioner's and ask any questions they may have.

Mike Toth introduced Petition #22-02, which is a 21.7 acre tract of land located east of Deerpath Rd, south of West Mooseheart Rd, and north of Orchard Rd. The developer will give a presentation and provide background on the project itself and then the Village will give their presentation and explain the developer's request in more detail.

The petitioner, Tony DeRosa (Vice President for Fiduciary Real Estate Development, Inc.) presented their Seasons at North Aurora project. DeRosa gave a brief overview on the company, which is based out of Milwaukee, Wisconsin. DeRosa mentioned mixed-use and luxury multifamily products are their specialty and have developed and owned up to 11,000 apartments in their history. DeRosa shared some completed projects that are similar to the Seasons at North Aurora concept, which included their first Seasons development, Seasons at Randall Road in West Dundee, which was completed a few years ago. That development was two phases, which consisted of 380 total apartments. DeRosa showed pictures of the completed project's clubhouse, interior finishes, and overall site. DeRosa mentioned his other team members are here tonight include David Ferrell and Ashley Poull. AG Architecture is their design company and Manhard Consulting Engineering is their civil engineering firm.

DeRosa presented their Seasons at North Aurora concept in greater detail, which includes 260 apartment units (26 studio, 104 one bedroom, 104 two bedroom, and 26 three bedroom units). DeRosa mentioned it was a 21.7 acre site and the current zoning is R-4 General Residence District and the proposed multi-family development is a permitted use with a density of about 12 units per acre. DeRosa mentioned there is Connector Road that divides the two sites and the road is about \$1 million to build and Fiduciary will be building it as part of the site development. Parcels to the south of the connector road are zoned B-2 General Business District for future commercial, but are not part of this development. DeRosa stated the area's apartment occupancy is around 95% and there is a lack of newer multi-family housing in North Aurora. DeRosa added North Aurora has older rental housing stock, lack modern amenities and this development will target all age groups. Apartment prices would be \$1,400 (studio) to \$2,700 (3 bedroom). The development will have a condo and townhome type feel with garages and private entry's, maintenance free living with attached/detached garages, oversized windows, balconies, open concept floor plans, walk in closets, in unit washer/dryer and stainless steel appliances. It will also have a clubhouse, walkability connections throughout the site and on-site management team. DeRosa showed images of the proposed development, which included the clubhouse, outdoor areas, interior gathering areas, and exterior elevations. DeRosa mentioned the east-west connector road would divide the 40 acres of parcels with multi-family permitted on north side and commercial on both ends and the first developer to build on site must build the connector road. DeRosa added the parking screened to interior of development, there is a landscape buffer around perimeter, stormwater features on north side of development, trail/sidewalk connections throughout the site. Parking will be assigned by unit for both garages and exterior parking spaces. DeRosa showed a two-minute fly through 3-D presentation of what the site would look like.

DeRosa outlined the PUD Ordinance development standards for apartment uses for the site, which included the following: building height be limited to three stories (development is two stories), apartments unit have individual access from exterior (each unit will have individual access from the exterior of the building), one parking space provided for each dwelling unit in an interior enclosed area (66% enclosed parking spaces per unit a total of 172 spaces); at least 25% of each apartment building covered in masonry (25.8% will be covered), and architectural monotony standards must be met (DeRosa mentioned cement siding, big windows, and lots of design to avoid monotony on the exterior). DeRosa shared some conclusions from preliminary traffic study, which included the development would not have a detrimental impact. Some traffic study details included Orchard Rd is estimated to increase 8% per day (60% of it would use Orchard to the south

via the connector road that comes out to .73 trips per minute). Deerpath Rd traffic would increase 3% trips increase per day (15% of the traffic is estimated to go south on Deerpath Rd, which is about .18 trips per minute). DeRosa added current conditions as well as improvements as part of the development will help mitigate congestion and commercial development would have more traffic impact than residential one. DeRosa said Fiduciary is working with Kane County Department of Transportation on traffic improvements for Orchard Rd, which would include a southbound deceleration lane on Orchard Rd into the connector road and a dedicated northbound left turn lane into the connector road DeRosa showed the elevations for the clubhouse, floorplans and building exterior contrast. DeRosa added the current tax bill is around \$600 tax bill, but would increase to about \$800,000 a year after the development is completed. DeRosa continued and said this would help retailers in area that are struggling, that the development will hopefully be a catalyst to help commercial develop to the south in the future and that the development is highest and best use of property according to our research.

Mike Toth presented slides regarding the Village's codes, zoning designation, the current PUD, and the Annexation Agreement for the property. In 2012, the property was annexed and a PUD ordinance was approved, which established the B-2 General Business District for the properties north and south of the connector road area with area north of connector road having an R-4 General Residence District zoning designation which allows multi-family as a permitted use. The PUD established standards in 2012 and was amended in 2013 which had a few changes. One change was, in the 2012 PUD, both interior and exterior access was required, but the 2013 PUD only requires exterior access which the development is providing. Another change is that the 2012 PUD ordinance required 20% of the total units must include an interior enclosed parking space, while 2013 PUD ordinance requires 100% of parking spaces (260 spaces) would need to be provided interior enclosed parking.

Toth stated, if the site plan met all requirements of the PUD and Annexation Agreement, the site plan would only need to be submitted to the Plan Commission for review and could have been forwarded to the Village Board for approval without a need for a public hearing. Toth elaborated and said site plan reviews are required for any development to go to the Plan Commission for review and Village Board for approval. However in this PUD ordinance, once anyone submitted a site plan for the property it would come to the Plan Commission for review and developer would only be required to send notice to the adjacent property owners. No signs or newspaper listings would have been required if this would have happened. Site plan approval standards are included in the annexation agreement instead of the PUD, which means Village Board has final say over the site development standards. He added they are included in staff report for guidance tonight on Page 5. Another approval to be considered is the establishment of Lot 1 of Seasons at North Aurora subdivision and preliminary plat that has been submitted.

Toth explained the reason why the public hearing was triggered, signs on the property and letters sent to property owners, etc. were because of Planned Unit Development and Zoning Ordinance amendments. First, the enclosed parking spaces deviation. They are providing 172 enclosed parking spaces, but they need 260 enclosed spaces to avoid it. More garages on property could be a negative due to storage component. Second, is the plan submittal process deviation. As long as the plan being submitted for permit review matches the plans approved by the Village Board they do not need to go through the final review process. Third, the landscape buffer along Orchard

Road. Kane County requires 170 feet of ROW and has jurisdiction for the Road. Upon review, Kane County requires another 15 feet into the buffer yard so the landscape buffer has been reduced to 35 feet instead of 50 feet allowable by code. This has been customary since the Orchard Acres development to the south of this proposed development, on northwest part of Oak St and Orchard Rd., also had same thing happen – the 50 foot buffer was reduced to a 35 feet setback. Given those deviations, staff has reviewed the site plan and is recommending approval with eight conditions upon approval, which are listed on the last page of the staff report.

Chairman Mike Brackett opened the public hearing for public comment. Chairman Brackett mentioned no one signed up on the sheet, but anyone who would like to speak is free to do so in an orderly manner.

Ann Snodgrass (1525 W. Mooseheart Rd.) had a few questions regarding how long the plan been under consideration, what is the time frame for the development, any traffic studies on Mooseheart Rd towards White Oak Dr, how will this impact the schools, and will a left turn be allowed on Orchard Rd. Toth mentioned the Village has been in contact with the Village for months and have a had a few meetings about the project both internal and external and the plan tonight was first seen about a month ago. Toth said the next step is to send it to the Village Board for further discussion with final consideration coming in April or May. It would then have to go through permitting process if approved before site work could begin. DeRosa said the construction target date is mid to late summer with 20 months start to finish with the first building completed in 10 months and one building finished every 30 days after commencement of construction. DeRosa said roughly 10 school age kids per 100 units is about the average they see so they would expect 25-30 school age kids at the development. KOLA traffic consultant, Luay Aboona, said the intersection for Orchard Rd/White Oak and White Oak/W Mooseheart will be looked at as the traffic is further studied and the new access road will be a full intersection with a left and right turn out onto Orchard with stop sign control. DeRosa mentioned they are working with KDOT and that the development will not warrant a need for a traffic signal. Snodgrass asked if there will be any more meetings for residents to speak and asked about how the construction traffic routes will enter and exit during construction. DeRosa said they will work with the Village regarding access for the site. Steve Bosco mentioned tonight the Plan Commission will make a recommendation to the Village Board and next the Village Board would look at it at a Committee of a Whole (COW) meeting which is a public meeting where people can attend again. Bosco said there will be at least two COW meetings then will be a third meeting for approval is the likely route and residents can speak at each meeting. Meetings are held here at Village Hall and packets will be posted online. Public hearing notices are only for Plan Commission meeting and will not be updated on site. Toth added Village Board meetings are held 1st and 3rd Monday of the month and packets are posted online typically by Thursday afternoon prior to that meeting.

Michelle Pitts (2041 Westover Rd.) has lived near Deerpath Rd for 42 years and had questions about the need for the multi-family housing in the area and didn't want to bring certain type of people to town. She was also concerned about the environmental impact of marshland in Mirador since it floods every year and has a good amount of wildlife in that area. Toth mentioned there are IDNR reports that are submitted as part of the process. Bosco mentioned governments speak with acronyms a lot and explained what each of the following were: IGA stands for "intergovernmental agreement", the IDNR is the "Illinois Department of Natural Resources" and PUD is a "Planned

Unit Development". The petitioner questioned what type of people or demographics she was referring to. DeRosa mentioned demand for this type of development is stronger than 20 years ago and many people want to rent now due to maintenance free living. Retirees, young professional, and snowbirds will be attracted to this development. High quality of housing is as nice or nicer than brand new than single family home and average income 10-15% higher than income in the community as a whole. Rooftops drive retail and should help bring more retail to area and help maintain existing retail.

Jared Placek, Engineer with Manhard Engineering, addressed stormwater concerns and explained there are two stormwater management ponds proposed on the development and the current conditions of the stormwater drain north into the Mirador pond. Currently the site is uncontained and unrestricted north into the area, which has been mentioned as a flooding concern. Part of the development stormwater detention basin would hold water for an extended period of time and allows water to slow down. As a result, it will increase amount of time the water heads north. As required by law, the development will improve the current conditions and in regards to IDNR species endangered in the area, not on the site, but in the area, include herons, but the development doesn't show to have a negative impact on that and will continue to work with IDNR and other governmental agencies. Toth mentioned Village Engineer will review stormwater as well as need to follow the Kane County Stormwater Ordinance.

Dan Carter (1516 W Mooseheart Rd.) had questions about the construction access points, village curfews in regards to the social aspects of the development, dumpster locations and wondered if there would be streetlights at connector road and Deerpath Rd. Toth shared there appears to be eight dumpsters on site and the two access points for the property are on the connector road. Dumpsters would have to follow code of 6-8ft of solid wall or fence with a gate and 6 foot concrete pad. Toth added construction access points will be determined as part of the engineering review and erosion control plan. Bosco stated that curfews generally apply to certain activities after a certain time, but the development would most likely be noise control complaints where a resident can call the police if there is excessive noise. DeRosa mentioned loud parties are not allowed on the weekend; clubhouse gatherings are mostly with family; speakers and pool-related activities are kept at a minimum as well. Carter asked if W Mooseheart Rd will be overflow parking and there will be no access to W Mooseheart Rd from the development. DeRosa said Fiduciary looked into going to W. Mooseheart Rd for access, but after review, traffic going to the connector road made the most sense for the area and creates more buffer green space for the site and the connector road would only have access to the site. DeRosa said the management company controls noise for the clubhouse activities and if residents are loud they can be cited. It could lead to a break in their lease if continued. DeRosa added that no parking is needed on W. Mooseheart Rd since the site has adequate amount of parking. Toth added two parking spaces per unit are required and the developer is providing 2.3 parking spaces per unit. Toth said he spoke with the Police Department regarding W. Mooseheart Rd and the road isn't supposed to be parked on and cars would be towed if parked there. If it became an issue the Village can enact more specific prohibited parking, if needed.

Steve Poss (832 Benson Ct.) asked what the benefit to the community is since it will add additional people and traffic to the surrounding areas. Kevin Drendel shared the Village does not own the property and must accept the proposal and process it accordingly. Drendel said the Village doesn't

have the ability to just say no if it meets the requirements and outlined how the property owner has private property rights, which gives them opportunity to pursue a development how they see fit. The municipality has zoning controls the developer must follow, but the Village cannot deny a property outright because people don't like it. Poss asked if this will impact property values. DeRosa added empirical research suggests multi-family adjacent to the single family homes does have a positive impact on property values. Multi-family tends to drive new businesses to the area as well. Toth added business owners tend to look for demographic details, including area income, as part of their research. Toth also added the Comprehensive Plan suggests a transition from single-family to multi-family to commercial rather than a straight jump from commercial to single-family zoning. DeRosa added typically a desirable community has vibrant retail and business because of the people who spend money in that area. The more people spending more money, the more businesses stay open and property values tend to rise.

Max S. (unknown address) asked if the public hearing process results in a vote or just lets residents know what is happening. Bosco explained this meeting takes input by the Plan Commission who is appointed by the Mayor and Village Board. The Plan Commission role is to hear the public input, staff report, developer presentation, and add any conditions they see fit. The Plan Commission then votes to approve or deny the project, but the vote is a recommendation not a final act. Bosco continued it will then go to the Mayor and Village Board, who are elected and they make the final decision to approve it or not. Max S. was concerned about the impact on nature and the number of kids it may add to the schools. He asked if the Village plans to expand the elementary and middle schools. Bosco said the school district is a different taxing body and would make that decision. Bosco mentioned the percentage of property taxes that go to the Village is 5%-6% which would be around \$50,000 while the schools would receive 60-70% of the property tax bill. Toth stated a land cash fee and school district impact fee is required for developments and it is paid at the time of the permit. Max S. asked if the east side of Orchard Rd. is part of the development. Toth said not at this time and not a lot of concepts have been submitted for that site. That property is zoned similar to these parcels where it's mostly commercial property, but allows 30-40% residential should a developer request it. Max S. mentioned more senior living in the area would be nice addition if possible.

Dan Carter asked if the only reason we are here today is for the public hearing regarding the garage situation. Toth stated yes, mostly since the PUD deviation triggered the public notice and once that was opened then landscape buffer was added as a KDOT requirement upon their review. Toth said the developer could meet that code if they do 100% garages, but as mentioned before having too many garages could lead to parking spillover since the garages tend to be used for storage instead of parking. Drendel added in 2012 there was a public hearing for the zoning, annexation agreement and PUD and amended again in 2013, which also went through a hearing process so this is technically the third hearing process this property has gone through. Bosco explained properties are zoned throughout the community and each district has different standards of what can go in where. Staff works with the developer for a few months to get through what they are asking for so they can have all the details lined up for a meeting like this. We can't notice a public hearing until we find what the change is about and a developer has submitted all the required information.

Jacqueline S. (resident of Tanner Trails) had a few questions regarding ADA units on the property, minimum lease terms, how many three bedroom units there will be, what the maximum people is

allowed for gathering area in the clubhouse, environmental concerns for detention regarding pipe size and the depth of the pond. DeRosa mentioned ADA units will be available due to law and 2% of the units typically need to comply. Minimum lease terms are 6, but most leases are usually 12-18 month leases. Toth stated occupancy limits are determine by the local code, which would be the North Aurora Fire Protection District. Jared Placek, Engineer from Manhard Engineering, shared the existing pipe on the south end of W Mooseheart Rd is 12 inches in diameter widens to 21 inches as it travels north to the marsh area. The development would install a smaller pipe to keep the water in the detention basin as long as possible with the water levels in the ponds for two-year storm event reaching 2-3 feet and 100 year flood event reaching 5-6 feet with the capacity to handle 100 years storm events. Toth added there are 26 three-bedroom units on the plan.

Ann Snodgrass had a few more questions regarding occupancy requirements and asked if the site could be voted down if there are enough residents that oppose it. DeRosa stated anyone who lives in the apartment is required to be on the lease and they track everyone who lives there including tenant vehicles. Toth stated again the fire district determines the number of occupants in a building. Drendel added that there are laws regarding defining a family and a municipality cannot make such determination in regards to those terms. Bosco said the Village can vote it down, but there is underlining zoning in place already so the developer could resubmit a site plan and it could be approved by the Village Board. Snodgrass mentioned she didn't think a \$1,400 monthly rent is luxury for a studio. She moved to North Aurora recently from a local community where projects like these have been turned down and developers don't always follow through on what they offer. She prefers condo ownership instead of rental apartment units. Snodgrass asked about the development by Woodman's and what is the rental rate and occupancy rate. Toth said The Springs are usually at 95% occupancy, which has 300 units over 18 acres.

Hugo Cardenas (3S701 Deerpath Rd) mentioned he has Oak Trees on his property and believes some are 300 years old. He was wondering if developer could look into preserving the root structure. Cardenas was also concerned about the condition of the rental community after five years. He added there is a potential for residents breaking into his vehicles. Cardenas also shared that the Spring Apartments are not his neighbors, but he can hear the music from his backyard so he was concerned how close the clubhouse was to his house. He also concern about the connector road being too close to the Oak Trees on his property. Cardenas mentioned when most people drink they get loud and happy and could cause noise issues. Cardenas said he would like the developer to look into the Oak Trees which are supposedly 300 years old as they are a key component of why he moved to the property in the first place.

Matt Berger, (resident of Mirador) had a question regarding who is the property owner of this site and have there been any proposals in the past regarding single family homes on this site. Toth mentioned Stan Zepelak is the original property owner of site, but is unsure if developer has officially bought it. Toth stated the village has only a few phone calls for multi-family or commercial on this site, but nothing for single family homes since he started with the Village in 2013.

Chairman Mike Brackett closed the public hearing.

NEW BUSINESS

- 1. Petition #22-02: The petitioner, Fiduciary Real Estate Development, Inc., requests the following actions in the R-4 General Residence District, Planned Unit Development for the vacant tract of land situated west of Orchard Road, south of West Mooseheart Road and east of Deerpath Road:
 - a) Special Use Planned Unit Development Amendment with deviations to the Planned Unit Development and Zoning Ordinance
 - b) Preliminary Final Plat of Subdivision
 - c) Site Plan Approval

Commissioner Doug Botkin thanked the staff and developer for providing a detailed presentation. Botkin mentioned the Comprehensive Plan calls for single-family housing in that location so the project complies with the zoning, but not necessarily the Comprehensive Plan. Deviating from the Comprehensive Plan is always a thing to look out for, but the plan tonight is legal and should be considered since the property is zoned that certain way. The main question is do we like the development and developer and so far I do and would vote yes.

Commissioner Aaron Anderson thanked the residents for engaging in the process and asked if the renderings and fly through is what the plan is going to be and the impact on surrounding infrastructure. Commissioner Anderson mentioned multifamily developments are newer to North Aurora, but has been written on the wall for 15 years and has now made its way here. Commissioner Anderson questioned how the 20-30 school kid information was determined. DeRosa said 10 school age kids per 100 units is the average and that's how they got that estimate. DeRosa encouraged staff and members to reach out to other communities about their other properties to get feedback how well those communities are doing and how their standards are being held up. DeRosa said he can provide tours of those communities if anyone was interested. DeRosa added the age range for the development is pretty much any age from 22 to 82. Commissioner Anderson asked how it was determined to locate the clubhouse adjacent to the single family residential housing. DeRosa said the landscape buffer makes it difficult to have the clubhouse anywhere else on site due to pavement and other accessory structures not allowed in the buffer area. DeRosa mentioned if they were allowed to encroach in the landscape setback it would be easier to move the clubhouse more east off the property line. DeRosa said they looked into having all three story buildings and adding 100 more apartments to the site to make it work, but prefer the less dense two-story plan you see here tonight. DeRosa added the site scale fits two-story more, but it appears to come down to the 1:1 garage unit's provision.

Chairman Brackett also agreed the clubhouse location pushed up next to the private property concerned him. Toth added the site's primary access is pushed back 400-500 feet due to KDOT provisions, which is why the clubhouse is located where it is. The landscape plan shows adding fencing and evergreens along the adjacent property owner to the west, which allows more buffering and screening for both parties. Chairman Brackett mentioned he thought the clubhouse location is odd since it's not centralized in the development to all the units.

Commissioner Scott Branson shared there were homes here before Mirador and Tanner Trails were built so development does happen and changes the landscape. Commissioner Branson shared that

the three-bedroom apartments will probably be filled with more kids the developer is projecting, but rooftops drive retail and there are lots of new retail opportunities for the Village. Commissioner Branson mentioned he liked the residential plan for that area compared to having an industrial or commercial development next to the existing single family homes. Commissioner Branson also shared concerns regarding the clubhouse location and for the Oak Trees adjacent to the clubhouse area.

Commissioner Anna Tuohy thanked the residents for coming out and sharing their perspectives, views and concerns. Commissioner Tuohy mentioned she lives in Tanner Trails and understands the traffic concerns for the development. She asked if there was only a fence/gate along the west side perimeter of the development or was it for the entire development. DeRosa said the only fencing on the site is along the west side of the clubhouse, which is anticipated to be a six foot wood board-on-board fence. Commissioner Tuohy asked how many residents would be on site if it was at 100% capacity. DeRosa shared it would be around 420 residents on site if occupancy was 100%. Commissioner Tuohy also shared the concern about the clubhouse proximity to the property owner to the west. DeRosa said that concern is noted and will be looked into. Toth said looking into an alternative clubhouse locations can be added as a condition to the list of staff conditions, should the Plan Commission want to recommend approval.

Multiple Commissioners asked about why the buffer dictates the location of the clubhouse and pool and why the clubhouse is so far away from other buildings. Toth shared KDOT requires a full access road to the connector road be 500 feet back from Orchard Road and the clubhouse likes to be the primary access point in most developments so possible tenants don't need to drive through the entire site to get to the clubhouse. DeRosa shared many complexes don't have the clubhouse centralized, but is the point closest to the main access point of the site. Commissioner Tuohy said the demand is here since apartments are full occupancy in most parts of the Village and people who want to move here can't do that do to lack of inventory. Commissioner Tuohy also asked if there have been any crime increase in The Springs since this proposed development is a similar, but less dense apartment community. Bosco stated the Police Department pulled police calls to the Springs and are currently reviewing it. Chairman Brackett shared more density makes it appear there are more calls, but should be viewed propositionally compared to subdivisions with same amount of residents. DeRosa shared after five years, we do not lower our standards and have detailed credit, landlord references and criminal background checks.

Commissioner Tuohy asked how much the average income may be for each unit type. DeRosa mentioned median income for the area is about \$85,000 and with 30% going to rent on average you are looking between \$50,000 incomes for studios to \$90,000 for the three-bedroom units if not higher. Commissioner Tuohy also asked about the traffic concern and would like more information on intersections for Deerpath Rd/Oak St., W. Mooseheart Rd./Deerpath Rd., Tanner Rd./Deerpath Rd., W. Mooseheart Rd./White Oak Dr., and Orchard Rd./White Oak Dr. as well as Orchard Rd. and Deerpath Rd. in regards to the connector road. DeRosa shared KDOT has jurisdiction of Orchard Rd., but it appears the Village will maintain the connector road once built. DeRosa shared stop light is not warranted at this point, but if Mango Creek (land to the east) is developed it would trigger the signalized intersection. Toth said the connector road was also added to relieve traffic on Deerpath Rd. to Orchard Rd. and vision triangle provisions will be taken into consideration at the time the intersections are developed.

Commissioner Alexander Negro mentioned he was also concerned with location of the clubhouse and asked who is responsible for paying for the stoplight. Toth shared he believes there is a shared cost between Village and Developer, but will check the Annexation Agreement.

Commissioner Richard Newell thanked the residents for the community interest and taking time to be there. Commissioner Newell shared that current demographic trends in the United States show younger groups aren't buying regardless of economic status and prefer to rent on many occasions. Commissioner Newell also mentioned the clubhouse location seemed weird, but understands why it was placed there. Commissioner Newell asked where the stormwater management goes. Jared Placek mentioned best management practices according to law will be utilized and make it naturalized way to make sure it doesn't pollute anything downstream. Commissioner Newell also mentioned he had concerns about the traffic study as noted by Commissioner Tuohy. Commissioner Botkin mentioned although the clubhouse is close to property owner to the west, but if the developer moved it to the center, an apartment building with a balcony would most likely be next to the property owner and may be harder to screen and reduce noise.

Chairman Brackett shared the main concerns he's heard: traffic in regards to the signalization/stop sign on the connector road, the intersections for Deerpath Rd. and Orchard Rd., stormwater management and the location of the clubhouse area. Commissioner Tuohy would like the traffic study to be looked into more going forward. Toth stated clubhouse could be put in as a condition, stormwater would be addressed through permitting and engineering review and the traffic study would be reviewed by the Village engineer going forward and more detailed analysis will be done.

Bosco mentioned there are several options to consider. One option would be to ask the developer to gather more information and come back, if that would help the Plan Commission make a recommendation. Another option would be to vote as-is or add conditions to forward this project onto the Village Board for review. DeRosa mentioned KDOT still has jurisdiction on some roads so they may require certain traffic criteria and will make the ultimate decision on those intersection improvements. Commissioner Tuohy said she was good with the eight conditions in the report as well as adding a traffic and clubhouse location condition to it. Commissioner Anderson said he was in favor to send it on to the Village Board if there is community interest in it. Toth said that he can work with the Village Attorney to draft the Plan Commission conditions in more detail. Toth said staff will provide draft minutes to Village Board for the upcoming COW meeting and outline the main comments and concerns mentioned tonight. Commissioner Botkin asked the clubhouse condition to state that the developer should examine alternate clubhouse locations and not state it is required to be moved. Bosco asked for clarification on the conditions regarding to traffic. Chairman Brackett said the condition was to turn left onto Orchard Rd. from the connector road and to further examine the site in regards to traffic flow on Deerpath Rd., W Mooseheart Rd., and White Oak Dr. Commissioner Negro asked if stop light language is needed to be included in the conditions and how fast the developer would be able to look into alternate options for the clubhouse location. Chairman Brackett mentioned the stoplight would be determined by Kane County as part as their review so it does not need to be included. Bosco said there is a formula they use to determine a stop sign vs. a signalized intersection. Toth shared the annexation agreement appears to indicate the stoplight cost on Orchard Rd. and connector road is tied to cost sharing between the two development sites. DeRosa stated it would take about a week to modify the clubhouse location, but it would be ready in time for the Village Board meeting. Commissioner Anderson asked to add a condition looking into protecting the root structure for the Oak Trees on the property west of the development. Commissioner Tuohy said the IDNR requirement would apply to the site for wildlife so that would not need to be added as a condition.

Motion for approval of Petition #22-02 with the following conditions approved above regarding clubhouse placement, root structures of the Oak Trees on the western perimeter of the development and look into the traffic study in greater detail with staff's eight conditions was made by Commissioner Tuohy and seconded by Commissioner Newell. Vote: Botkin – Yes, Newell – Yes, Negro – Yes, Anderson – Yes, Tuohy — Yes, Branson – Yes, Brackett – Yes. **Motion approved**.

Bosco mentioned there will be two to three more public meetings for public comment discuss the topic before it would be considered for approval by the Village Board. If anyone has any questions they can reach out to Village and more specifically myself and the Community Development Department.

OLD BUSINESS – None

PLAN COMMISSIONER COMMENTS AND PROJECT UPDATES

Toth mentioned the recreational vehicles item went to the Committee of the Whole meeting on February 21, 2022 and staff is working on finalizing the new ordinance to bring to the Village Board. Staff provided the Village Board with all the Plan Commission's comments and decided to keep the time as Thursday 6pm to Monday noon and change the two week periods to April 1 -15 and October 15 - 30.

Toth shared that in 2020 Aurora Pack brought forward their full expansion plan and recently submitted building plans that were different than what was approved. This resulted in a minor change that needed to be approved by the Village Board. It was deemed a minor change since it met all the criteria for the PUD for the I-3 District, but changes were significant enough that Village Board needed to approve the altered site plan. Toth also shared permits are getting ready for the Orchard Acres development, which includes Starbucks and Taco Bell.

ADJOURNMENT

Motion to adjourn made by Commissioner Anderson and seconded by Commissioner Botkin. All in favor. **Motion approved**.

Respectfully Submitted,

Jessica Watkins Village Clerk

STAFF REPORT TO THE VILLAGE OF NORTH AURORA PLANNING COMMISSION FROM: MIKE TOTH, COMMUNITY & ECONOMIC DEVELOPMENT DIRECTOR

GENERAL INFORMATION

Meeting Date: March 1, 2022

Petition Number: 22-02

Petitioner: Fiduciary Real Estate

Development, Inc.

Requests: 1) Special Use — Planned Unit Development Amendment with deviations to the Planned Unit Development and Zoning Ordinance 2) Preliminary Final Plat of Subdivision 3) Site Plan Approval



Parcel Number(s): 12-31-300-017 & 12-31-400-026

Size: 21.7 acres

Current Zoning: B-2 General Business District/R-4 General Residence District Mixed Use PUD

Current Land Use: Vacant Land

Proposed Land Use: Multi-Family

Dwellings

Proposed Use Classification: Permitted Use

Contiguous Land Use: North: R-1 Single Family District and Open Space; South: Vacant Land; East: R-1 Single Family Residence District; West: F – Farming (Unincorporated Kane County)



PROPOSAL

The subject property is a 21.7-acre vacant tract situated west of Orchard Road, south of West Mooseheart Road, and east of Deerpath Road. The petitioner has submitted plans for a multifamily residential development to be located on the subject property in the B-2 General Business District/R-4 General Residence District Mixed Use Planned Unit Development. The submitted development plans include thirteen (13) two-story residential buildings, consisting of 20 units per building, providing a total of 260 residential units – 26 studio units, 104 one-bedroom units, 104 two-bedroom units and 26 three-bedroom units. A clubhouse, pool and other ancillary amenities would also be included.

Staff Report Petition #22-02 Page 2 of 6

BACKGROUND

On August 7, 2012 a public hearing was held before the Plan Commission at such time the property owner requested the property be annexed into the Village and change the E-R Estate Rural District zoning designation to a B-2 General Business District/R-4 General Residence District flex zoning, similar to that of the Mango Creek development located across Orchard Road. As part of the request, the property would be split by a connector road located between Deerpath Road and Orchard Road with the ability to allow multi-family residential use on the north side of the connector road and a commercial option on both sides of the connector road. The multi-family residential use would only be permitted north of the connector road. Surrounding property owners had concerns regarding higher density, traffic congestion and that the notification time frame did not give them enough time to review the request. A few Commissioner's had concerns regarding the potential of high density residential and/or a business district adjacent to single family homes. The Plan Commission concluded by recommending approval of the petition.

On November 19, 2012, the Village Board approved an Annexation Agreement between the Village of North Aurora and the Stanley L. Zepelak Trust (Ordinance 12-11-19-01) governing the development of the entire vacant tract of farm land located north of Tanner Road, south of West Mooseheart Road, west of Orchard Road and east of Deerpath Road, known as the Zepelak Property. Approval of a Special Use for a Commercial and Multi-Family Use Planned Unit Development for the Zepelak property was also approved at that time (Ordinance 12-11-19-03).

On January 7, 2013, the Village Board reapproved a special use Ordinance (Ordinance 13-01-07-03). The PUD Ordinance changed the originally-approved PUD provisions regarding the access to each apartment unit and the number of required enclosed parking spaces. The updated PUD Ordinance requires only exterior access to each apartment while the original Ordinance required both interior and exterior access. The updated Ordinance requires at least one parking space to be provided for each dwelling unit in an enclosed space while the original Ordinance only required a total of 20% of the units to have at least one parking space provided for each dwelling unit in an enclosed space. The annexation agreement was not altered at the meeting, but an ordinance clarifying the Village annexing the land (Ordinance 13-01-07-02) was approved. As part of the Annexation Agreement, it provided the process of establishing a connector road from Deerpath Road to Orchard Road should a development be built. On February 4, 2013 the Village Board approved the Plat of Dedication for the Deerpath Connector Road.

The approved PUD established rights to the B-2 General Business District zoning south of the aforementioned connector road and the flexibility of either commercial use through the B-2 General Business District or residential use through the R-4 General Residential District zoning for the area north of the connector road. The 'Dwelling, Multi-Family' (multi-family residential) use is classified as a permitted use in the R-4 General Residential District.

Section 3.2 of the PUD Ordinance provides development standards for apartment uses, which are outlined below. Staff has provided a response pertaining to the proposed development's applicability to each standard.

- Building height shall be limited to three (3) stories;
 - The proposed apartment buildings will be two (2) stories in height.

- Each apartment unit shall have individual access from the exterior;
 - Each unit will have individual access from the exterior of the building.
- At least one parking space shall be provided for each dwelling unit in an interior, enclosed area:
 - o 66% of the total number of units will have an enclosed parking space (see deviation information below).
- At least twenty five percent (25%) of each apartment building shall be covered with masonry or brick material;
 - o 25.8% of each apartment building will be covered with masonry.
- The architectural elements, including anti-monotony standards, must be approved as part of the site plan review.
 - O Site plan approval is being requested as part of the petitioner's request. The Plan Commission's motion on the site plan would include the architectural building elements.

REQUESTED ACTIONS

Special Use – Planned Unit Development Amendment with deviations to the Planned Unit Development and Zoning Ordinance

The PUD Ordinance was approved through the special use process; as such, any amendments to the PUD must be subsequently approved through the special use process.

Rights have already been granted to develop the subject property with multi-family residential through the establishment of the R-4 General Residential District zoning classification. The PUD Ordinance sets forth public notification requirements that specified only adjacent property owners (properties directly bordering of the subject property) are required to receive a letter when a site plan was submitted to the Village for review. The public notification process did not require signs to be posted, newspaper publication or letters to be sent to property owners within 250' of the subject property. Said notification requirements are only being triggered due to the following PUD and Zoning Ordinance deviations:

PUD Amendment – Enclosed Parking Spaces

As previously referenced, the PUD Ordinance requires at least one parking space to be provided for each dwelling unit in an enclosed space. The proposed plans include a total of 172 enclosed parking spaces, which represents 66% of the total number of residential units (260). The original Ordinance (approved in 2012) only required a total of 20% of the units to have at least one parking space provided for each dwelling unit in an enclosed space.

PUD Amendment - Development Plan Processing

The petitioner is requesting the ability to establish a schedule that would allow the preliminary development plans to constitute the final development plans. Per this request, the preliminary plans would constitute the final plans as long as the final plans are consistent with the approved preliminary plans. If the petitioner were to make any plan revisions after approval of the preliminary plans, staff would review the final plans to determine if any further approval by the Plan Commission or Village

Staff Report Petition #22-02 Page 4 of 6

Board would be required. Staff notes this has been common practice with many of the recent development projects.

Orchard Road is under the jurisdiction of Kane County. If the petitioner is required to amend the site plan to accommodate any required Kane County traffic improvements or easement restrictions adjacent to Orchard Road, such changes shall be deemed to be a "Technical Change" to the development plans.

Zoning Ordinance Amendment - Orchard Road Landscape Buffer & Parkway Trees

Per Chapter 14.10.C.3.a of the Zoning Ordinance, a 50' landscaped buffer shall be provided and maintained on all properties adjoining the following streets: Airport Road, Deerpath Road, Illinois Route 25, Illinois Route 31, Illinois Route 56, Mooseheart Road, Oak Street, Orchard Road, Randall Road. The original development plans submitted by the petitioner included a 50' landscaped buffer adjacent to Deerpath Road, West Mooseheart Road and Orchard Road. Kane County is requiring an additional 15' of the subject property for right-of-way purposes; as such, the landscaped buffer adjacent to Orchard Road was reduced to 35'. The terms of right-of-way dedication are included in the Intergovernmental Agreement between the Village and Kane County, which designates 170' of right-of-way along Orchard Road to Kane County. Staff notes the Orchard Commons development located directly to the south also has a reduced landscaped buffer of 35' as a result of said right-of-way dedication.

The Zoning Ordinance requires parkway trees to be planted in any parkway at the equivalent of one tree at an average interval of every forty (40) linear feet. The development plans include parkway trees plantings along West Mooseheart Road and Orchard Road. It is likely Kane County will prohibit the planting of the parkway trees along Orchard Road if deemed be a hazard. If Kane County prohibits the planting of parkway trees along Orchard Road, the petitioner would be required to plant additional trees within the landscaped buffer along Orchard Road at a ratio of one tree for every two parkway trees. Such changes shall also be deemed to be a "Technical Change" to the development plans.

Preliminary Final Plat of Subdivision

The subject property is currently comprised of two separate parcels located north of the dedicated connector road. The petitioner intends to consolidate the two parcels north of the connector road into one lot and create Lot 1 of the Seasons at North Aurora Subdivision. A final plat of subdivision will be provided at final engineering. As part of this request, preliminary final plat consideration is being requested. As such, the preliminary plat would constitute the final plat. As long as the final plat is consistent with the preliminary plat, no further or approval by the Plan Commission and/or Village Board would be required. If the petitioner is required to make any minor changes to the plat to accommodate any engineering comments, such changes shall be deemed to be a "Technical Change" to the plat.

Site Plan Approval

Per the approved Annexation Agreement, site plan approval is required by the Village prior to development of any one or more lots, without the need for a public hearing. Standards for site plan review are established in Chapter 4.4 - Site Plan Review of the North Aurora Zoning Ordinance; however, the governing Annexation Agreement establishes a set of site development standards as outlined below. Staff notes only the Village Board has discretion over changes to the Annexation

Staff Report Petition #22-02 Page 5 of 6

Agreement and staff is providing the applicable site plan standards for informational purposes as these standards are typically included in a PUD Ordinance.

Compliance: The Final Site Plan is in compliance with the terms of this Ordinance and the Annexation Agreement.

Circulation: The traffic circulation for the one or more lots is deemed adequate for the use contemplated for such one or more lots and is in harmony with the traffic circulation needs for the larger development.

Pedestrian Pathways: Pedestrian pathways within such lots are approved as adequate for the use contemplated for such one or more lots and are in harmony with the pedestrian needs for the larger development. Sidewalks shall be constructed on both sides of all internal public streets. Sidewalks shall also be constructed on the adjacent frontages of Orchard Road, Deerpath Road, Tanner Road, and Mooseheart Road.

Site Plan Engineering: The final engineering for the area to be developed is substantial compliance with the Final Subdivision Engineering and is approved by the Village Engineer.

Site Plan Landscaping: The parking lot and foundation landscaping proposed for the area within the Final Site Plan shall be in compliance with the Village Ordinances existing as of the date hereof and must be approved by the Village Community Development Director, Plan Commission, and Board of Trustees along with the Final Site Plan.

Signage: Any signage other than signage on buildings as permitted by Village ordinance shall require approval as part of the Final Site Plan.

Architecture: The building elevations, materials, and design elements shall be reviewed and approved by the Village. The Village will allow the types of materials, elevations, and design comparable to similar projects already approved in the Village as of the date of this Agreement.

COMPREHENSIVE PLAN

The 2015 Comprehensive Plan recommends 'Single Family-Detached' (single-family homes) use for the subject property. Rights to multi-family residential zoning were approved for the subject property prior to the Comprehensive Plan 2015 update and the inconsistency between the zoning and the Comprehensive Plan designations may be the result of an error or oversight. The subject property is located in the Comprehensive Plan's West Gateway Subarea Plan, which includes the properties along Orchard Road stretching from Interstate 88 to [the south of] White Oak Drive. A recommendation of the West Gateway Subarea Plan applies to the proposed development as a transitional land use: higher density residential uses should separate active commercial areas from the Village's quiet single-family neighborhoods and provide dense population to support planned commercial uses.

FINDINGS & RECOMMENDATION

The Community Development Department finds that the information presented **meets** the Standards for Specials Uses as submitted by the petitioner, made part of this petition and as set forth in the Zoning Ordinance. The proposed site plan meets site plan review standards of the North Aurora Zoning Ordinance and the Stanley L. Zepelak Trust PUD and Annexation Agreement. Based on the above considerations, staff recommends that the Plan Commission make the following motion recommending **approval** of Petition #22-02, subject to the following conditions:

- 1. All dumpsters located on the subject property shall be enclosed per Section 14.11.A of the Zoning Ordinance.
- 2. One parking lot island shall be provided between every ten (10) parking spaces.
- 3. All planted parkway trees shall be the species and sizes specifically identified in Chapter 16.12.190.C.8 of the Subdivision Ordinance.
- 4. Within the off-street parking facilities two-way traffic aisles shall be at least twenty-four (24) feet in width.
- 5. A photometric plan shall be submitted and approved by the Village prior to building permit issuance.
- 6. If the petitioner is required to make any minor changes to the plat to accommodate any engineering comments, such changes shall be deemed to be a "Technical Change" to the plat.
- 7. If the petitioner is required to amend the site plan to accommodate any Kane County traffic improvements, such changes shall be deemed to be a "Technical Change" to the development plans.
- 8. If Kane County prohibits the planting of parkway trees along Orchard Road, the petitioner shall plant additional trees within the landscaped buffer along Orchard Road at a ratio of one tree for every two parkway trees. Such changes shall also be deemed to be a "Technical Change" to the development plans.

APPLICATION FOR SPECIAL USE

VILLAGE OF NORTH AURORA Board of Trustees 25 East State Street North Aurora, IL 60542		PETITION NO. 22 - 02				
		FILE NAME SERVED RECEIVED				
I.	APPLICANT AND OWNER DATA	JAN 3 1 2022 WILLAGE OF ARCENT AUTORA				
	Name of Applicant Fiduciary Real Estate De	evelopment Inc Anthony DeRosa				
	Applicant Address 789 North Water Street,	Suite 200, Milwaukee, WI 53202				
	Applicant Telephone # 414-246-8402					
	Email Address tderosa@fred-inc.com					
п.	Owner Address 17753 Lucaya Drive, Lakewood Ranch, FL 34202 Owner Telephone # 630-253-6721 ADDRESS, USE AND ZONING OF PROPERTY					
	Address of Property West side of Orchard Road and south of Mooseheart Road (indicate location if no common address)					
	Legal Description:					
	Parcel Size 21.7 acress					
	Present Use Vacant Farmland (business, n	nanufacturing, residential, etc.)				
	Present Zoning District R-4 General Reside	ence District				
	(Zoning Or	dinance Classification)				

III. PROPOSED SPECIAL USE

Proposed Special Use Multifamily/Amending existing PUD (Zoning Ordinance Classification)								
Code Section that authorizes Special Use See PUD								
Has the present applicant previously sought to rezone or request a special use for the property or								
any part thereof? No								
If so, when? to what district?								
Describe briefly the type of use and improvement proposed See project narrative								
What are the existing uses of property within the general area of the Property in question? See project narrative								
To the best of your knowledge, can you affirm that there is a need for the special use at the particular location? (Explain) Yes, see project narrative.								

Attach hereto a statement with supporting data that the proposed special use will conform to the following standards:

- 1. The proposed special use is, in fact, a special use authorized in the zoning district in which the property is located.
- 2. The proposed special use is deemed necessary for the public convenience at that location.
- 3. The proposed special use does not create excessive additional impacts at public expense for public facilities and services, and will be beneficial to the economic welfare of the community.
- 4. The proposed use is in conformance with the goals and policies of the Comprehensive Plan, and all Village codes and regulations.

- 5. The proposed special use will be designed, located, operated, and maintained so as to be harmonious and compatible in use and appearance with the existing or intended character of the general vicinity.
- 6. The proposed special use will not significantly diminish the safety, use, enjoyment, and value of other property in the neighborhood in which it is located.
- 7. The proposed special use is compatible with development on adjacent or neighboring property.
- 8. The proposed special use minimizes potentially dangerous traffic movements, and provides adequate and safe access to the site.
- 9. The proposed special use provides the required number of parking spaces and maintains parking areas, in accordance with the requirements of this Ordinance.
- 10. The proposed special use is served by adequate utilities, drainage, road access, public safety, and other necessary facilities.
- 11. The proposed special use conforms with the requirements of this Ordinance and other applicable regulations.

IV CHECKLIST FOR ATTACHMENTS

The following items are attached here to and made a part hereof:

- 1. Introduction Letter. Please include information relevant to the proposed use of the property and business operations (hours of operation, number of employees, etc.).
- 2. Legal Description of the subject property(s).
- 3. Illinois Land Surveyor's plat of survey.
- 4. Site Plan illustrating all existing and proposed improvements.
- 5. Statement and supporting data regarding Standards for Special Uses (above).
- 6. Filing fee in the amount of \$300.00, if paid by check make payable to the Village of North Aurora.
- 7. Specified escrow deposit (\$4,000 minimum). May be included with filing fee. Remaining funds refundable upon project completion.
- 8. Visit the Illinois Department of Natural Resources' website <u>www.dnr.state.il.us</u> and initiate a consultation using DNR's <u>EcoCat</u> online application.
- 9. Visit the Kane DuPage Soil and Water Conservation District's website www.kanedupageswcd.org for a Land Use Opinion Application

The Applicant authorizes the Village of North Aurora representatives to enter on to the property to make inspection during the hearing process.

The Applicant is responsible for publishing a legal notice in the newspaper, sending United States mail notices to properties within 250 feet, and posting a sign on the property advertising the public hearing. These shall be in accordance with village Ordinances at the times decided by the Village of North Aurora.

The undersigned hereby agrees to reimburse the Village for all costs of court reporter fees for attendance at and transcript of hearing(s) and other professional service fees for services rendered in connection with this application as defined in Appendix B of the North Aurora Zoning Ordinance. Such reimbursement shall be made promptly upon receipt of invoices from the Village, whether or not this application for special use is approved.

I (we) certify that all of the above statements and the statements contained in any documents submitted herewith are true to the best of my (our) knowledge and belief.

Applicant or Authorized Agent

Duner Co Speller

1/31/2022

Date

Date

ATE OF ILLINOIS)	
) SS COU TY OF KANE)	
I,	, being first duly sworn oath depose
and say that I am true officer of	and that the following are all of the
beneficiaries of the	
	TRUCTOFFICER
SUBSCRIBED AND SWORN TO Before me this	
A Notary Public in and for such County	

Following are the names and addresses of all property owners within 250 feet of the property in questions for which the special use being is being requested.

TAX PARCEL NO.	PROPERTY OWNER	MAILING ADDRESS
See attached Excel spreadsheet		
And the second s		A STREET, THE PROPERTY OF THE
-	Self-recorded to the self-reco	
Andrew Control of the Control		
-		Nierte
1. Ashley Poul	baing first du	ly swarm on eath cartifies that all of the
above statements and the s	tatements contained in any paper	y sworn on oath certifies that all of the s or plans submitted herewith are true and
correct.		
11/1 R		2/3/21
Applicant Signature		Date
SUBSCRIBED AND SWO	DRN TO	CANCE STA
Before me this 3rd	_day of te orvary.	20 22
Claria X	As	STATE OF BLIC
Notary Public		OF WISCON

Parcel	Situ	us Addresses (physical locations) Address	City	State	Zip
1231400026	REPORT OF REPORT OF	7,64(1000	NORTH AURORA	IL	60542
231300017			NORTH AURORA	IL	60542
	Donald & Jadwiga Kozloski	38W537 MOOSEHEART RD	NORTH AURORA	IL	60542
231300012	Hugo & Anastasia Cardenas	03S701 DEERPATH RD	NORTH AURORA	IL	60542
231300014	LLC	13101 W MISSISSIPPI CT APT 408	LAKEWOOD	со	80228
231300017	LUCAYA ASSET MANAGEMENT LLC STANLEY L ZEPELAK, MANAGER	17753 LUCAYA DR	LAKEWOOD RANCH	FL	34202
231327003	JOSE M GUZMAN & ROSA CORONA	801 N DEERPATH RD	NORTH AURORA	IL	60542
231400018	ELIZABETH DUEWEL	38W194 MOOSEHEART RD	NORTH AURORA	IL	60542
231400020	JERRY L JONES	38W195 MOOSEHEART RD	NORTH AURORA	IL	60542
231400024	MANGO CREEK DEERPATH LLC	13101 W MISSISSIPPI CT APT 408	LAKEWOOD	со	80228
231402001	BATAVIA PARK DISTRICT	327 W WILSON ST	BATAVIA	IL	60510
231402002	MIRADOR COMMUNITY ASSOCIATION	PO BOX 413	NORTH AURORA	IL	60542
231402003	MIRADOR COMMUNITY ASSOCIATION	PO BOX 413	NORTH AURORA	IL	60542
231403007	ARMANDO C & JOCELYN G DURAN	826 HATHAWAY CT	NORTH AURORA	IL	60542
231403008	SOCORRO MONJARAZ	818 Hathaway Court	AURORA	IL	60505
231403009	MAGDALENO CAMPOS & SUGEY RODRIGUEZ MORALES	810 HATHAWAY CT	NORTH AURORA	iL	60542
231403010	SAMI LORENE & KYLIE HALL	1641 W MOOSEHEART RD	NORTH AURORA	IL	60542
231403011	VOELKNER LIVING TRUST SCOTT M & JESSICA VOELKNER, TRUSTEES	1633 W MOOSEHEART RD	NORTH AURORA	IL	60542
231403012	STEPHON & LUCIA BUTLER	1625 W MOOSEHEART RD	NORTH AURORA	IL	60542
231403013	CATHERINE MARY & KUCHA, MARTIN R DILLON	1617 W MOOSEHEART RD	NORTH AURORA	IL	60542
1231403014	JERECKI M & TOTTEN- GARNER, CHEVEONNE M GARNER	1609 W MOOSEHEART RD	NORTH AURORA	IL	60542
1231403015	RANDALL G & NETTIE K WILLIAMS	802 HATHAWAY CT	NORTH AURORA	IL	60542
231422005	SYLVIA WILLIAMS	819 HATHAWAY CT	NORTH AURORA	IL	60542
231422006	JIA, JIANHUA & WANG, HAIYAN	811 HATHAWAY CT	NORTH AURORA	IL	60542
231422007	FLINCHUM, CATHERINE & KENNEY, DEBORAH A	803 HATHAWAY CT	NORTH AURORA	IL.	60542
231425007	RYAN & NANCY DIETLIN	816 BENSON CT	NORTH AURORA	IL	60542
221425000	MICHAEL & MONICA L	808 BENSON CT	NORTH AURORA	IL	60542
	TURCIOS, MAX E & SPENCER-TURCIOS, FLORA	800 BENSON CT	NORTH AURORA	IL	60542
231426001	ROBERT MICHAEL ZWOLINSKI	1613 HARTSBURG LN	NORTH AURORA	IL	60542
231426002	SCARPITTI, KRISTINA NICOLE & EKSTROM, CODY STEPHEN	1605 HARTSBURG LN	NORTH AURORA	IL	60542
231426003	MARLA KRAMER	1597 HARTSBURG LN	NORTH AURORA	IL	60542
231426004	ADRIAN A & CAROLYN S DUESLER	1589 HARTSBURG LN	NORTH AURORA	IL	60542
231426005	MICHAEL APPS	1581 HARTSBURG LN	NORTH AURORA	IL	60542
231428001	JOSEPH S & DARLENE M EMANUEL	1572 W MOOSEHEART RD	NORTH AURORA	IL	60542
231428002	SUSEN H DEMARS	1564 W MOOSEHEART RD	NORTH AURORA	IL	60542
	LISA A QUIGLEY	03S714 DEERPATH RD	NORTH AURORA	IL	60542
	LISA A QUIGLEY	P.O. Box 1835	BATAVIA	IL.	60510
1231300009	LUCAYA ASSET MANAGEMENT LLC	17753 Lucaya Dr	LAKEWOOD RANCH	FL	34202
1231300009	LUCAYA ASSET MANAGEMENT LLC	03S652 DEERPATH RD	NORTH AURORA	IL	60542

APPLICATION FOR SPECIAL USE

Attach hereto a statement with supporting data that the proposed special use will conform to the following standards:

1. The proposed special use is, in fact, a special use authorized in the zoning district in which the property is located.

FRED Response: Yes, multifamily is allowed within the current zoning district.

2. The proposed special use is deemed necessary for the public convenience at that location.

FRED Response: Yes, multifamily is deemed necessary for this location.

3. The proposed special use does not create excessive additional impacts at public expense for public facilities and services, and will be beneficial to the economic welfare of the community.

FRED Response: Yes, the proposed special use does not create excessive impacts to public facilities.

4. The proposed use is in conformance with the goals and policies of the Comprehensive Plan, and all Village codes and regulations.

FRED Response: Yes, the proposed use in in line with the existing zoning and Village codes.

5. The proposed special use will be designed, located, operated, and maintained so as to be harmonious and compatible in use and appearance with the existing or intended character of the general vicinity.

FRED Response: Yes, the proposed special use is designed, located, operated and maintained in a harmonious and compatible fashion to the surrounding uses.

6. The proposed special use will not significantly diminish the safety, use, enjoyment, and value of other property in the neighborhood in which it is located.

FRED Response: Yes, the special use will not diminish the safety, use, enjoyment and value of the surrounding properties.

7. The proposed special use is compatible with development on adjacent or neighboring property.

FRED Response: Yes, the proposed special use is compatible with the surrounding developments.

8. The proposed special use minimizes potentially dangerous traffic movements, and provides adequate and safe access to the site.

FRED Response: Yes, the proposed special use minimizes potentially dangerous traffic movements and provides for safe access to the site.

- 9. The proposed special use provides the required number of parking spaces and maintains parking areas, in accordance with the requirements of this Ordinance.
 - FRED Response: Yes, the proposed special se provides the required number of parking spaces and maintains parking areas in accordance with the Village Ordinance.
- 10. The proposed special use is served by adequate utilities, drainage, road access, public safety, and other necessary facilities.
 - FRED Response: Yes, the proposed special use is served by adequate utilities, drainage, road access, public safety, and other necessary facilities.
- 11. The proposed special use conforms with the requirements of this Ordinance and other applicable regulations.

FRED Response: Yes, the proposed special use conforms with the requirements of this Ordinance.



Seasons at North Aurora

Detailed Proposal Description



North Aurora, IL

February 2, 2022



789 N. Water Street, Suite 200, Milwaukee, Wisconsin 53202 Phone 414.226.4535 ● Fax 414.226.4523 ● www.fred-inc.com

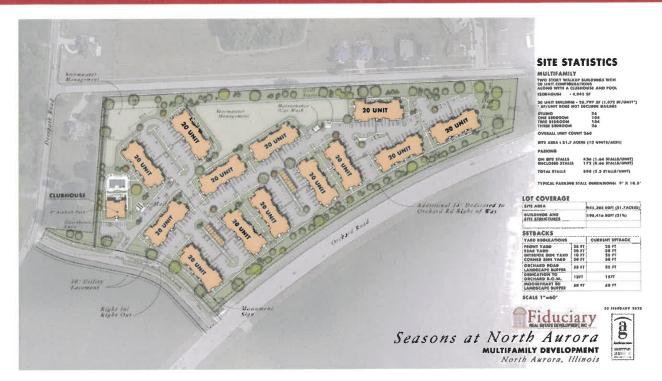
Subject Property

The subject property is located on the west side of Orchard Road and to the south of Mooseheart Road. The proposed site will be approximately 21.7 acres in size. The subject property is currently vacant farmland.



Proposed Development

The Seasons at North Aurora is an institutional grade, best-in-class market rate, amenity rich multifamily development designed with the end user in mind. The development has a true suburban feel with a significant amount of green space. The community will consist of two-story walkup buildings with 20 unit configurations. The buildings have been designed in a townhouse style which feature ground level, private direct entrances as well as attached garages for select units. The apartments, which include studio, one bedroom, two bedroom, and three bedroom floor plans, are strategically placed within the buildings.



Careful attention was taken to maximize floor plan efficiency, functionality and flexibility to provide residents with a great value. Each of the 260 market rate apartment homes will feature modern finishes including open concept floor plans, designer cabinetry, expansive windows, quartz countertops, upgraded appliances, oversized balconies/patios, large walk-in closets and 9-foot ceilings. Flooring will consist of high quality grade carpet in all bedrooms and designer plank flooring throughout the balance of the apartment. All units will include a split HVAC system (similar to what is in a single family home), individual hot water heaters, energy efficient windows and a full-size washer and dryer to maximize efficiency and comfort. The building layouts and floor plan designs of this development provide a variety of housing options and price points that will cater to a broad demographic group.

In addition to the individual unit features, the 5,000 square foot clubhouse has been designed to create an unparalleled resident experience with its resort style pool, 24-hour fitness center with high end cardio equipment and club room with an entertaining style kitchen. Pedestrian walkways will also be featured throughout the site, including connections to the onsite dog park.



Building and Unit Counts: The multifamily development will include thirteen (13) freestanding buildings with 20 apartment units per building for a total of 260 apartments. The unit mix consists of 26 studios (10% of total), 104 one-bedrooms (40% of total), 104 two-bedrooms (40% of total), and 26 three-bedrooms (10% of total). The overall density is approximately 12 units/acre.



Design/Materials: The exterior finish of the buildings includes 25% brick, oversized windows and fiber cement siding. A mix of large balconies and private patios complement the exterior elevations and the gabled roof details contribute to the suburban feel of the community.

Parking: Parking will be provided through a mix of building-attached garages containing twelve spaces throughout eight attached garages, detached garages with eight or six bays each, and surface parking. Total parking provided is 598 spaces for all 260 units, resulting in a parking ratio of 2.3 spaces per unit. The plan includes 172 enclosed garage spaces for an overall garage ratio of .66 garage spaces/unit.



Access and Circulation: Two access points will be provided off the Deerpath/Orchard Connector Road. The eastern access point will only be a right in right out.



Landscape/Buffering and Pedestrian Ways: The site plan reveals a greened-up site featuring courtyards and pedestrian walkways that flow throughout the development. Per the IGA with KDOT the Orchard Road right of way needs to be 170 feet instead of the currently platted 140 feet. The additional 15 feet will come out of the originally provided 50' landscape buffer, the landscape buffer will now be reduced down to 35' to meet the IGA and KDOT requirements.

Finishes: Apartment finishes include: upgraded stainless steel appliance package, upgraded cabinetry with 42" upper cabinets, large windows, open concept floor plans, in-unit full size washer / dryer, walk in closets, and oversized balconies/patios.





Development Details

- Multifamily Property Size: 21.7 acres
- Current Zoning:
 - R-4 General ResidenceDistrict
- The Comprehensive Plan earmarks this site as Corridor Commercial.
- Residential Density: 12 units per acre



- Parking Requirements
 - o Code requires 2 parking spaces per dwelling unit
 - Per code the multifamily project requires 520 parking spaces
 - 598 parking spaces are being provided
- Significant Increment in Property Assessed Value:
 - Current property assessed value: \$7,427

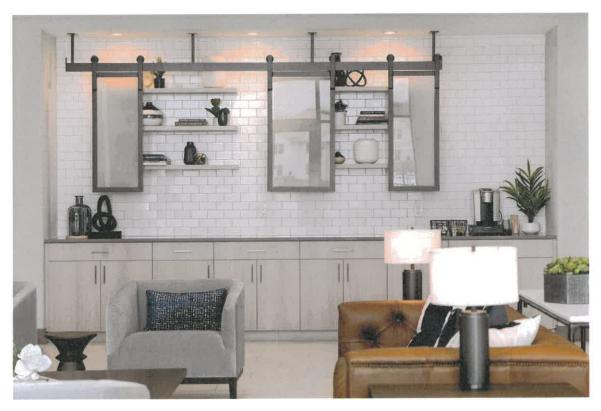


- Architecture
 - Two story design that is in scale with adjacent properties
 - Parcel to the North Single family homes
 - Parcel to the South Vacant farmland
 - Parcel to the East Single family homes
 - Parcel to the West Single family homes
- Storm Water Management
 - Utilizing the natural site characteristics to manage all storm water management
 - No additional runoff will be created from the development

Market Demand

There are a multitude of characteristics that help support the long-term success of a multifamily development including location, community amenities, quality of construction, and overall cost of living. The demand for additional rental housing along with the current overall strength of the local rental market provides Fiduciary an opportunity to bring this "Class A" development to the market.

Fiduciary's market research indicates pent up demand for a unique type of new, luxury apartment rentals in the Village of North Aurora. Specifically, there is a growing demand for alternatives to single family homes. Many of the multifamily housing options in the local submarket are older communities with dated finishes and amenities which cannot fulfill the current market demand.



In recent years, demand, especially from young professionals and empty nesters, has shifted away from home ownership towards multifamily housing. There is a demand for new, high-end market rate apartment homes in North Aurora from those that are looking to downsize or no longer own a home, but want to stay within the community, as well as from those professionals that work for major employers in the area. This demand is from a demographic group that will spend their money in the communities in which they live and is looking for an upscale development to call home.

Fiduciary is targeting a different demographic that is not looking to live in the typical 3 or 4 story building with common corridors, but rather a smaller scale building type with private, direct entries creating more of a condo or townhome type feel. This group wants the community they live in to feel more suburban with an abundance of green space, walkability within the development, abundant amenity package and conveniently located.

Given the site characteristics and the pent up demand for high quality multifamily housing in this area, Fiduciary has identified that the highest and best use for the subject property is a multifamily development.





9| Fiduciary Real Estate Development, Inc.

About Fiduciary Real Estate Development, Inc.

Fiduciary Real Estate Development, Inc. (FRED) is an experienced developer and investor in commercial real estate focusing on multifamily projects. Founded in 1984, FRED's proven track record of successful investment management has grown the business into one of Wisconsin's largest property management companies. The company owns and manages more than 8,000 market rate apartments, with an owned portfolio conservatively valued at over \$1.5 billion.

FRED's mission is to develop and manage exceptional residential communities that provide a distinctive living experience through enthusiastic service and dynamic teamwork. Visionary leadership, accountability with integrity and camaraderie and passion for people guide the vision of creating communities that are vibrant and enrich residents' lives.

Below are a few of Fiduciary's most recent awards.



INNOVATIVE MARKETING OF THE YEAR

2020 AOMA TOBY Awards



SENIOR HOUSING PROPERTY OF THE YEAR

2020 AOMA TOBY Awards



GEN X PROPERTY OF THE YEAR

2020 AOMA TOBY Awards



INNOVATIVE MARKETING OF THE YEAR

2019 AOMA TOBY Awards



SENIOR HOUSING OF THE YEAR

2019 AOMA TOBY Awards



MILLENNIAL PROPERTY OF THE YEAR

2019 AOMA TOBY Awards



GEN X PROPERTY OF THE YEAR

2019 AOMA TOBY Awards



PROPERTY OF THE YEAR (201-300 UNITS)

2019 AASCW



TOP PROJECT OF THE YEAR

2018 Daily Reporter



PROPERTY EXCELLENCE: **GENERATION Y**

2018 AOMA TOBY Award



PROPERTY EXCELLENCE: **GENERATION** X

2018 AOMA TOBY Award



PROPERTY EXCELLENCE: NEW CONSTRUCTION

2018 AOMA TOBY Award



PROPERTY EXCELLENCE: 150+ UNITS

2018 AOMA TOBY Award



ASSISTANT MANAGER OF THE YEAR

2018 AOMA TOBY Award



PROPERTY MANAGER OF THE YEAR

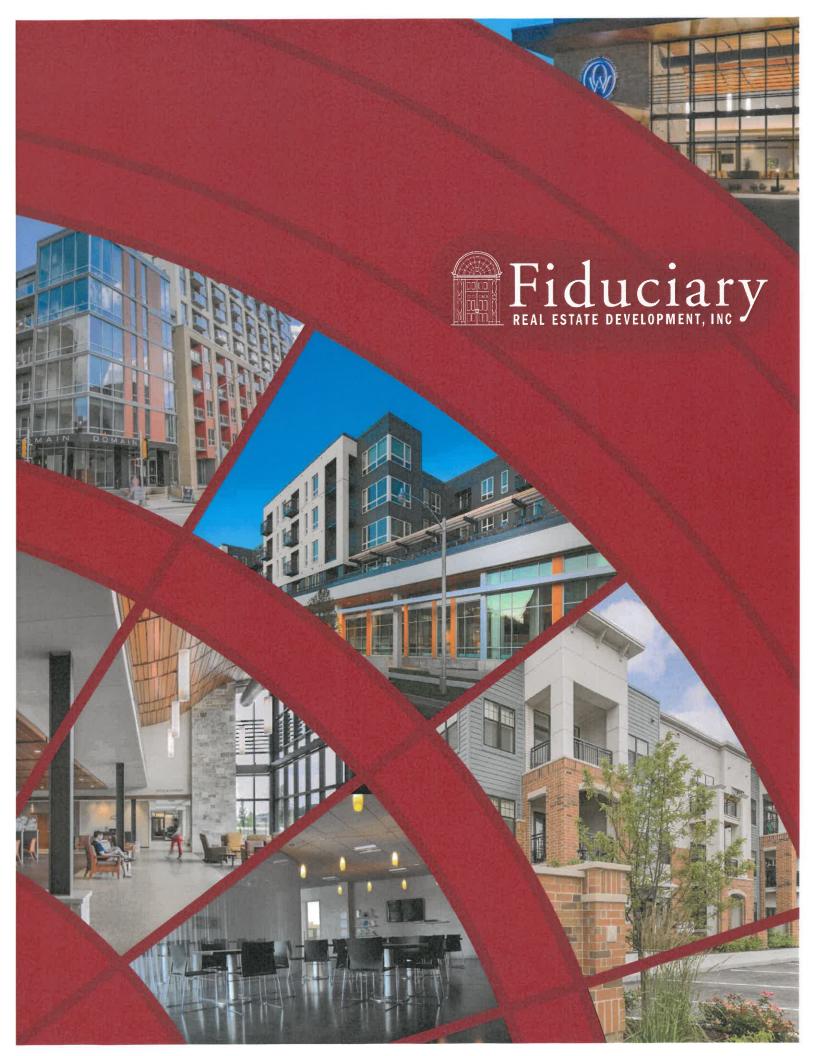
2018 AOMA TOBY Award



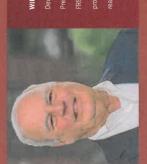
MAINTENANCE TECH OF THE YEAR

2018 AASCW

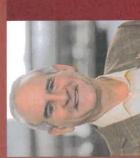




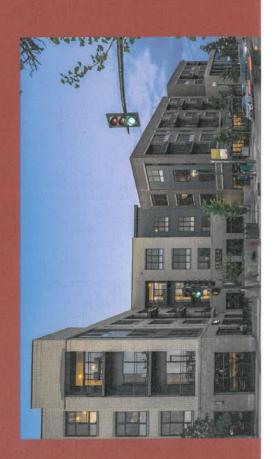
OUR FOUNDERS



MILLIAM ARPE William (Bill) R. Arpe is Chairman of Fiduciary Real Estate bevelopment, Inc. (FRED). Prior to serving as FRED's Chairman, Bill served as President and CEO between 1984 and 2012. He, along with Ted Keliner, founded RED in 1984. Since that time, FRED has grown from being an acquirer and property manager of stabilized multifamily apartments, into the fully integrated real estate development and investment management company that it is today.



TED KELLNER Tod Kellner, CFA is the Executive Chairman of Flüuciary Real Estate Development, Inc. (FRED) and one of the founding members of FRED. He is the retired founder and portfolio manager of Flüuciary Management, Inc an investment management firm established in 1980.



ABOUT US

Fiduciary Real Estate
Development, Inc. (FRED) is an experienced developer and investor in commercial real estate focusing on multifamily, mixed-use, medical office and industrial projects.

Founded in 1984, FRED's proven track record of successful investment management has grown the business into Wisconsin's largest property management company.

The company owns and manages more than 8,000 market rate apartments throughout the states of Wisconsin, Minnesota and Illinois with an owned portfolio conservatively valued at over \$1 Billion.

In addition, FRED has over 25 years of real estate development and in-house construction experience. The company has developed over 5,500 market rate apartments, 1,000 single-family lots, 600 condominiums and has converted over 1,100 units to condominiums.

OVER 8,000 MARKET RATE APARTMENTS OWNED & MANAGED

OWNED PORTFOLIO VALUED AT OVER \$1 BILLION OVER 400,000 SQF OF COMMERCIAL REAL ESTATE VALUED AT \$100 MILLION 1,000 SINGLE-FAMILY LOTS & 600 CONDOMINIUMS

WHAT

FRED'S REPUTATION AND EXPERTISE CONSISTENTLY ENSURES SUCCESSFUL

DEVELOPMENTS FOR SINGLE FAMILY COMMUNITIES, MULTIFAMILY COMMUNITIES AND COMMERCIAL DEVELOPMENT.

of creating, building, and managing our own communities; controlling and designing of over 8,000 apartment homes in Wisconsin, Minnesota and Illinois. We are proud Multifamily Communities FRED manages 30+ apartment communities consisting quality from start to finish.

Commercial Development From a state of the art medical campus to a children's and office buildings for our clients. By listening to their needs, we have been able educational facility, we have developed and constructed build to suit industrial to provide award-winning facilities that accommodate their growing needs. Single Family Communities Our years of experience help us to acquire key land parcels Our development team oversees all of the critical stages of development including while skillfully steering the development through government approval processes. land acquisition, design planning, approval process, infrastructure improvement, construction, and marketing and sales.













EXECUTIVE



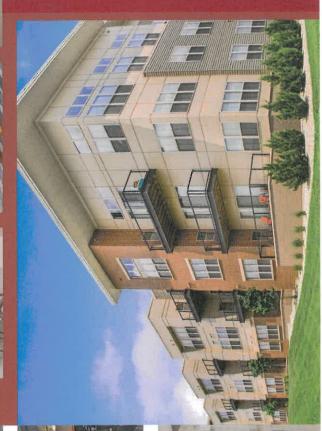
units and ensuring that FRED prov Jynamic, high quality living exper





D E V E L O P M E N T T E A M













SUBURBAN LIVING by providing an exceptional location SEASONS EMBODIES THE EVOLUTION OF LUXURY

SEASONS MULTIFAMILY COMMUNITIES















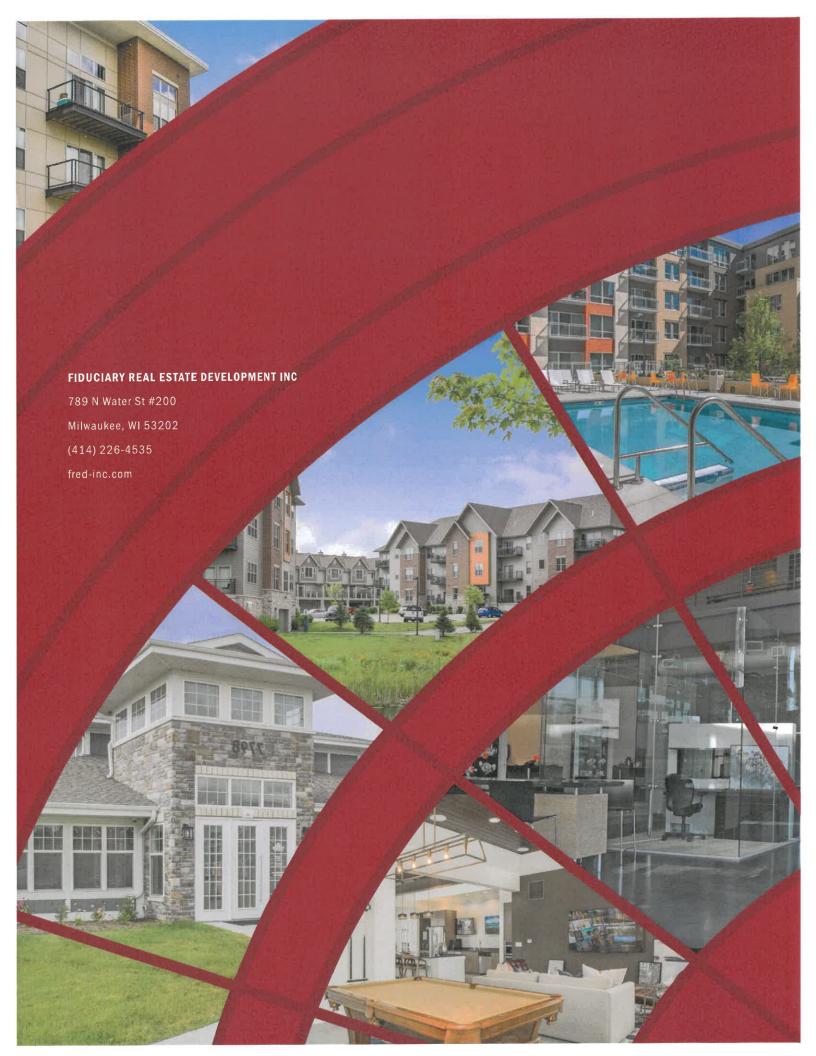








DEVELOPMENT PROJECTS



SEASONS AT NORTH AURORA North Aurora, Illinois

FIDUCIARY REAL ESTATE DEVELOPMENT INC.





RENDERING IS REPRESENTATIVE ONLY... SEE DOCUMENTS FOR SPECIFIC DETAILS

DATE: 2 FEBRUARY 2022

CONCEPTUAL DEVELOPMENT SUBMISSION



1414 UNDERWOOD AYE. WAUWATOSA, WI 53213 414.431.3131 TEL 414.431.0531 FAX WWW.AGARCH.COM



SITE STATISTICS

TWO STORY WALKUP BUILDINGS WITH 20 UNIT CONFIGURATIONS ALONG WITH A CLUBHOUSE AND POOL CLUBHOUSE - 4,942 SF

20 UNIT BUILDING - 25,797 SF (1,072 SF/UNIT*) • SF/UNIT DOES NOT INCLUDE GARAGE

SITE AREA: 21.7 ACRES (12 UNITS/ACRE)

426 (1.64 STALLS/UNIT) 172 (0.66 STALLS/UNIT)

598 (2.3 STALLS/UNIT)

945,303 SQFT (21.7ACRES) 198,416 SQFT (21%) **CURRENT SETBACK** 25 FT 30 FT 25 FT 30 FT 35 FT 15FT



02 FEBRUARY 2022

50 FT





SITE STATISTICS

20 UNIT BUILDING · 25,797 SF (1,072 SF/UNIT') • SF/UNIT DOES NOT INCLUDE GARAGE

SITE AREA: 21.7 ACRES (12 UNITS/ACRE)

426 (1.64 STALLS/UNIT) 172 (0.66 STALLS/UNIT)

598 (2.3 STALLS/UNIT)

TYPICAL PARKING STALL DIMENSIONS: 9' X 18.5'

102410101		
SITE AREA		945,303 SQFT (21.7ACRES)
BUILDINGS AND SITE STRUCTURES		198,416 SQFT (21%)
SETBACKS		VACATA PARTICIAL
TAKE REGULATIONS		CURRENT SEIBACK
FRONT YARD	25 FT 30 FT	25 FT 30 FT
INTERIOR SIDE YARD	10 FT	
COPY SING VADA	20 67	

35 FT 15FT

Architecture





































































































































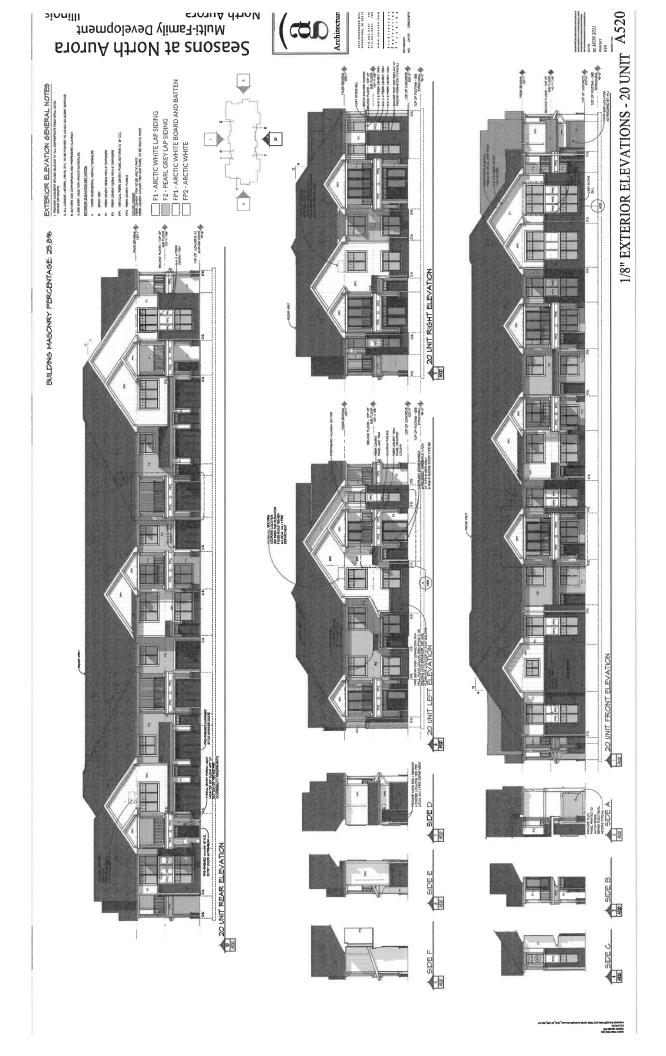












Seasons at North Aurora Fiduciary Development Morth Aurora



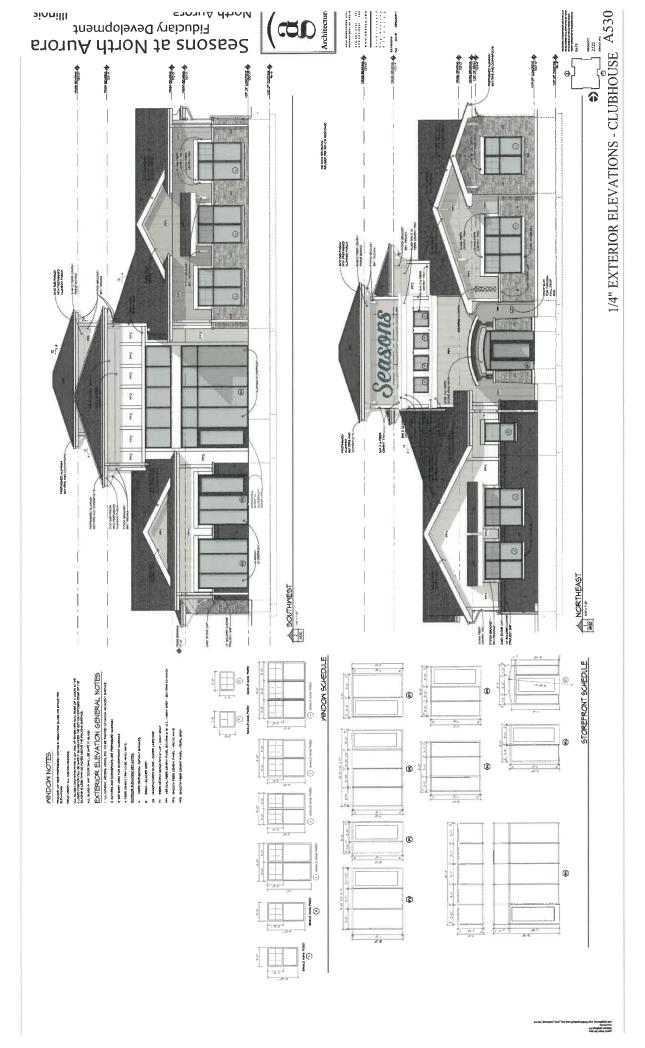
1/8" FIRST FLOOR PLAN - 20 UNIT A221

1/8" SECOND FLOOR PLAN - 20 UNIT A222

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Seasons at North Aurora Fiduciary Development Morth Aurora

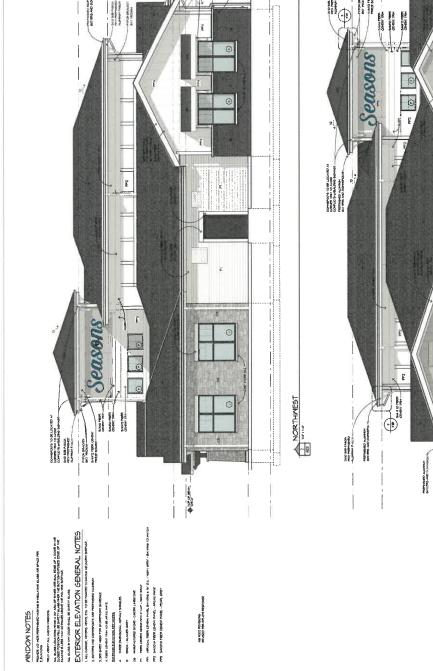
Architectur



Seasons at North Aurora

Fiduciary Development

Fiduciary Development



1/4" EXTERIOR ELEVATIONS - CLUBHOUSE A531

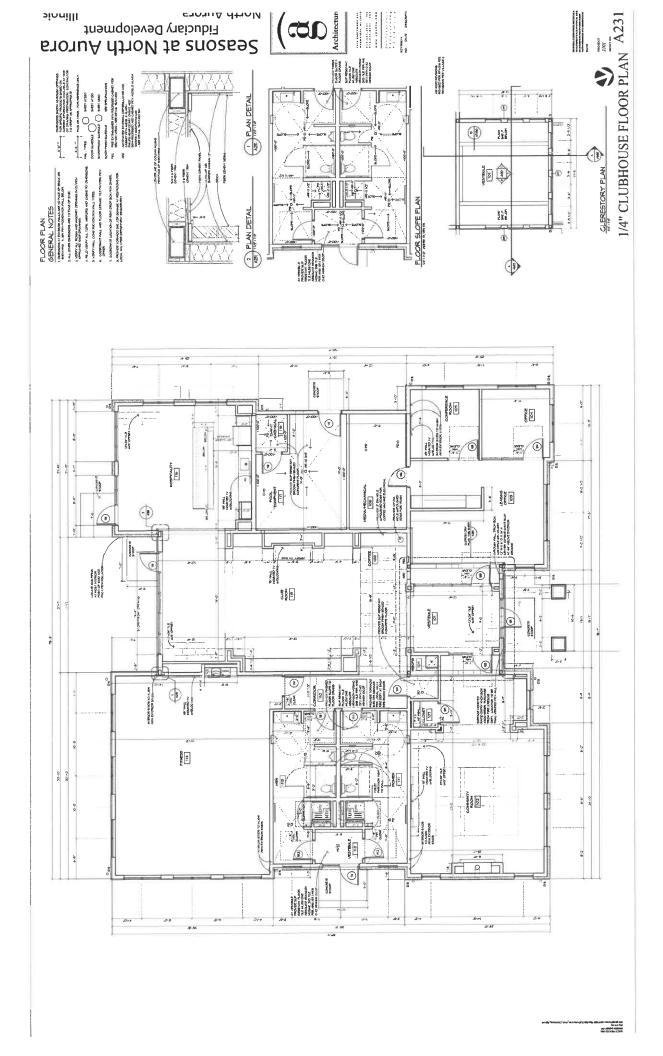
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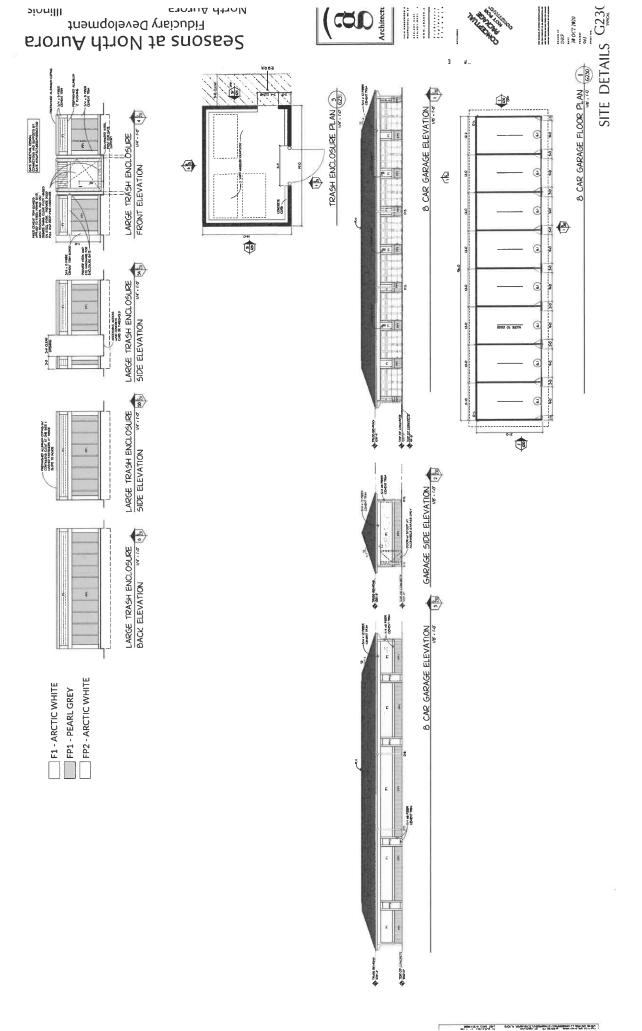
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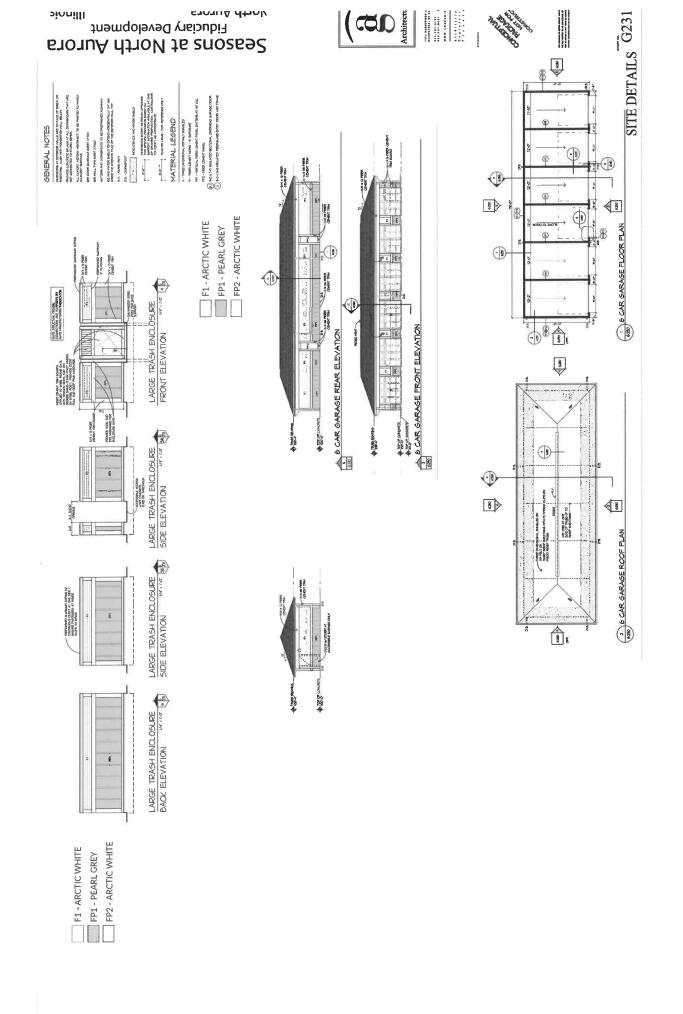
PYTCH BRACKET

BKT MQBAG -
BAMB PEER

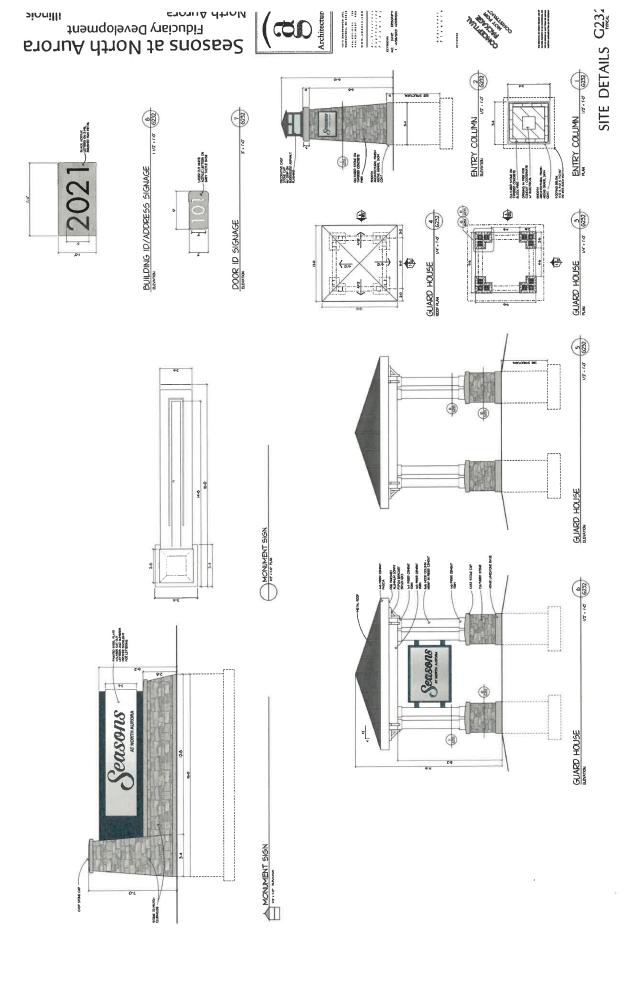
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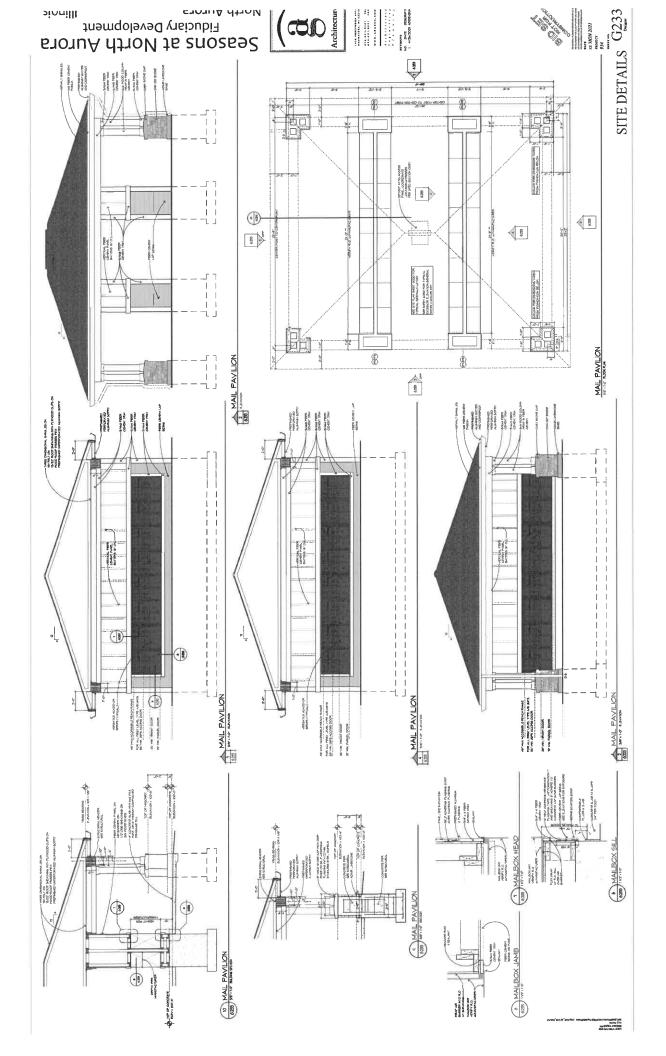


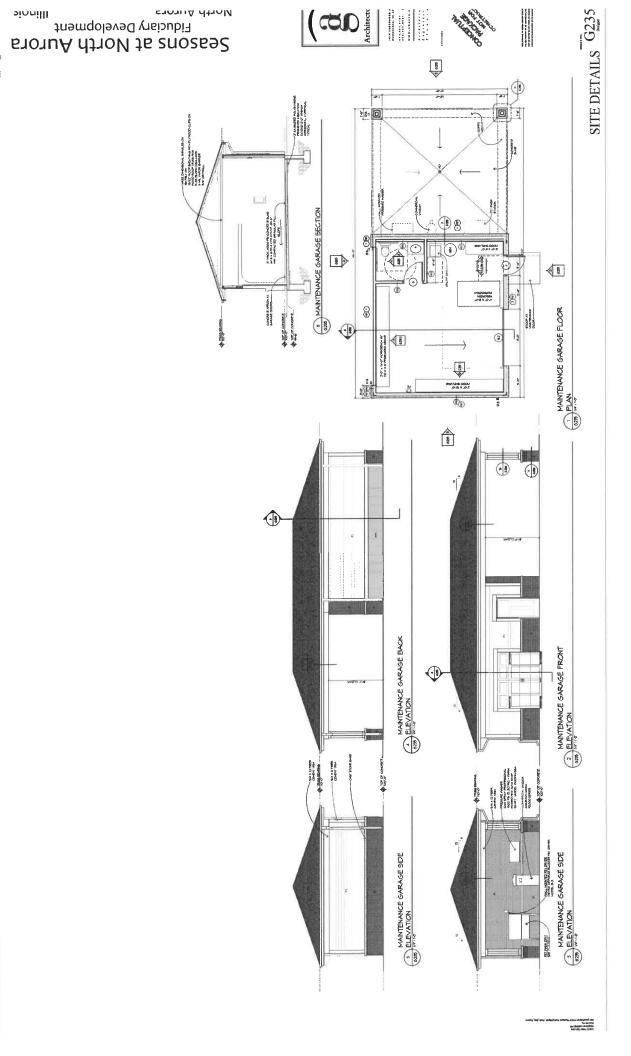


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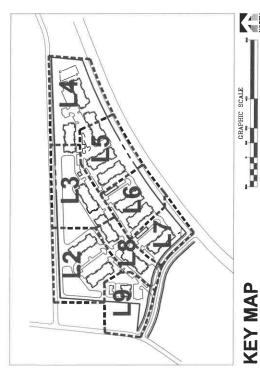
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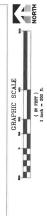
REMARKS

LANDSCAPE PLAN

SEASONS AT NORTH AURORA

CITY OF NORTH AURORA, ILLINOIS





SHEET NO.	DESCRIPTION
5	TITLE SHEET AND LANDSCAPE SUMMARY
2	LANDSCAPE PLAN
ខា	LANDSCAPE PLAN
3	LANDSCAPE PLAN
27	LANDSCAPE PLAN
97	LANDSCAPE PLAN
7	LANDSCAPE PLAN
18	LANDSCAPE PLAN
67	LANDSCAPE PLAN
L10	LANDSCAPE DETAILS
53	LANDSCAPE SPECIFICATIONS

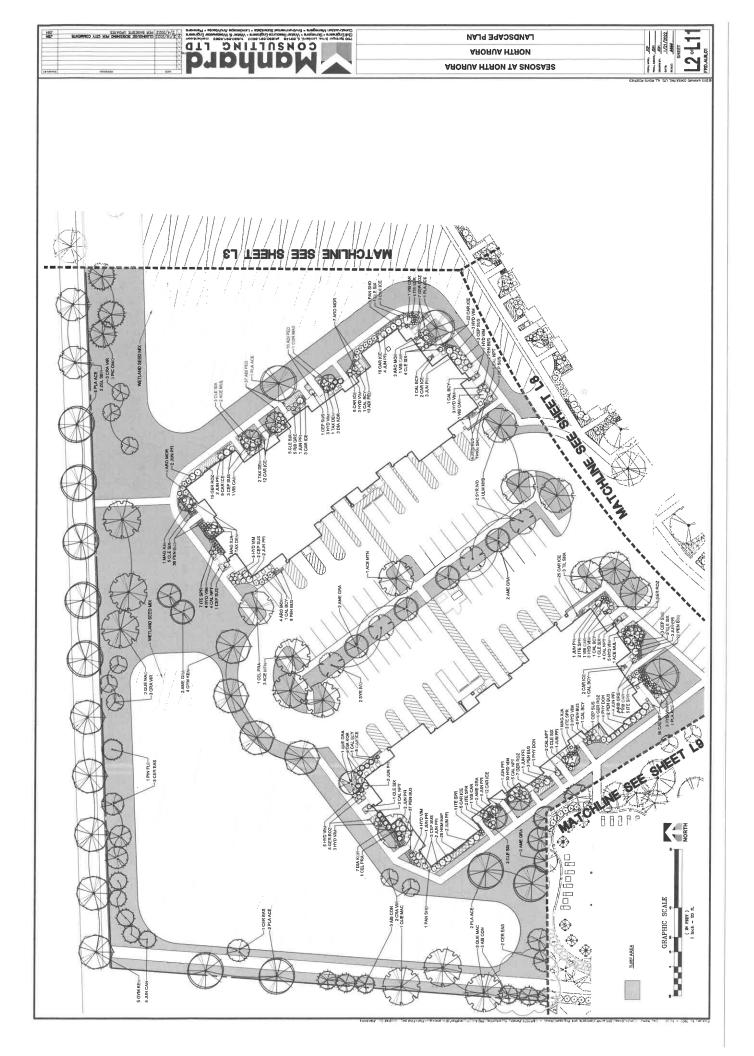


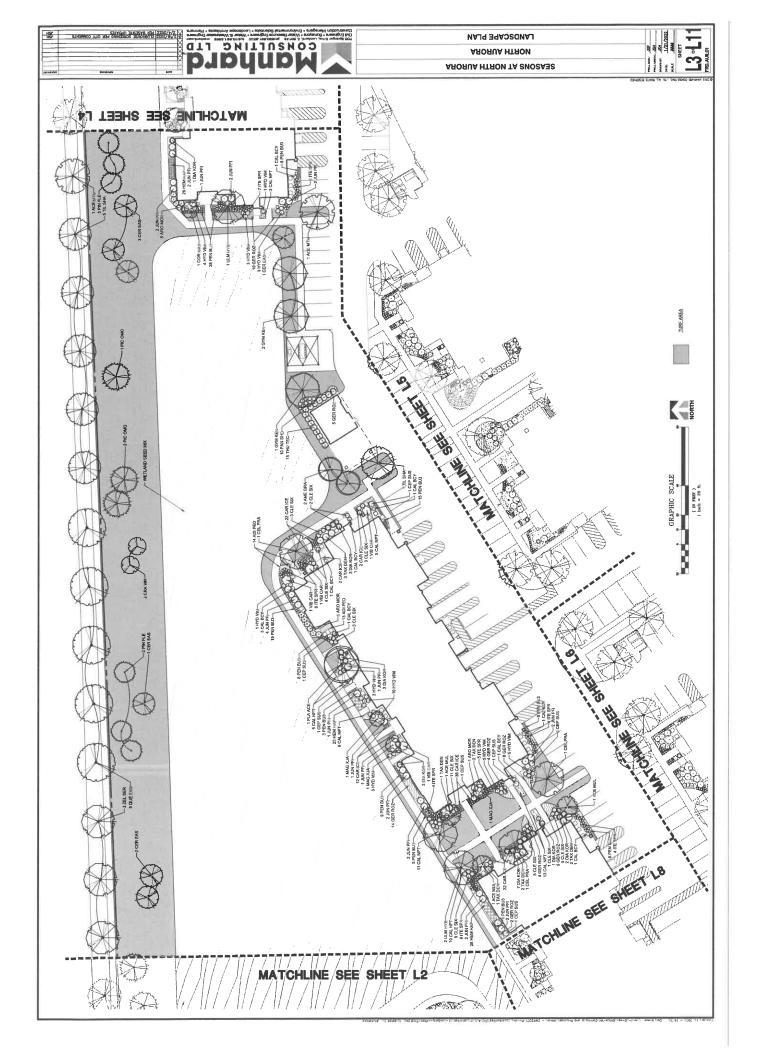
DECIDIONS TREES		BOTANICAL NAME	COMMON NAME	3710	CONTAINER	-
ACE MTN	43	Acer miyabei "Morton" TM	State Street Miyabe Maple	2.5" Cal.	B&B	-
CEL PRA	22	Celtis occidentalis 'Prairie Pride'	Prairie Pride Common Hackberry	2,5° Cal.	B&B	H
GYM KEN	22	Gymnocladus dioica	Kentucky Coffeetree	2.5° Cal.	888	-
PLA ACE	36	Platanus x acerifolia	London Plane Tree	2.5° Cel.	B&B	H
QUE MAC	12	Quercus macrocarpa	Burr Oak	2" Cal.	B&B	+
QUE EXM	21	Quercus x 'Crimschmidt' TM	Crimson Spire Oak	2.5° Cal.	888	
TIL SHA	33	Tilia cordata 'Baileyi' TM	Shamrock Littlefeaf Linden	2.5° Cal.	888	Н
ULM HYB	34	Ulmus x 'Patriot'	Patriot Elm	2,5° Cal.	888	+
ZEL SER	19	Zelkova serrata	Sawleaf Zelkova	2.5° Cal.	B&B	\vdash
EVERGREEN TREES	Ş	DOTANICAI NAME	COMMONWAME	2410	CONTAINED	-
ARICON	, t	Abiae connodor	White Eir	97.0	CONTRINER	+
JUN CAN	14	Juniperus virginiana 'Canaertil'	Cananti Fastom Rodcodar	i	888	+
PIC OMO	28	Pices omorika	Serbian Soruce	# 1	2	+
PIN FLE	19	Pinus flexills Vanderwolf's Pyramid'	Vanderwolf's Pyramid Limber Pine	6. H	8&8	\pm
ORNAMENTAL TREES	ΔŢ	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
ACE MUL	4	Acer pelmatum Bloodgood	Mutti-trunk Bloodgood Japanese Maple	9. ⊞	B&B	
AME GRA	43	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Apple Serviceberry	6. 用	B&B	
CER EAS	52	Cercis canadensis	Eastern Redbud Mulb-trunk	9. ₩	B&B	
COR MAS	12	Cornus mas	Cornelian Cherry	5. HL	888	
CRA VIR	24	Crataegus viridis "Winter King"	Winter King Hawthorn	1,5" Cal.		
MAG XJA	22	Magnolia x 'Jane'	Jane Magnolia	2. HL	B&B	
SYRIVO	12	Syringa reticulata Tvory Silk	Ivory Silk Japanese Tree Lilac	5. Ht	В&В	
SHRUBS	ΔT	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	\vdash
RIB GRE	28	Ribes alpinum 'Green Mound'	Green Mound Alpine Currant	5 gal.		+
PECIDIOS SHBIBS	YES	BOTANICAI NAME	COMMON NAME	6175	CONTAINED	
AROMOR	158	Aronia melanocama 'Morton' TM	Incomis Buanty Black Chokehem	3 cm	100	+
AROLSC	40	Aronia melanocarpa 'UCONNAM165' TM	Low Scape Mound Black Chokeberry	3 gal.	Pot	
CEP SUS	102	Cephalanthus occidentalis 'SMCOSS' TM	Sugar Shack Buttonbush	3 gal.	Pot	+
CLE SIX	304	Clethra amifolia 'Sixteen Candles'	Sixteen Candles Summersweet	3 gal.	Pot	-
DIAKOR	87	Diervilla x 'G2X885411' TM	Kodiak Red Diervilla	3 gal.	Pot	
HYD VIM	336	Hydrangea paniculata 'Kolmavesu' TM	Lavalamp Flare Panicle Hydrangea	3 gal.	Pot	
HYD BRE	13	Hydrangea querdfolia 'Brenhill' TM	Gatsby Gal Oakleaf Hydrangea	3 gal.	Pot	ш
ITE SPR	188	Itea virginica 'Sprich' TM	Little Henry Sweetspire	3 gal.	Pot	- 1
PHY DON	7	Physocarpus opulifolius 'Donna May' TM	Little Devil Dwarf Ninebark	3 gal.	Pot	Н
VIB CAR	22	Vibumum carlesli	Koreanspice Viburnum	3 gal.	Pot	_
EVERGREEN SHRUBS	ΔT	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
JUN PFI	210	Juniperus chinensis 'Kallays Compact'	Kattay Compact Pfitzer Juniper	3 gal.	Pot	
TAX DEN	105	Taxus x media 'Densiformis'	Dense Anglo-Japanese Yew	3 gaf.	Pot	
THU TEC	43	Thuja occidentalis Techny	Techny Arborvitae	3 gel.	888	\vdash
ORNAMENTAL GRASSES	Д	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
CAL BCY	90	Calamagnostis brachytricha	Korean Feather Reed Grass	1 gal.	Pot	
CARICE	658	Carex morrowii 1ce Dence'	Ice Dance Japanese Sedge	1 gal.	Pot	-
PANSHD	44	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	1 gal.	Pot	
PEN BU3	1,242	Pennisetum alopecuroides 'Burgundy Bunny'	Burgundy Bunny Dwarf Fountain Grass	1 gal.	Pot	
PERENNIALS	Δ	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPAC
ADI PED	423	Adlantum pedatum	Northern Maidenhair Fern	1 gal.	Pot	18" 0.
ALL MNM	88	Allium x "Millenium"	Millenium Ornamental Onion	1 gal.	Pot	18" 0.
CAL NPT	242	Calamintha nepeta nepeta	Lesser Calamint	1 gal.	Pot	24" 0.
GER ROZ	370	Geranium x 'Rozanne'	Rozanne Cranesbill	1 gal.	Pot	28" o.
нем нар	414	Hemerocalits x 'Happy Returns'	Happy Returns Daylily	1 gal.	Pot	18"

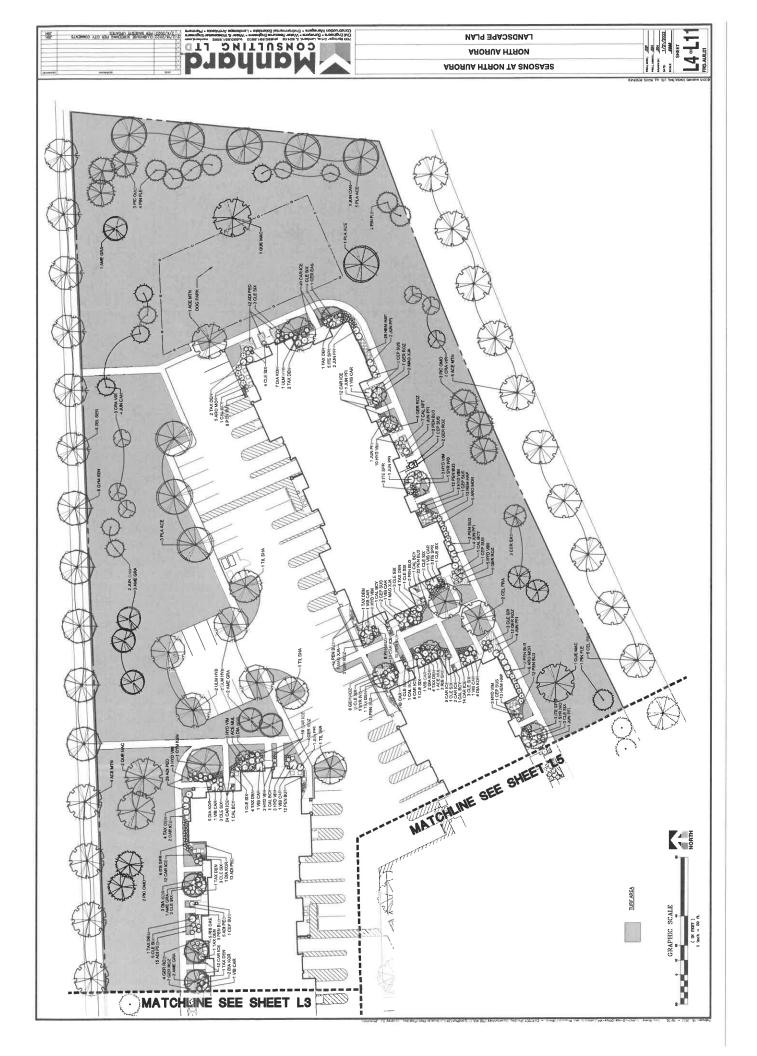
REMARKS

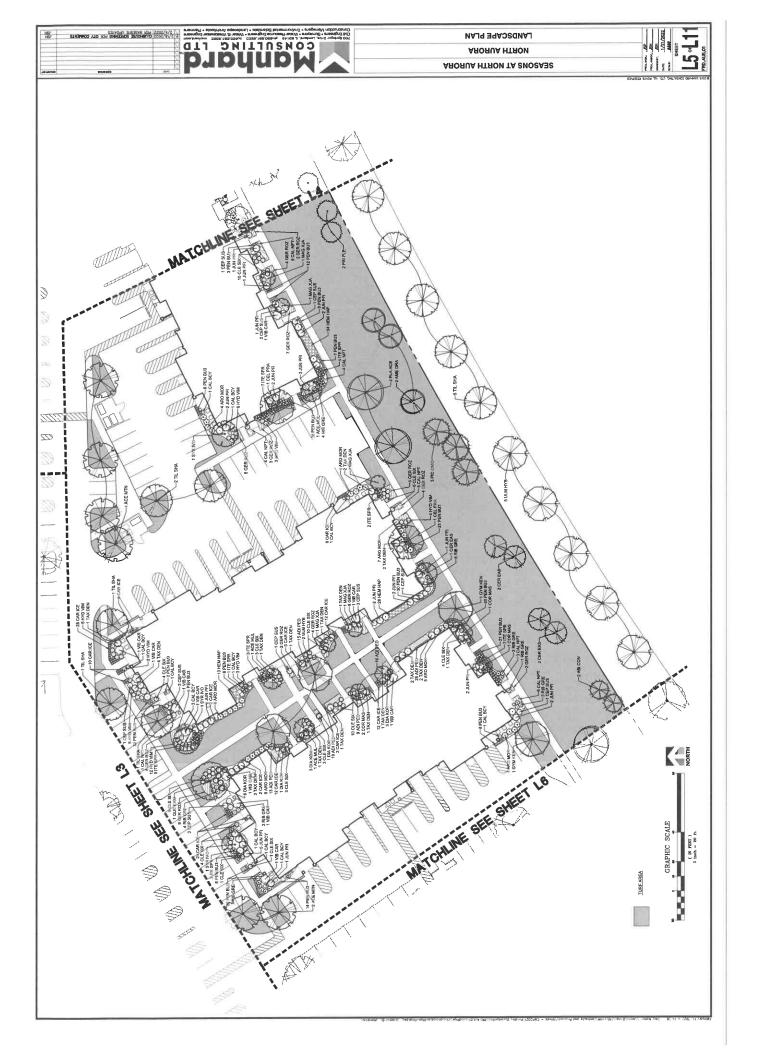


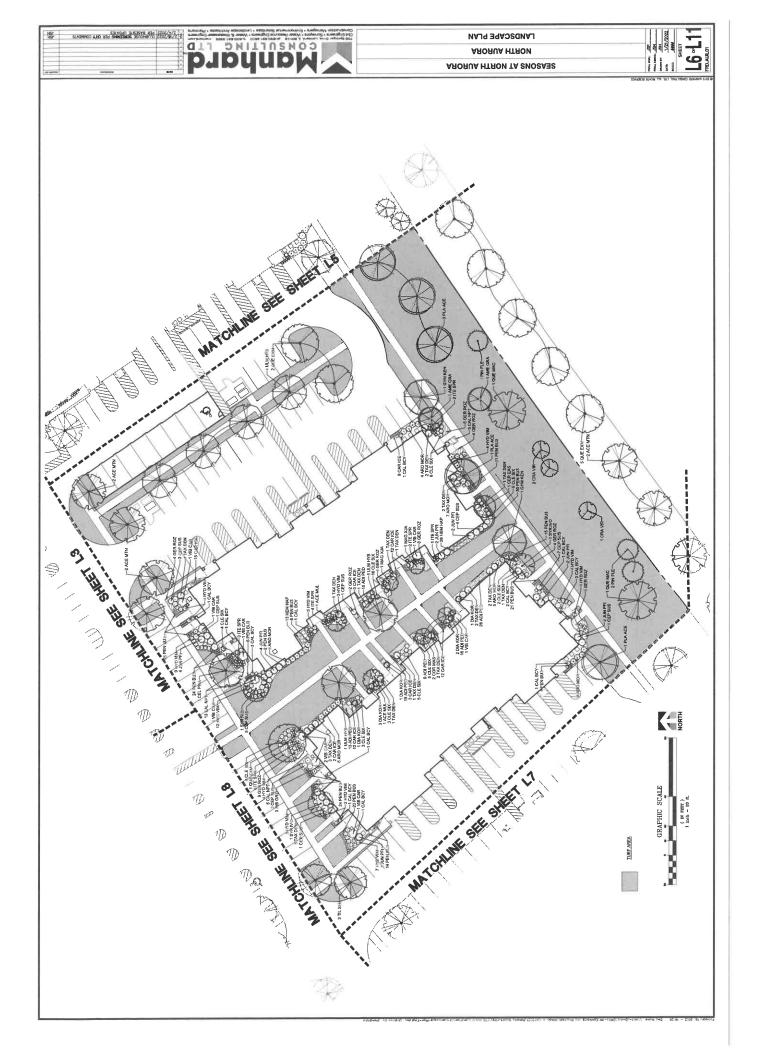


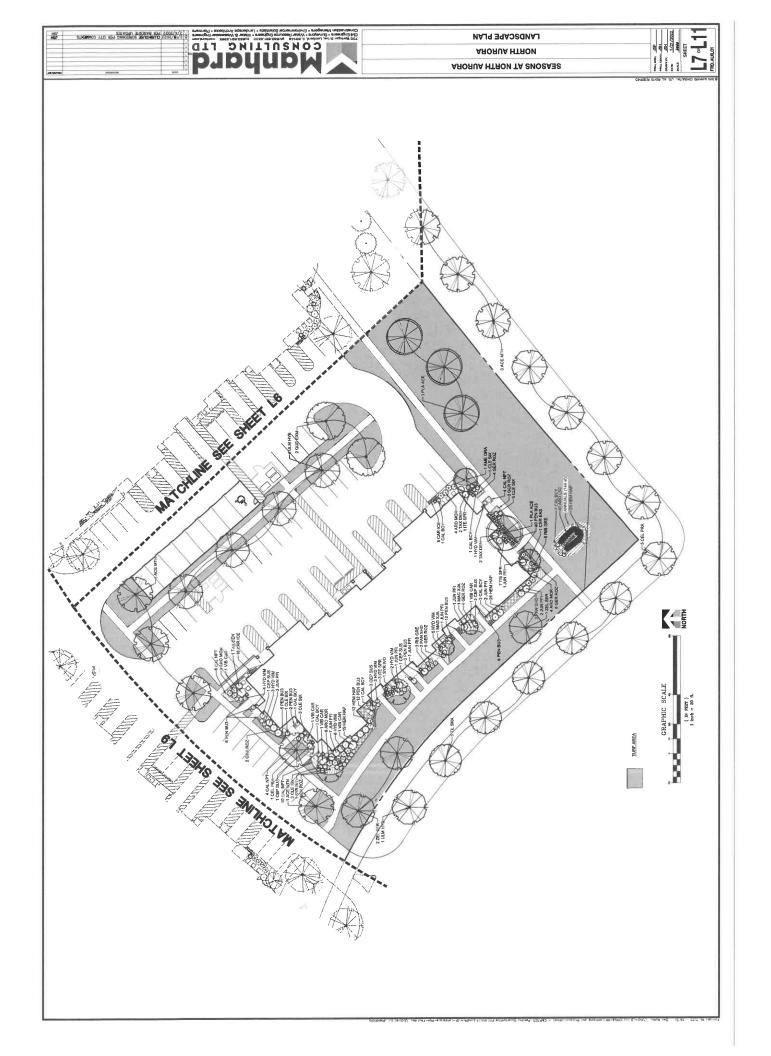


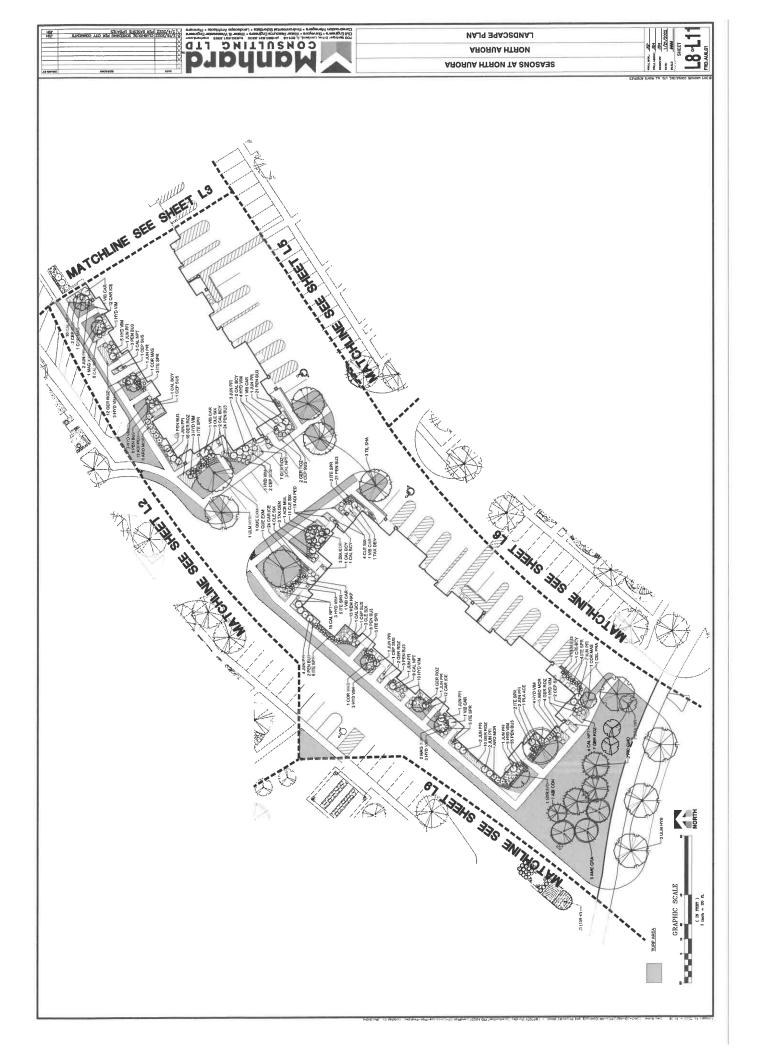


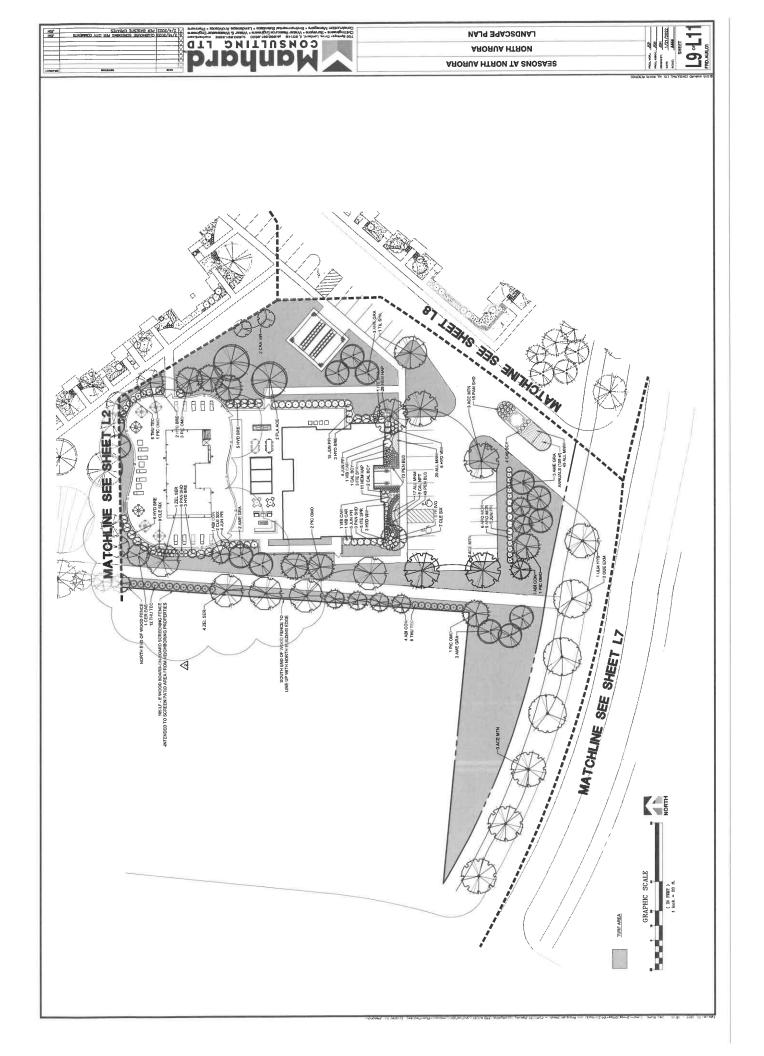














GENERAL PLANTING SPECIFICATIONS:

PART 1 - GENERAL

1-01 DESCRIPTION:

- A. Provide esen, einha, esentrale and proundon
 2. Treas, abruita, personale ar old proposition
 2. These, abruita, personale and proundon
 3. Prefers, abruita, personale and proundon
 4. Much and planting accessories
 5. Fee
- The Contractor shall verify all exieting conditions and dime any discrepancies to the Owner or his/her representative.

1-02 QUALITY ASSURANCE:

- A. Comply with alta work requiren
- Plant names indicated must corrept with "Standardized Plant Names as adopted by the latest edition."
 The American Abrill Commisses which are not listed the American Verticals which are not listed the American Verticals which are not listed the American Vertical Society and the Society
 - C. All plant materials shall contorm to the "American Standards for Nursery Stock" (ASNS), latest odfisc published by the American Association of Nurserymen, Whathington, D.C.
- All plant material shall be grown and supplied within a 50 mile radius of the project for a minimum of two full growing seasons. Authere to storing requirements as listed in the plant list and/or bid form for the project. A plant shall be measured in its natural standing position,
- and the form that is through and the falled the internal case about 100 per selections of the internal of the
 - All principe shall be done in form. Strub limars do not meet these specifications. Shrubs specified the helpful shell not see a spread that is equal to height nessurement. Strubs that he shell she he helpful shell to the helpful shell to th
- All plant materials are subject to expection and approval. The facefusigns excited and Omers treas the dight is solved and together and the material at the materials applied to the plant to an experiment to the solved and the solved and considered or to only speciment. They present materials and distribution of the solved and considered to the solved and the solv
 - Containes grown deciduous andice evergreen shrubs will be acceptable in lieu of balled and buflage shrubs subject to specified intellistics to containing grown stock. See of container grown malerial is conform to szabhaját trequientents of plant list.

1-03 DELIVERY, STORAGE & HANDLING:

- Fartilizer shell be delivered in original, unopered and undamaged partiaging. Containers shall displa solid, long-yes and manufacturer's rane. Store fartilizer in a manner that will prevent wetting and deterioration.
- Plant material transported on open vehicles should be covered with a protective covering to pre-wind burn.

Dry, loose topsold shall be provided for planting bed mixes. Muddy or frozen topsold is unacceptable working with medium in this condition will destroy its structure, making root development more diffic 1-04 PROJECT CONDITIONS:

- Notify landscape architect at least seven (7) working days prior to installati
- il sthaf be the Contractor's responsibility to locate and protect all existing above and befow grou utilities, Utilities can be located and marked (in lilinote) by calling J.U.L.F.E. at (900)892-0123.
- The Contractor shall provide, at heliher own experte, protection spained trespansing an second evens, planted evens, and other controllers are second to the profitting orapidal Contractor that provide burnings orapidal Contractor that provide burnings or progress or contractor that provide surfacedes, it increases the rail with a second to provide und a man. The Contractor shall not be responsible for any demagn Contractor shall not be responsible for any demagn Contractor shall not be responsible for any demagn.
- - A complote list of plants including a schedule of sizes, quantibles and other requirements is shown; the Dewings and other by the planting and on the bid form. In the event that quantily discrepencies or material omissions occurs in the other measures ist, the planting plane shall govern.

1-05 PRELIMINARY ACCEPTANCE:

All plansings shall be mainfained by the Contractor for a period of 90 days after prefinings a access by the Owner or the American presentation. Maintening the auxiliary and provided the day of the Owner or the American presentation. Maintenings shall aim a district and arrivals flower maintenance.

-06 WARRANTY:

A Alternative (exclusion processes of the manufaction of the constraint of the control of the co

PART 2 - PRODUCTS

2-01 PLANT MATERIALS:

- A. Destair Christic (profied the prosition to very many community of the profit of the

Locate all plant material as indicated or as approved in the field by the Landscape Authitect. If the observations are accounted within an end shown on the drawings, then do not proceed with plant poperations until alternate plant locations have been selected of, well of the control of the

Planting belos shall be constructed as shown on the planting delash. Heles shall be hard day or mechine doc Chest, can will be shared to be considered to the construction of the construc

G. It shall be the responsibility of the landecape continuous in prepare all seeded areas by disking and raking prior it plasting seed of old shall be looked and are lander to a minimum depth of 6°. Fine grading of all seeded stees it required. Wakinum size of stone or looked lump is 1°.

- No evidence of wounds or pruning cuts shall be allowed unless approved by the Lands Architect.
- Evergroen tross shall be branched to the ground. The helpful of evergreen tross are determined by measuring from the ground to the fittered branch decest to the kin-height inflor width offer tross are necessured by the mass of the plant not the very pip of the branches.

Prior to planting, provide additional topsoll to all plantling beds to bring the finish grade of the bad to 2" above lawn grade and to finish grade of adjacent hard surface grades.

Provide pre-mixed planting mixture for use around root systems and root balls of the plants. The mixtures are outlined in section B of part 2-92.

Shrube and email petra shall meet the requirements for spread explore helph factorised in the
plant if it. In shapif researchment after its series from ground leads to the average helph of the
petr of the plant, not for largest frament. Single stems of this plant will not be sourged Side.
Forming and after the petr of the plant is plant and may be provided. Side
forming and be fall and my grown and may good from the good of the side sourd. These stead be a ment, event, and be a ment of the
mind; vigous according in the from clear word. These or dide most of the stands in prints.

2-02 ACCESSORIES:

- A. Topest.

 1. Topost shall be fettle, retained to a leterny character, without exhibition of subsidiaries in the fettle of the
 - Topsoil for seed areas shall be a minimum of 6°.
- Soil amendments shall be as follows:

 1. For these and shrubs the plant pit will be backilled with pulverized black dist.
- For parturnists and ornamental greases the soil inxidure will be as follows: CAM-S3 General Purpose Peat Based Mixer as spikelled by Michaest Trading, Top beds with 6" of CAM-S3 and its existing beds to a depth of 6". Soil mittanes are available from Michaest Trading, Michaest Trading, S. Charles, IL, 60174 (630) 365-1990
- Popilizar.

 1. For trea and stroke user, 144-6 brigardes 17 g or equivited an entable from Anhur Clasen, inc.

 1. For trea and stroke incommendation for application, Annur Clasen, inc. 540 Deras Direc, Venesing, IL 6000 (817937-2177. For furt sreas use 6.24-16 Clesen Feirway with micronutrients with minor elements 3.0 % S. 2024. B., 65% Cu, 1,0% Fe, .0006% Mo., 10% Mn available from Arthur Clesen or approved equal.
- F. Makdy.

 1. Date much shall bot linely stratefood hardwood back which has been soveraid and is fee of any
 gener fellige, living, rocks, sevolut, wood beenlop, growth or guaranticios labelling lippedency
 or other foreign misculate, four, much is evaluable from Missensi Tradity.
 - 1. Write service will be solighte on the day, with the cost of vester levels paid by the Omers.
 1. Write services will be solidated to the solidate the service to the work stress sould be the responsibility of I Landscape Commission. All mecessary loses, piping, lank truck, etc. shall be suppleed by the Landscape Commission.
 - Guyáng: 1. Slakes: 5/8" x 40" steel eya anchor with 4" helix
- Cable:
 Thee under 5". Blockle 16f" galvanized sircraft cable, 7x7 strand or approved equal b. Thee conference of the provent Blockle 31f" galvenized sircraft cable, 7x7 strand or approved equal
- 4. Hose: new two-ply reinforced rubber hose, minimum 1/2* I.D Turnbuckles: 5/16", eye and eye, with 4" takeup.
 - Tree wrap: Burlap tree wrap 4" wide.

PART 3 - INSTALLATION OF PLANT MATERIAL

A: Whether years from the and but some versus proper question. Once a sub-the we promitted, watering may be contented but the selection and the selection of the contented but the selection and contented but the selection and the selection of the methods and proceedings and the selection of the methods and proceedings and the selection of the methods and proceedings in which is selection of the methods and proceedings in the selection of the methods and proceedings in which is selected to the selection of the methods and proceedings in the selection of the methods and proceeding and the selection of the methods and proceedings and the selection of the selecti

Examine proposed planting areas and unsatisfactory conditions are corrected. 3-02 PREPARATION:

3-01 FIELD VERIFICATION:

- All planning techniques and methods shall be consistent with the latest e of Nurseymen, Inc.' and as detailed on these Drawings.
 - Plenting shall be performed by experienced workmen familiar with planting proc supervision of a quelified supervisor.
- Apply Round-Up or approved equivalent to kill any existing vegatablon in all areas to be plembed. Apply Round-Ling period between chemical application multiplat installation with memufact. Do not begin platering operations until preschiped operational entiting period has alleped. Take extrame care to evoid chemical drift to adjoining properties of landscape plankings.

Moisten prepared surface immediately prior to laying sod. Water thoroughly and allow surface moleture to dry before planting lawns. Do not create a muddy sod condition.

Sodding of specified I swn areas on plans will be completed as follows:

1. Rate and surface to receive sod to completely remove any sod crust no more than one day to larging sod.

10. Bring sod.

Suitable erration control practices shall be maintained by the CONTRACI glinote Liften Manual and all applicable Soil Erosion and Sedimentation C the PLANS.

Staples should be 8" wire staples, applied at two (2) per square yar.

 Erceion Control Blanket
 Erceion Control Blanket shell be installed per manufacturer's on the plan. Install S-75 Erosion Control Blanket as manufactured by P equal. t. Blanket should be premarked with staple pattern. FTB.AULGI

Pior to all planting, routid all areas to be landscaped to pregate for plant hasbastion to a mintroll depth of 12. Cleminas unavenus masses and becomes. Administrating such, profess and controll, and company and a profess are to be ground. Board stocks to the breat Remove all checks, weeds and undestables plants and their mode from areas to be planting. Remove all controlled all planting than distinction.

Sod shall be laid within 24 hours from the time of stripping. Do not plant dormant sod or if the ground is frezen,

- Topsof shall be apresd over the atte at a minimum depth of 6". Those areas which are indica prairis or natural areas on the Drawings shall have a minimum topsof depth of 18".
- Water end thoroughly with a fine spray immediately after planting.

Place top elevation of sod 1/2 inch below adjoining edging or pay

- After sod and soit have dried, roll seeded areas to ensure a good bond between the sod and soil and to remove mitter depressions and irregularities. 8. Sodded slopes 3:1 or greater shall be staked to prevent erosion and washout
 - Warranty sodding for a period of one (1) year from the end of the 50 day maintas sod falls or lacks vigor and full growth as determined by the Landscape Architect will repeat site preparation operations and re-sod affected areas at the Contract
- (O bito); good he a personalir independing influence before the important in the sees bridged to the personal personal personal personal result of the personal perso
 - Things of plant material and seeding operations.

 1. Seeding to plante material and seeding operations.

 1. Seeding to plante assess and extract which has beingweither in about condition to see the seem during periods of they write, a writer has pourt is not an operation of the seeding to see seeding 1.000 (3) Seeding content for the seeding residence in the seeding seeding the seed materials. These of during 18 though the seed must be a seeding the seed must be a seed of seeding the seed must be a seed of seeding the seed must be a seed of seeding of the seed of the seed must be a seed of seeding and of the seed of the seed must be a seed to see a seed of seeding and the seeding of the seed of the seed of seeding the seeding the seed of seeding the seed of seeding the se

Manhard LID

 Sod shall be installed when the ground is not frozen or snow covered and temperatures are less than 80° F. It shall not be placed during a period of extended drought. Herbecoaus ornamental plants shall be planted between May 1 and June 15 or between Augus 15 and Decomber 1.

Set balled and buflapped plants in the planting hole and compact 8" of sot around the base of the ball Backfit invalidity seek with planting mature. We've plants immediately after planting to elemente at words and incompary seek the planting to elemente at all the planting to elemente at all the planting of elemente at all the planting to the planting the plant

Specia graundissen plants according to dimensive agiven on the plans, Adjall specially as received years by the plants of the plants of the plants. Plant to verbin if it of the structed of these and strates or also edge of the plants all, whichever a clearest. Plant to writin 12" of edge of bod.

Set glant material in the planting hole to proper grade and alignment. Set glants upright and plumb, plantind are should be suited by the move that are should grade. Remove build from the 17 of not bell. Remove trained builds (grade), Cut and movem or cut and fed down upper half of wire basket, dependent the airs. Detclift hale by firstly immaing soil to enoid any air pockets or voids.

3-03 PLANTING PROCEDURES:

4. Spring planning of woody onnamental plants shall be performed from the line the soft can be set all of the plants of the p

3-04 MAINTENANCE:

Mukative
1. Inness of season or much record oil free and service beds as frictands on cranings or painting
1. Inness of season before the season as orders constituted being breach appaired to
truck, form nutch to create on threated one around breach.

Mulch perennial, groundcover and annual planting beds with 2" must mulched areas thoroughly after placing mulch.

- All plantings shall be maintained by the Contractor for a period of 90 days after profinitionsy excepts by the Commerce of the planting of the period of the
 - 3-04 ACCEPTANCE:
- All plant instential (acciduting armust color), shall be warranthed for one (1) year after the end of the 5 day materiarmost elected in the stretch of the maintenance period is marked by the final acceptance of the Contribrok work by the Owner or half has representative.
- 3-06 SITE CLEAN-UP:

and an extraction of the contraction of the contrac

Seeding of specified levn areas on plans will be treated as follows:

1, Topool staff be spread only at a reast to be seedled to a minimum depth of 6" when compact (to be performed by others):

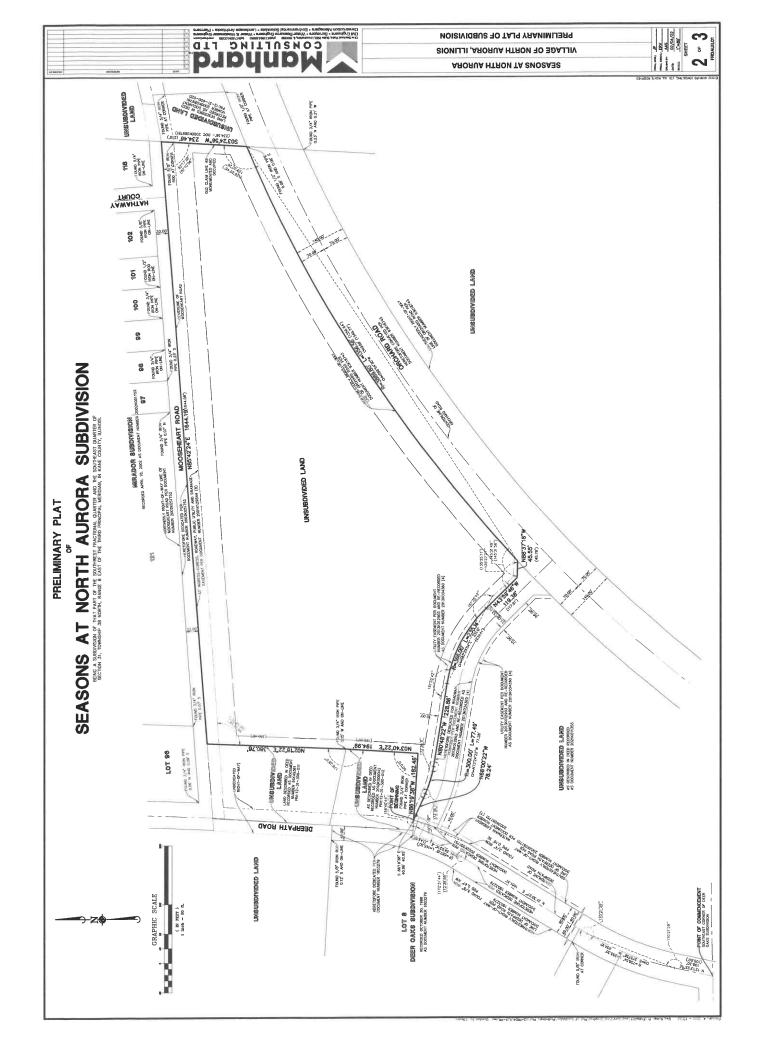
Apply fertitizens and conditioners at the ratio specified per ead test findings, in files of ead the results, apply two (2) lones of ground againatinns finestone and 1000 las, 10+10+10 or equivariets, isotdizer per ecc. At least 40% of the fertitizer nitrogen shall be of an organic origin

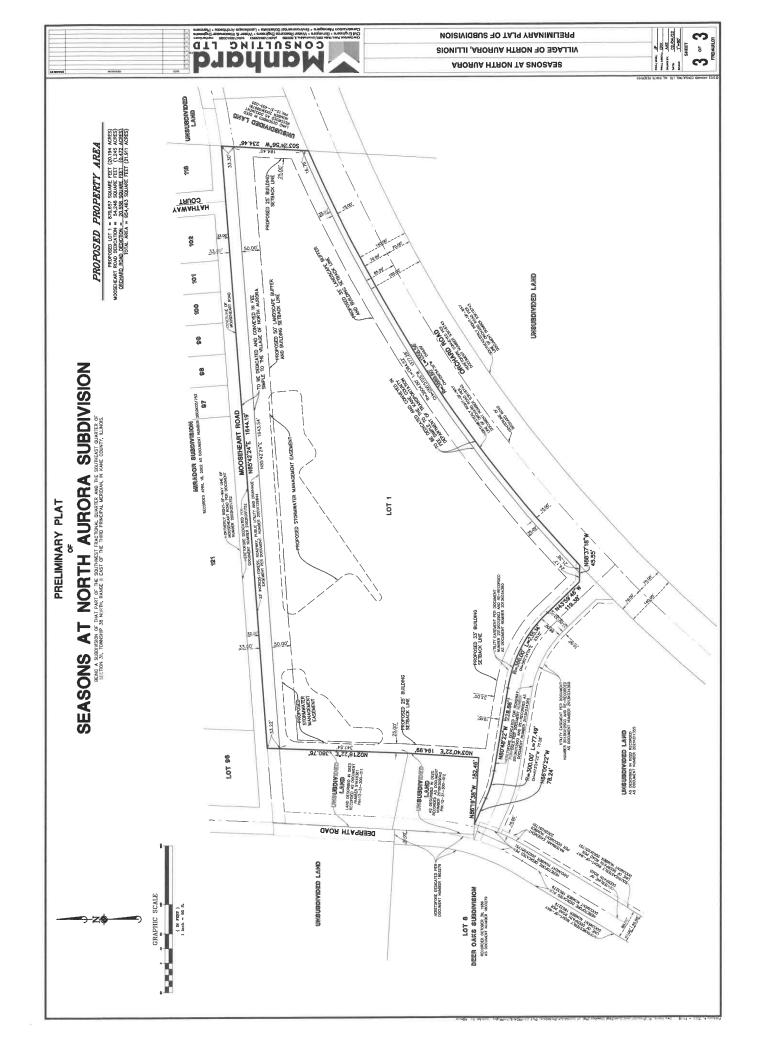
Seed mixture and application rate – use Premium seed mix as supplied by Arthur Clesen Apply at a rate of 5 fbs./1000 s.f.

4. Sol proparation areas where verticular buffic has compacted the sol shall be looseened fact to a minimum dept of 6 before fertility and seeding. Fine grading of all seeded areas is required. Mozurulm size of stone or topical lamps as if:

The wingship on changing the Broadcast Policy control (will be in executed to the observability of a producter protein or part another products. The indextoces profits of an order as to which there are between products and all paper for multiplicates and produce. The sub-tant one over dumage or defects. When wayping is done, include with everyond registry with approved the wayping upon a law order than the wings of the products will be wringsoft applied by with approved the wayping upon the broad with the products and the wingsoft and products and paper wayping upon the broad wingsoft and the products and the products and between the products and the products are also as the products and the products and the products and of the products are also as the products and the products are also as the products and the products and of the products are also as the products are also as the products are also as the products and of the products are also as the products are also as the products are also as the products and one of the products are also as the products are also as the products are also as the products and the products are also as the and the products are also as the products are also a

LANDSCAPE SPECIFICATIONS **АЯОЯЛА НТЯОИ АЯОЯЛА НТЯОИ ТА SNOSABS**





Village of North Aurora Memorandum



To: President and Village Board of Trustees

From: Jason Paprocki, Finance Director

CC: Steven Bosco, Village Administrator

Date: April 4, 2022

RE: FY 2022-23 Draft Budget

The FY 2022-23 Draft Budget has been completed and emailed separately to the Board for discussion at the Committee of the Whole meeting. In addition, the Draft Budget has been posted on the Village's website for public viewing. An overview presentation of the Draft Budget will be given tonight, along with time for the Board to provide feedback.

The FY 2022-23 Draft Budget will also be on the Committee of the Whole agenda for the April 18th meeting for follow-up questions and discussion. The official Public Hearing will be on April 18th as well, with final approval of the Budget scheduled for the May 2nd Village Board meeting.