REPORT

18th Avenue Subdivision
Traffic Impact Study

October 21, 2022

H. Lee & Associates, PLLC

18TH AVENUE SUBDIVISION
TRAFFIC IMPACT STUDY

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INTRODUCTION

This traffic impact analysis has been prepared to assess transportation impacts related to the proposed 18th Avenue Subdivision. The project site is located at 3010 NW 18th Avenue in Camas, Washington and is comprised of tax lots 127439000, 127359000, and 127356000. Figure 1 shows the project vicinity.

Project Description

The proposed project will subdivide approximately 9.28 acres into 33 new single-family detached lots. One single-family detached home exists on-site and will be retained as part of the subdivision totaling the overall lot count to 34. Access to the proposed project will be from connections to NW Hancock Drive and a newly constructed roadway onto NW Hood Street. It should be noted that the connection to NW Hood Street will create the east leg of the preliminarily approved Hood Street Subdivision access intersection which is located directly across NW Hood Street from the proposed 18th Avenue Subdivision. Figure 2 shows the project site plan.

Scope of Traffic Impact Study

The scope of the traffic impact study was developed from known City of Camas traffic study requirements. From these requirements, the following intersections were analyzed:

- NW 16th Avenue/NW Brady Road
- NW 18th Avenue/NW Hancock Drive
- NW Brady Road/NW McIntosh Road
- NW Hood Street/Project Access

The remainder of this report presents the following analysis:

- Existing traffic conditions in the project study area.
- 2027 "Without Project" condition to establish the baseline condition by which the project impacts are determined.
- Trip generation estimates for the proposed development.
- 2027 "With Project" condition to determine project traffic impacts.

SUMMARY OF FINDINGS

Findings

The following are the findings from the traffic analysis:

- The proposed development is expected to generate 311 daily, 23 A.M. peak hour (6 in, 17 out), and 31 P.M. peak hour (19 in, 12 out) net new trips.

- All of the study area intersections are projected to meet the City of Camas' level of service standards in the 2027 "Without Project" and 2027 "With Project" condition.

- Based on field measurements conducted by H. Lee & Associates, PLLC, the existing NW 18th Avenue/NW Hancock Drive and the proposed NW Hood Street/Project Access intersections should be able to meet the sight distance requirements as long as any vegetation within the sight distance triangles are properly maintained after construction and no obstructions are placed within the sight distance triangles that could impede a driver's vision. The corner sight distances should be re-verified in the final engineering/construction stages of development.

- Turn lane warrants at existing NW 18th Avenue/NW Hancock Drive and proposed NW Hood Street/Project Access intersections were not conducted due to low traffic volumes, acceptable levels of service, and acceptable accident rates in the 2027 "With Project" conditions along NW Hood Street.

Recommendations

- Based on the traffic impact analysis documented in this report, no physical, off-site mitigation would be needed.

18th Avenue Subdivision TIA
Camas, WA

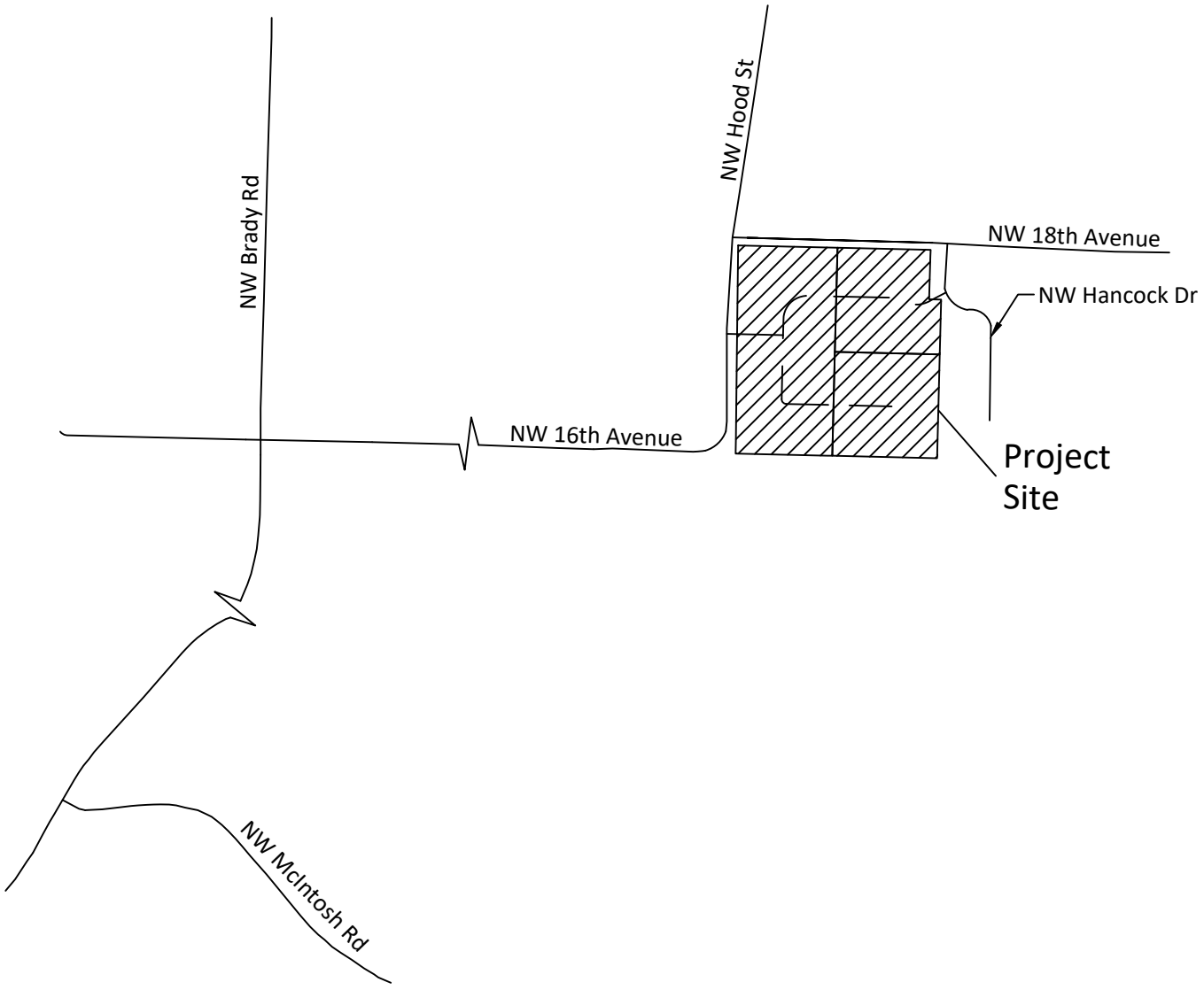

FIGURE 1
Site Vicinity Map

NOT TO SCALE

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18th Avenue Subdivision TIA
Camas, WA

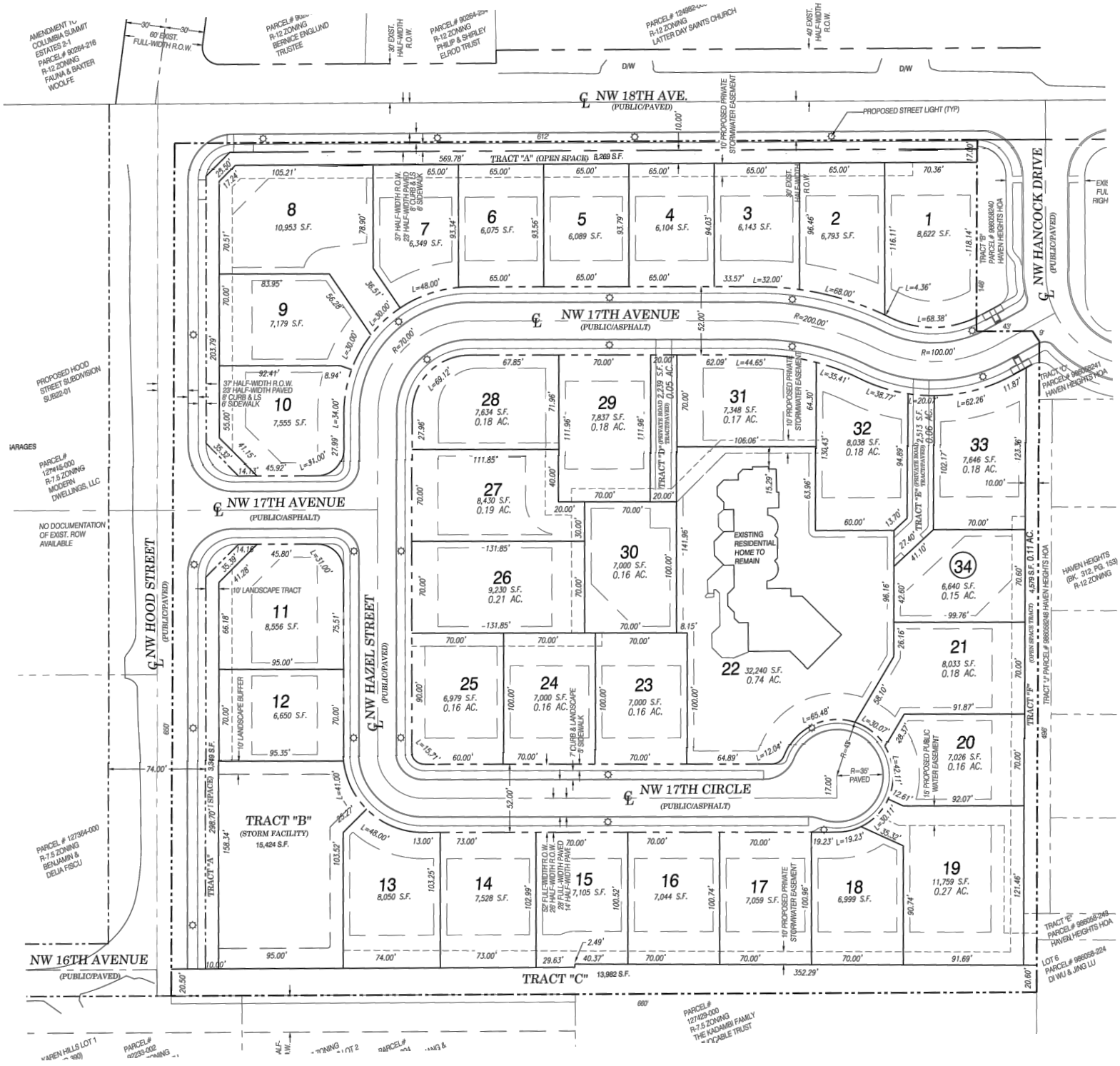

FIGURE 2
Site Plan

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SECTION II
EXISTING CONDITIONS

SITE CONDITION AND ADJACENT LAND USE

One existing single-family detached home exists on-site and will be retained as part of the subdivision. The preliminary approved Hood Street Subdivision exists to the west. The Church of Jesus Christ of Latter-day Saints exists to the north. Residential uses surround the project site.

TRANSPORTATION FACILITIES

The following provides a description of the existing street system in the study area.

NW Brady Road: NW Brady Road is a two-lane minor arterial roadway north of NW 16th Avenue with a posted speed limit of 35 mph. Between NW 16th Avenue and NW McIntosh Road, NW Brady road is a two-lane collector roadway with intermittent sidewalks along both sides of the roadway and a posted speed limit of 35 mph. South of NW McIntosh Road, NW Brady Road is a two-lane minor arterial roadway and has a posted speed limit of 40 mph.

NW Hancock Drive: NW Hancock Drive is a two-lane local roadway. Sidewalks exist along both sides of the roadway. There is no posted speed limit but is assumed to be 25 mph.

NW Hood Street: NW Hood Street is two-lane minor arterial roadway between NW 18th Avenue and NW 16th Avenue. This section of roadway has a posted speed limit of 35 mph. North of NW 18th Avenue, NW Hood Street is two-lane local roadway with sidewalks along the east side of the roadway and intermittent sidewalks along the west side of the roadway. This section of roadway has a posted speed limit of 25 mph.

NW McIntosh Road: NW McIntosh Road is a two-lane minor arterial roadway. Sidewalks exist along the north side of the roadway and bike lanes exist along the south side of the roadway west of NW Dawson Ridge Drive. The posted speed limit is 35 mph.

NW 16th Avenue: NW 16th Avenue is a two-to-three lane minor arterial roadway. Intermittent sidewalks and bike lanes exist along both sides of the roadway. The posted speed limit is 35 mph.

NW 18th Avenue: NW 18th Avenue is a two-lane minor arterial roadway. Intermittent sidewalks exist along both sides of the roadway. The posted speed limit is 35 mph.

As part of this study, levels of service analyses were performed for the following intersections:

- NW 16th Avenue/NW Brady Road
- NW 18th Avenue/NW Hancock Drive
- NW Brady Road/NW McIntosh Road

- NW Hood Street/Project Access

The NW 16th Avenue/NW Brady Road intersection is signalized. The remaining study area intersections are unsignalized and stop sign controlled. Figure 3 shows the existing lane configurations and traffic control at these intersections.

EXISTING TRAFFIC VOLUMES

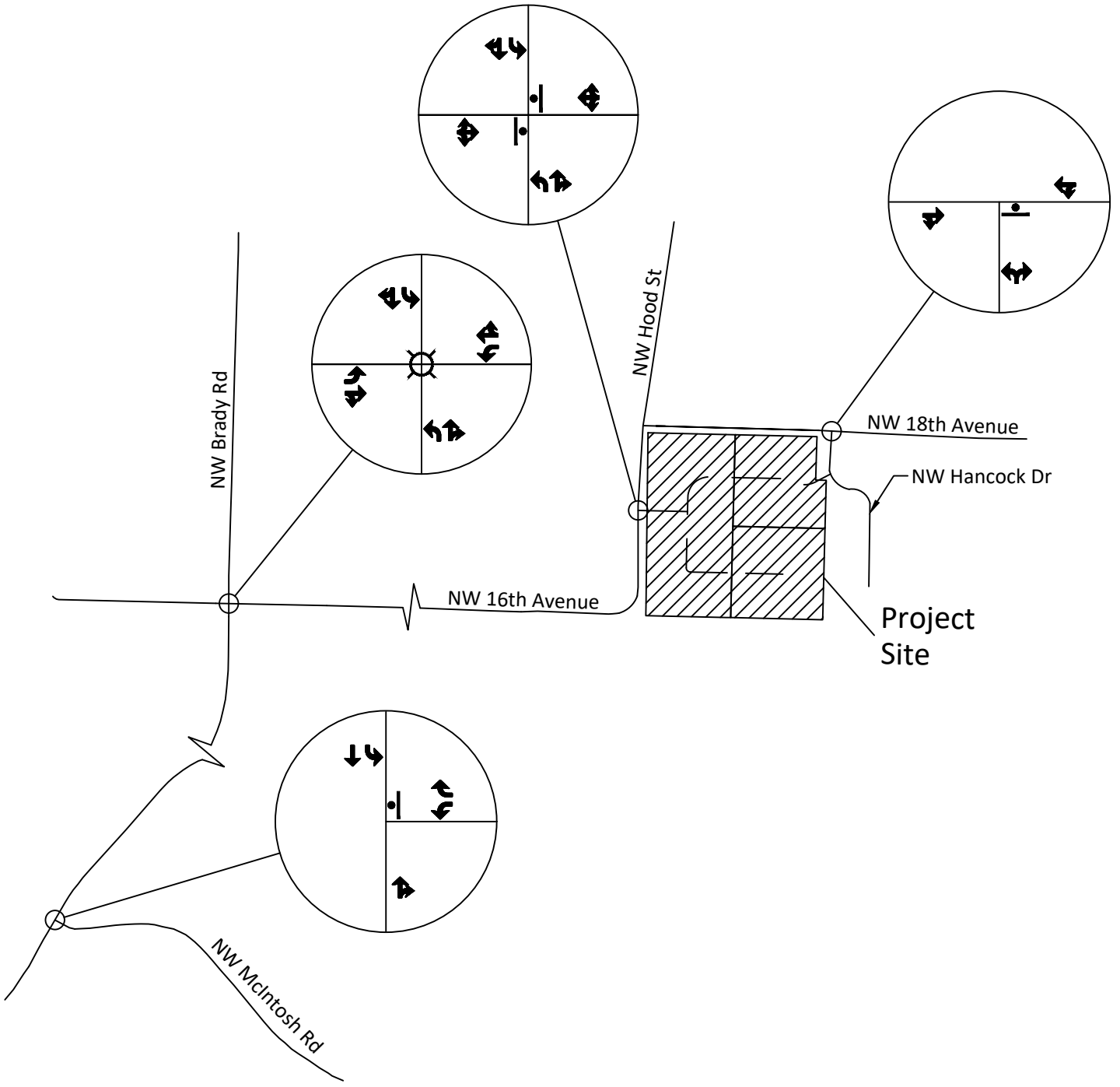
A.M. and P.M. peak hour traffic counts were obtained at the study area intersections by HLA in March 2022. Per conversations with City of Camas staff, existing traffic counts collected in 2022 can be utilized without making pandemic adjustments as long as HLA can show that they are back to pre-pandemic levels. HLA compared the existing 2022 pandemic traffic counts to 2018 historical pre-pandemic traffic counts at the NW Brady Road/NW 16th Avenue intersection. To update this 2018 pre-pandemic count to the current year (2022), HLA applied a one percent historical annual compounded growth factor that was established previously in the Hood Street Subdivision traffic study to the A.M and P.M. peak hour counts. The 2022 projected pre-pandemic A.M. peak hour volume is 850. The 2022 projected pre-pandemic P.M. peak hour volume is 991. The existing 2022 pandemic A.M. peak hour count volume is 1,019. The existing 2022 pandemic P.M. peak hour count volume is 960. The existing 2022 traffic volumes are within 97% of the 2022 projected pre-pandemic traffic volumes and therefore no adjustments were made since a three percent discrepancy in traffic volumes is within the range of normal traffic fluctuation.

Per the HCM, peak 15-minute traffic volumes were multiplied by four (4) to arrive at the peak hour traffic volumes. With this methodology of developing peak hour traffic volumes, the peak hour factor (PHF) is set to 1.00 because the peaking has already occurred by multiplying the peak 15-minute traffic volume by four (4). The existing condition traffic volumes are presented in Figure 4. The existing traffic counts can be referenced in Appendix A.

A speed study along NW Hood Street was conducted between 3:00 P.M. on July 26, 2021 and 9:00 A.M. on July 29, 2021. The 85th percentile speed southbound was 33 mph. The 85th percentile northbound was 31 mph.

A speed study along NW 18th Avenue was conducted between 12:00 A.M. on March 14, 2022 and 8:00 P.M. on March 16, 2021. The 85th percentile speed southbound was 37 mph. The 85th percentile northbound was 37 mph. The speed study data can be referenced in Appendix A.

18th Avenue Subdivision TIA
Camas, WA



LEGEND

- Lane Usage
- Traffic Signal
- Stop Sign

NOT TO SCALE

FIGURE 3
Existing Lane Configuration and Traffic Control

* 2027 "With Project" Lane Configuration and Traffic Control

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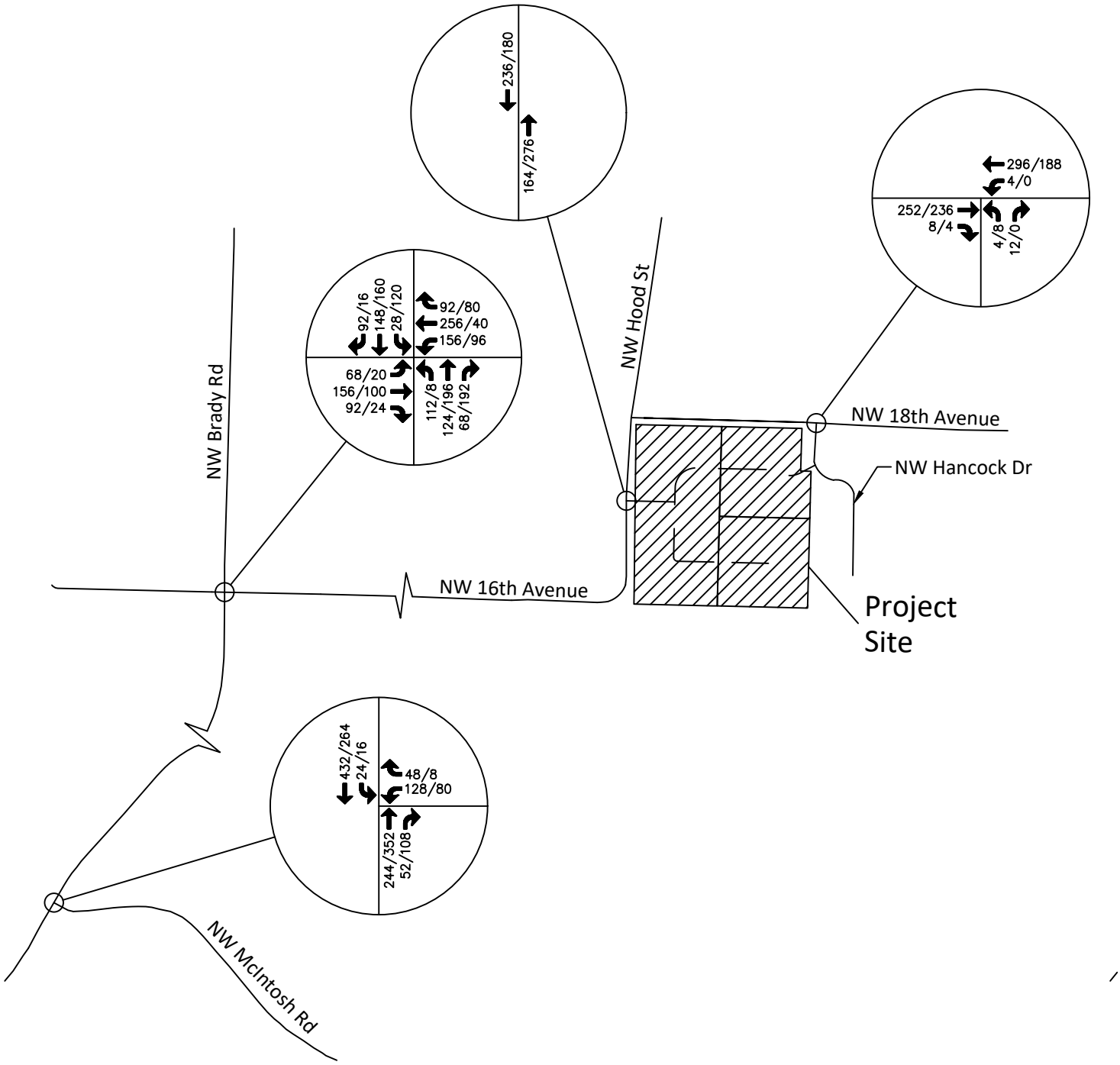
18th Avenue Subdivision TIA
Camas, WA



LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

NOT TO SCALE

FIGURE 4
Existing A.M. and P.M.
Peak Hour Traffic Volumes

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EXISTING LEVEL OF SERVICE

Based on the traffic volumes in Figure 4 and the existing lane configurations presented in Figure 3, peak hour traffic operations were analyzed at the study area intersections using the methodologies outlined in the Highway Capacity Manual (HCM) 7th Edition. According to the HCM, there are six levels of service (LOS) by which the operational performance of an intersection may be described. These levels of service range between LOS "A" which indicates a relatively free-flowing condition and LOS "F" which indicates operational breakdown.

LOS D is the City of Camas' adopted level of service standard for arterial/collector intersections. For non-arterial/collector intersections, LOS C is the adopted level of service standard.

Existing A.M. and P.M. peak hour levels of service at the study area intersections are summarized in Table 1. As shown in Table 1, all of the study area intersections are operating within the acceptable levels of service standards or better in the existing condition. Appendix B contains the levels of service worksheets for the existing condition.

Table 1. Existing Levels of Service

	A.M. Peak Hour		P.M. Peak Hour	
Signalized Intersection	LOS	Average Delay (sec)	LOS	Average Delay (sec)
NW 16th Avenue/NW Brady Road	B	15.5	B	14.2
Unsignalized Intersection				
NW 18th Avenue/NW Hancock Drive				
Westbound Left	A	7.8	A	0.0
Northbound Approach	B	10.4	B	11.2
NW Brady Road/NW McIntosh Road				
Westbound Left	C	19.9	C	16.2
Westbound Right	B	10.0	B	10.6
Southbound Left	A	7.9	A	8.3

ACCIDENT HISTORY

Accident data was obtained from the Washington State Department of Transportation (WSDOT) for the five-year, five-month, and twenty-two day period between January 1, 2015 and June 22, 2021. The data includes total accidents and accidents by severity (i.e. fatal, injury or property damage only). This accident data is summarized in Table 2. Appendix C contains the accident data.

As shown in Table 2, none of the study area intersections have accident rates above 1.00 accidents per million entering vehicles. Accident rates above 1.00 accident per million entering vehicles do not necessarily indicate there is a safety problem, but it is an indicator that further analysis should be conducted. Intersections with accident rates of less than 1.00 accidents per million entering vehicles are considered acceptable and therefore no further analysis is required.

It should be noted that there was a fatality at the NW Brady Road/NW 16th Avenue intersection on July 30, 2017. The crash involved a passenger car and motorcycle. The cause of accident was due to the passenger car running the stop sign and the motorcycle exceeding reasonable safe speed.

Table 2. Summary of Traffic Accident History in Study Area

Intersection	Average Annual Accidents				acc/mev[2]
	PDO[1]	Injury	Fatal	Total	
NW 16th Avenue/NW Brady Road	0.8	0.5	0.2	1.6	0.33
NW 18th Avenue/NW Hancock Drive	0.0	0.0	0.0	0.0	0.00
NW Brady Road/NW McIntosh Road	0.4	0.4	0.0	0.8	0.21
NW Hood Street/Project Access	0.0	0.0	0.0	0.0	0.00

[1] PDO = property damage only
[2] acc/mev = accidents per million entering vehicles

EXISTING PUBLIC TRANSIT SERVICE

C-Tran provides public transit service in the City of Camas. Currently there are no routes that provide service adjacent to the project site. The closest route to the project site is Route #37 (Mill Plain/Fisher's), which is approximately 1.76 miles northeast of the project site at the SE 192nd Avenue/SE 34th Street intersection.

NON-MOTORIZED TRANSPORTATION

Sidewalks exist along NW Hanckock Drive adjacent to the project site.

PLANNED TRANSPORTATION IMPROVEMENTS

There are four known transportation improvement projects planned by the City of Camas in the project vicinity based on the City of Camas' 2022-2027 Six Year Transportation Program. These projects are listed below:

NW 18th Avenue – NW Astor Street to NW 16th Avenue
This project includes constructing a pedestrian path along NW 18th Avenue and NW Hood Street from NW Astor Street to NW 16th Avenue. All project phases are anticipated to begin in 2024. The estimated total project cost is $260,000. This project has a priority number of 9.

NW Astor Street/NW 11th Avenue – NW 16th Avenue to NW McIntosh Road
This project includes widening the existing roadway and constructing bike lanes and sidewalks. Construction is anticipated to begin in 2027. The estimated total project cost is $2,390,000. This project has a priority number of 24.

NW 18th Avenue – NW Astor Street to NW 16th Avenue

This project includes widening the existing roadway and constructing sidewalks along NW 18th Avenue and NW Hood Street from NW Astor Street to NW 16th Avenue. Preliminary engineering is anticipated to begin in 2025. This project has a priority number of 25.

NW 18th Avenue – NW Whitman Street to NW Brady Road

This project includes reconstructing the existing roadway and constructing bike lanes along NW 18th Avenue. Preliminary engineering is anticipated to begin in 2025. This project has a priority number of 26.

SECTION III
TRAFFIC IMPACT ANALYSIS

ANALYSIS METHODOLOGY

The A.M. and P.M. peak hour traffic impacts generated by the proposed 18th Avenue Subdivision were analyzed as follows:

- The 2027 "Without Project" traffic volumes were established as the future baseline condition for the traffic analysis and to define a baseline by which project impacts are determined. The 2027 "Without Project" condition traffic volumes were derived by using a 2.0 percent annual, compounded growth factor and adding traffic generated by "in process" developments. The "in-process" traffic volumes were obtained from the City of Camas staff.

- A.M., P.M., and daily trip generation were estimated for the proposed development using the rates in "Trip Generation, 11th Edition," (Institute of Transportation Engineers, 2021).

- Trip distribution of site-generated traffic was developed from existing count information, previous traffic studies, locations of major employment centers, and logical travel paths to and from major travel corridors.

- Predicted A.M. and P.M. peak hour site-generated traffic from the proposed development was assigned to the roadway network and added to the 2027 "Without Project" traffic volumes to develop the 2027 "With Project" traffic volumes.

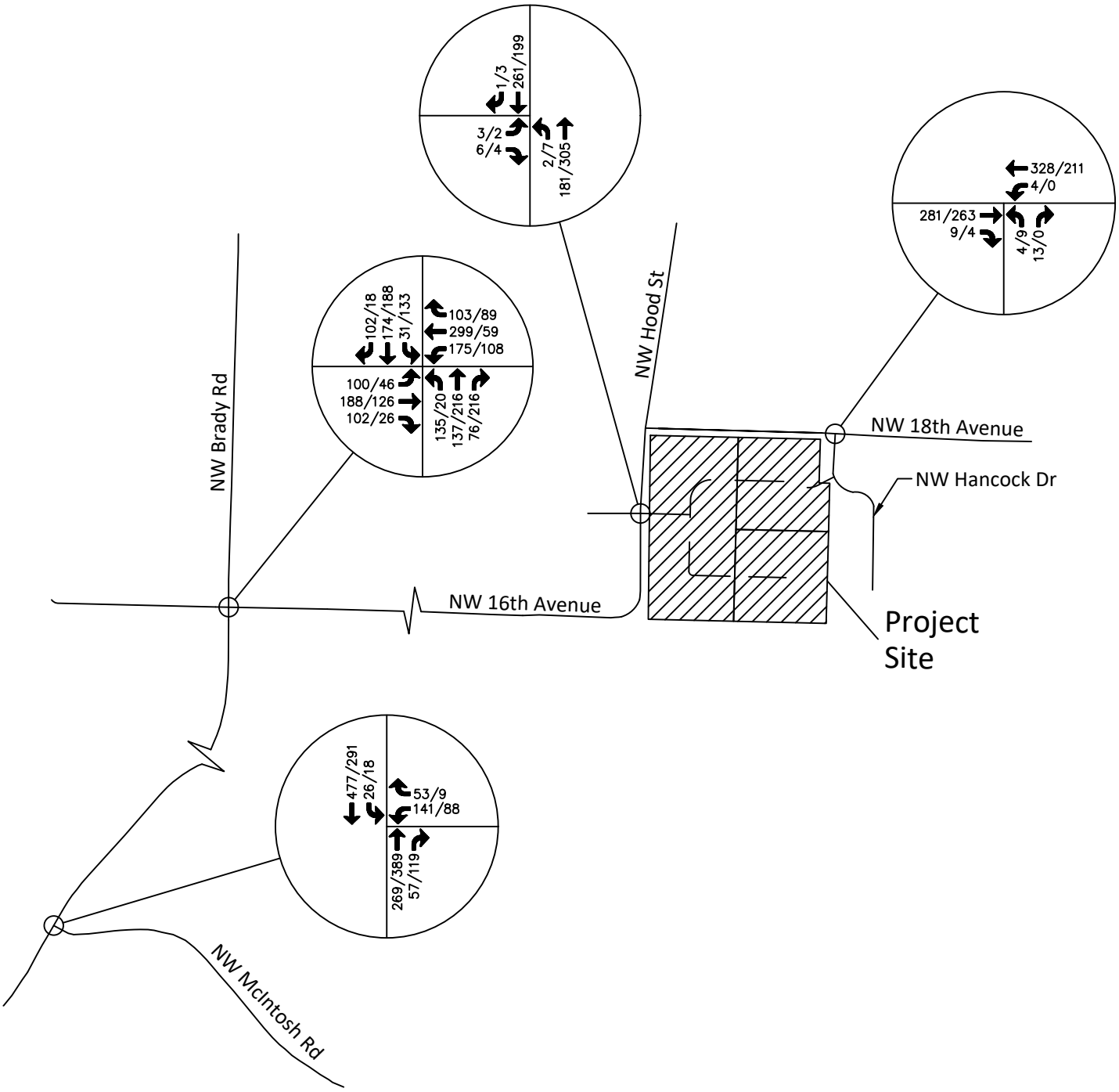
A detailed discussion of the methodology summarized above and the analysis results are contained in the remainder of this section.

2027 "WITHOUT PROJECT" TRAFFIC VOLUMES AND LEVELS OF SERVICE

The 2027 "Without Project" condition was analyzed as the future baseline condition for the traffic analysis and to define a baseline by which project impacts are determined. The 2027 "Without Project" condition traffic volumes were derived by using a 2.0 percent annual, compounded growth factor and adding traffic generated by "in process" developments. The "in-process" traffic volumes were obtained from the City of Camas staff and can be referenced in Appendix D. It should be noted that the Hood Street Subdivision is preliminarily approved and was also added to the 2027 "Without Project" condition traffic volumes as an "in-process" development. Figure 5 shows the 2027 "Without Project" traffic volumes.

Levels of service were calculated at the study area intersections with the 2027 "Without Project" traffic volumes shown in Figure 5 and the lane configurations shown earlier in Figure 3. Appendix E contains the level of service worksheets for the 2027 "Without Project" condition.

18th Avenue Subdivision TIA
Camas, WA



LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

NOT TO SCALE

FIGURE 5
2027 "Without Project"
A.M. and P.M. Peak Hour Traffic Volumes

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The 2027 "Without Project" A.M. and P.M. peak hour levels of service at the study area intersections are summarized in Table 3. As shown in Table 3, all of the study area intersections are projected to operate within the acceptable levels of service standards or better in the 2027 "Without Project" condition.

Table 3. 2027 "Without Project" Levels of Service

	A.M. Peak Hour		P.M. Peak Hour	
Signalized Intersection	LOS	Average Delay (sec)	LOS	Average Delay (sec)
NW 16th Avenue/NW Brady Road	B	17.1	B	15.3
Unsignalized Intersection				
NW 18th Avenue/NW Hancock Drive				
Westbound Left	A	7.9	A	0.0
Northbound Approach	B	10.7	B	11.6
NW Brady Road/NW McIntosh Road				
Westbound Left	C	23.8	C	18.0
Westbound Right	B	10.3	B	11.0
Southbound Left	A	8.0	A	8.5
NW Hood Street/Hood St Subdivision Access/Project Access				
Eastbound Approach	B	10.2	B	10.2
Northbound Left	A	7.8	A	7.6

DEVELOPMENT PLANS

As previously stated, the proposed project will subdivide approximately 9.28 acres into 33 new single-family detached lots. One single-family detached home exists on-site and will be retained as part of the subdivision totaling the overall lot count to 34. Access to the proposed project will be from connections to NW Hancock Drive and a newly constructed roadway onto NW Hood Street. It should be noted that the connection to NW Hood Street will create the east leg of the preliminarily approved Hood Street Subdivision access intersection which is located directly across NW Hood Street from the proposed 18th Avenue Subdivision. As previously shown, Figure 2 shows the project site plan.

TRIP GENERATION

Estimates of daily, A.M. peak hour, and P.M. peak hour trips generated by the proposed project were developed from rates published in "Trip Generation, 11th Edition" (Institute of Transportation Engineers, 2021). The proposed development is expected to generate 311 daily, 23 A.M. peak hour (6 in, 17 out), and 31 P.M. peak hour (19 in, 12 out) net new trips. Table 4 summarizes the project's trip generation.

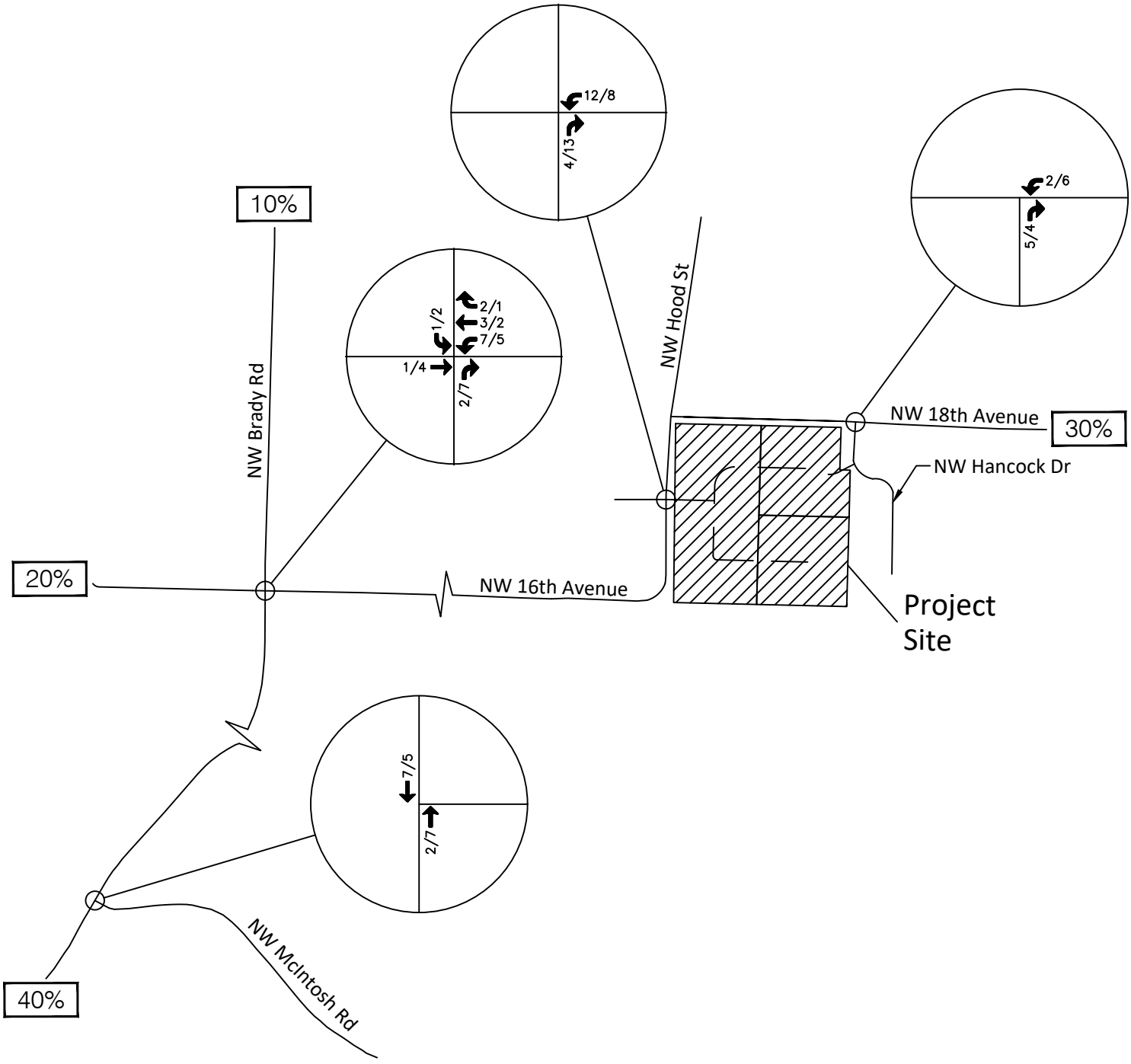
Table 4. Trip Generation Summary for 18th Avenue Subdivision

	Amount	Average Daily	A.M. Peak			P.M. Peak		
			In	Out	Total	In	Out	Total
Single-Family Detached Homes (ITE Code 210)								
Rate per dwelling Unit		9.43	0.18	0.52	0.70	0.59	0.35	0.94
Trips	33 new units	311	6	17	23	19	12	31

TRIP DISTRIBUTION AND ASSIGNMENT

A generalized trip distribution for the A.M. and P.M. peak hour was developed from the existing traffic counts, previous traffic studies, locations of major employment centers, and logical travel paths to and from major travel corridors. Figure 6 shows the resulting trip distribution pattern and assignment of project-generated trips.

18th Avenue Subdivision TIA
Camas, WA



LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

10% Peak Hour Trip Distribution

NOT TO SCALE

FIGURE 6
Trip Distribution and Assignment
Traffic Volumes

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2027 "WITH PROJECT" TRAFFIC VOLUMES AND LEVELS OF SERVICE

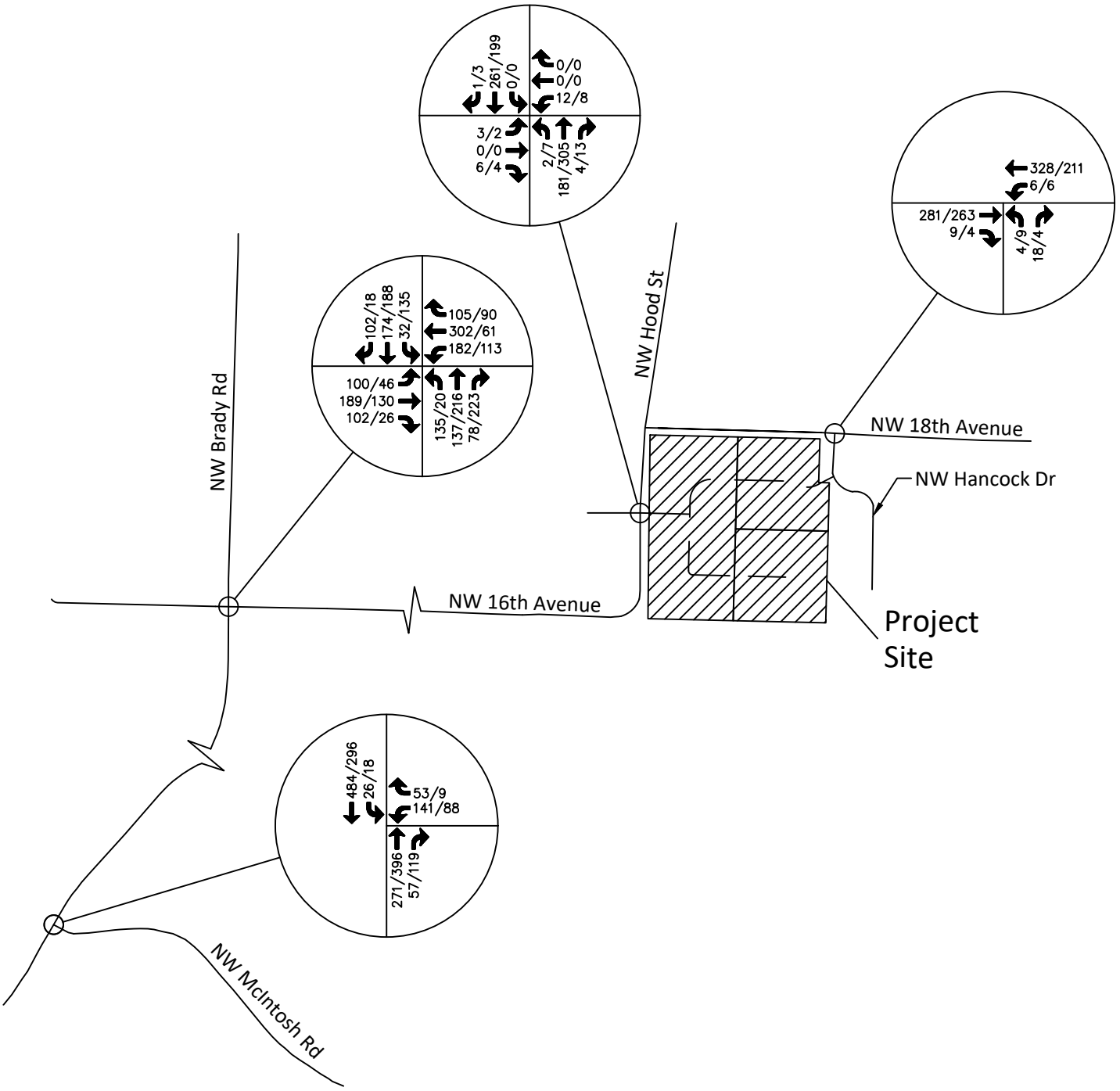
The traffic volumes shown in Figures 5 and 6 were combined to arrive at the 2027 "With Project" A.M. and P.M. peak hour traffic volumes. Figure 7 shows these traffic volumes. Levels of service were calculated for the 2027 "With Project" condition based on the traffic volumes shown in Figure 7 and the lane configurations previously shown in Figure 3. Appendix F contains the level of service worksheets for the 2027 "With Project" condition.

The 2027 "With Project" A.M. and P.M. peak hour levels of service at the study area intersections are summarized in Table 5. As shown in Table 5, all of the study area intersections are projected to operate within the acceptable levels of service standards in the 2027 "With Project" condition.

Table 5. 2027 "With Project" Levels of Service

	A.M. Peak Hour		P.M. Peak Hour	
Signalized Intersection	LOS	Average Delay (sec)	LOS	Average Delay (sec)
NW 16th Avenue/NW Brady Road	B	17.1	B	15.6
Unsignalized Intersection				
NW 18th Avenue/NW Hancock Drive				
Westbound Left	A	7.9	A	7.8
Northbound Approach	B	10.5	B	11.2
NW Brady Road/NW McIntosh Road				
Westbound Left	C	24.2	C	18.4
Westbound Right	B	10.3	B	11.0
Southbound Left	A	8.0	A	8.5
NW Hood Street/Hood St Subdivision Access/Project Access				
Eastbound Approach	B	10.4	B	10.5
Westbound Approach	B	12.1	B	13.0
Northbound Left	A	7.6	A	7.6
Southbound Left	A	0.0	A	0.0

18th Avenue Subdivision TIA
Camas, WA



LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

NOT TO SCALE

FIGURE 7
2027 "With Project"
A.M. and P.M. Peak Hour Traffic Volumes

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CORNER SIGHT DISTANCE

The minimum corner sight distance was analyzed for the proposed 18th Avenue Subdivision. The minimum corner sight distance required for the existing NW 18th Avenue/NW Hancock Drive and proposed NW Hood Street/Project Access intersections is based on the City of Camas' Design Standard Manual. Per the City of Camas' Design Standard Manual, public and private streets must comply with the sight distance requirements contained in the current "A Policy on Geometric Design on Highways and Streets," published by AASHTO (American Association of State Highway and Transportation Officials." The most recent edition of this reference is the 2018 – 7th Edition.

From AASHTO, the following intersection sight distances are relevant to the project's site access intersections:

- Case B1 – left turn from minor road
- Case B2 – right turn from minor road
- Case F – left from major road

The required sight distance for Case B1 based on a posted speed limit of 35 mph along NW Hood Street/NW 16th Avenue and NW 18th Avenue is 390 feet. This requirement can be found in Table 9-7 of the "A Policy on Geometric Design on Highways and Streets," page 9-46.

The required sight distance for Case B2 based on a posted speed limit of 35 mph along NW Hood Street/NW 16th Avenue and NW 18th Avenue is 335 feet. This requirement can be found in Table 9-9 of the "A Policy on Geometric Design on Highways and Streets," page 9-48.

The required sight distance for Case F based on a posted speed limit of 35 mph along NW Hood Street/NW 16th Avenue and NW 18th Avenue is 285 feet. This requirement can be found in Table 9-17 of the "A Policy on Geometric Design on Highways and Streets," page 9-57.

The corner sight distances at the existing NW 18th Avenue/NW Hancock Drive and proposed NW Hood Street/Project Access intersections were field measured and compared to the minimum acceptable AASHTO standards described above. Based on field measurements conducted by H. Lee & Associates, PLLC, all of the AASHTO sight distance requirements can be met at the existing NW 18th Avenue/NW Hancock Drive and proposed NW Hood Street/Project Access intersections as long as any vegetation within the sight distance triangles is properly maintained and no obstructions that obscure the driver's sight distance are located within the sight distance triangles. The corner sight distances should be re-verified in the final engineering/construction stages of development.

LANE WARRANT ANALYSIS

Turn lane warrants at the existing NW 18th Avenue/NW Hancock Drive and proposed NW Hood Street/Project Access intersections were not conducted due to low traffic volumes, acceptable levels of service, and acceptable accident rates in the 2027 "With Project" conditions along NW 18th Avenue and NW Hood Street.

CONCLUSIONS

Findings

The following are the findings from the traffic analysis:

- The proposed development is expected to generate 311 daily, 23 A.M. peak hour (6 in, 17 out), and 31 P.M. peak hour (19 in, 12 out) net new trips.

- All of the study area intersections are projected to meet the City of Camas' level of service standards in the 2027 "Without Project" and 2027 "With Project" condition.

- Based on field measurements conducted by H. Lee & Associates, PLLC, the existing NW 18th Avenue/NW Hancock Drive and the proposed NW Hood Street/Project Access should be able to meet the sight distance requirements as long as any vegetation within the sight distance triangles are properly maintained after construction and no obstructions are placed within the sight distance triangles that could impede a driver's vision. The corner sight distances should be re-verified in the final engineering/construction stages of development.

- Turn lane warrants at existing NW 18th Avenue/NW Hancock Drive and proposed NW Hood Street/Project Access intersections were not conducted due to low traffic volumes, acceptable levels of service, and acceptable accident rates in the 2027 "With Project" conditions along NW Hood Street.

Recommendations

- Based on the traffic impact analysis documented in this report, no physical, off-site mitigation would be needed.

APPENDIX A

TRAFFIC COUNTS & SPEED STUDY

Intersection: NW Brady Road/NW 16th Avenue Date: 06/11/15

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	2	43	2	3	12	14	51	1	6	27	1	5	0	6	4	2	168
7:15 - 7:30 AM	3	27	3	2	21	10	31	1	6	43	1	4	1	0	3	1	149
7:30 - 7:45 AM	4	37	10	2	62	19	39	6	12	51	4	4	1	9	11	2	259
7:45 - 8:00 AM	4	34	24	3	35	13	34	1	18	46	4	6	0	10	6	0	228
8:00 - 8:15 AM	11	49	16	2	21	19	37	1	14	29	3	2	0	4	6	0	209
8:15 - 8:30 AM	1	27	5	10	16	17	37	3	9	18	5	3	2	7	1	0	145
8:30 - 8:45 AM	5	29	7	8	20	24	37	3	13	28	13	7	7	13	2	1	198
8:45 - 9:00 AM	22	27	7	5	15	46	24	3	12	32	32	5	23	29	12	8	281
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	13	141	39	10	130	56	155	9	42	167	10	19	2	25	24	5	804
7:15 - 8:15 AM	22	147	53	9	139	61	141	9	50	169	12	16	2	23	26	3	845
7:30 - 8:30 AM	20	147	55	17	134	68	147	11	53	144	16	15	3	30	24	2	841
7:45 - 8:45 AM	21	139	52	23	92	73	145	8	54	121	25	18	9	34	15	1	780
8:00 - 9:00 AM	39	132	35	25	72	106	135	10	48	107	53	17	32	53	21	9	833
Peak Hour 7:15 - 8:15 AM	22	147	53	9	139	61	141	9	50	169	12	16	2	23	26	3	845
Peak Hour Factor		0.73				0.71				0.85				0.61			0.82
Percent Trucks		4%				3%				7%				6%			

Intersection: NW Brady Road/NW 16th Avenue Date: 06/11/15
PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	3	21	13	1	12	17	19	1	32	24	2	2	5	29	4	0	181
4:15 - 4:30 PM	2	28	14	0	13	13	12	1	18	37	6	0	6	27	5	0	181
4:30 - 4:45 PM	6	38	20	0	13	18	24	1	33	29	3	1	6	20	2	0	212
4:45 - 5:00 PM	1	32	12	0	23	15	17	0	36	43	2	0	4	25	4	0	214
5:00 - 5:15 PM	4	48	29	1	14	11	23	0	38	38	1	0	3	38	0	0	247
5:15 - 5:30 PM	1	32	29	0	20	12	22	0	36	36	2	2	4	25	1	0	220
5:30 - 5:45 PM	3	36	23	2	21	7	15	1	41	49	4	4	4	28	4	0	235
5:45 - 6:00 PM	3	35	27	1	13	9	18	2	36	52	4	1	5	17	4	0	223
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	12	119	59	1	61	63	72	3	119	133	13	3	21	101	15	0	788
4:15 - 5:15 PM	13	146	75	1	63	57	76	2	125	147	12	1	19	110	11	0	854
4:30 - 5:30 PM	12	150	90	1	70	56	86	1	143	146	8	3	17	108	7	0	893
4:45 - 5:45 PM	9	148	93	3	78	45	77	1	151	166	9	6	15	116	9	0	916
5:00 - 6:00 PM	11	151	108	4	68	39	78	3	151	175	11	7	16	108	9	0	925
Peak Hour 5:00 - 6:00 PM	11	151	108	4	68	39	78	3	151	175	11	7	16	108	9	0	925
Peak Hour Factor		0.83				0.86				0.90				0.81			0.94
Percent Trucks		1%				2%				2%				0%			

Intersection: NW Brady Road/NW 16th Avenue Date: 02/13/18

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	1	30	7	0	16	13	40	1	9	22	2	3	4	10	4	3	158
7:15 - 7:30 AM	2	39	8	1	25	8	53	2	13	24	0	4	0	7	4	0	183
7:30 - 7:45 AM	4	38	6	2	42	14	33	5	10	31	3	3	1	5	5	2	192
7:45 - 8:00 AM	8	31	18	0	25	17	36	1	12	35	5	1	7	9	9	1	212
8:00 - 8:15 AM	8	29	14	1	30	20	48	0	13	25	5	3	5	13	3	0	213
8:15 - 8:30 AM	7	27	6	2	27	15	41	4	16	23	7	5	1	5	1	0	176
8:30 - 8:45 AM	8	30	12	4	16	23	22	0	14	22	11	5	1	6	2	0	167
8:45 - 9:00 AM	17	22	11	1	18	43	21	2	6	15	32	2	21	35	20	7	261
															Peak 15 Total		261
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	15	138	39	3	108	52	162	9	44	112	10	11	12	31	22	6	745
7:15 - 8:15 AM	22	137	46	4	122	59	170	8	48	115	13	11	13	34	21	3	800
7:30 - 8:30 AM	27	125	44	5	124	66	158	10	51	114	20	12	14	32	18	3	793
7:45 - 8:45 AM	31	117	50	7	98	75	147	5	55	105	28	14	14	33	15	1	768
8:00 - 9:00 AM	40	108	43	8	91	101	132	6	49	85	55	15	28	59	26	7	817
Peak Hour 8:00 - 9:00 AM	40	108	43	8	91	101	132	6	49	85	55	15	28	59	26	7	817
Peak Hour Factor		0.94				0.83				0.89				0.37			0.78
Peak Hour % Trucks		4%				2%				8%				6%			
Peak 15 Min % Trucks		2%				2%				4%				9%			

Intersection: NW Brady Road/NW 16th Avenue Date: 02/13/18

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	6	23	25	3	25	21	26	0	26	28	1	0	7	33	7	0	228
4:15 - 4:30 PM	7	36	27	0	20	19	9	0	23	41	4	0	7	28	7	0	228
4:30 - 4:45 PM	8	25	23	1	24	13	23	1	26	27	2	0	25	20	4	0	220
4:45 - 5:00 PM	2	29	22	0	22	13	15	0	34	24	3	0	7	24	4	0	199
5:00 - 5:15 PM	1	59	25	2	24	6	26	0	34	47	1	0	2	25	1	0	251
5:15 - 5:30 PM	4	42	23	0	17	8	15	0	36	43	0	1	3	28	1	0	220
5:30 - 5:45 PM	4	31	32	0	20	12	30	0	34	42	1	1	5	27	0	0	238
5:45 - 6:00 PM	6	25	21	1	30	20	22	1	43	44	2	0	1	24	5	0	243
															Peak 15 Total		251
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	23	113	97	4	91	66	73	1	109	120	10	0	46	105	22	0	875
4:15 - 5:15 PM	18	149	97	3	90	51	73	1	117	139	10	0	41	97	16	0	898
4:30 - 5:30 PM	15	155	93	3	87	40	79	1	130	141	6	1	37	97	10	0	890
4:45 - 5:45 PM	11	161	102	2	83	39	86	0	138	156	5	2	17	104	6	0	908
5:00 - 6:00 PM	15	157	101	3	91	46	93	1	147	176	4	2	11	104	7	0	952
Peak Hour 5:00 - 6:00 PM	15	157	101	3	91	46	93	1	147	176	4	2	11	104	7	0	952
Peak Hour Factor		0.80				0.80				0.92				0.95			0.95
Peak Hour % Trucks		1%				0%				1%				0%			
Peak 15 Min % Trucks		2%				0%				0%				0%			

Intersection: NW 16th Avenue/NW Brady Road Date: 03/10/22

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	2	15	3	1	6	5	31	1	5	4	1	0	0	2	1	1	75
7:15 - 7:30 AM	2	23	10	0	15	10	30	0	3	18	4	2	0	4	3	1	122
7:30 - 7:45 AM	4	20	8	1	12	5	37	0	12	14	7	1	1	7	0	1	127
7:45 - 8:00 AM	4	25	4	1	18	16	42	2	10	12	7	3	2	3	3	1	146
8:00 - 8:15 AM	5	33	3	3	19	21	45	0	11	18	10	2	3	8	3	0	179
8:15 - 8:30 AM	23	37	7	1	23	64	39	1	17	31	28	3	23	39	17	5	348
8:30 - 8:45 AM	14	27	19	4	36	29	40	3	16	17	18	4	23	42	31	1	312
8:45 - 9:00 AM	20	13	29	4	16	33	13	4	4	11	8	1	2	25	6	0	180
															Peak 15 Total		348
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	12	83	25	3	51	36	140	3	30	48	19	6	3	16	7	4	470
7:15 - 8:15 AM	15	101	25	5	64	52	154	2	36	62	28	8	6	22	9	3	574
7:30 - 8:30 AM	36	115	22	6	72	106	163	3	50	75	52	9	29	57	23	7	800
7:45 - 8:45 AM	46	122	33	9	96	130	166	6	54	78	63	12	51	92	54	7	985
8:00 - 9:00 AM	62	110	58	12	94	147	137	8	48	77	64	10	51	114	57	6	1,019
Peak Hour 8:00 - 9:00 AM	62	110	58	12	94	147	137	8	48	77	64	10	51	114	57	6	1,019
Peak Hour Factor		0.86				0.75				0.62				0.58			0.73
Peak Hour % Trucks		5%				2%				5%				3%			
Peak 15 Min % Trucks		1%				1%				4%				6%			

Intersection: NW 16th Avenue/NW Brady Road Date: 03/09/22

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	3	30	32	3	25	20	16	3	24	33	2	2	7	29	1	1	222
4:15 - 4:30 PM	4	32	22	0	17	20	21	0	39	25	2	1	3	37	5	0	227
4:30 - 4:45 PM	3	30	25	0	24	16	21	1	40	28	6	1	6	24	8	0	231
4:45 - 5:00 PM	7	21	29	0	16	20	13	1	43	29	4	0	12	28	4	0	226
5:00 - 5:15 PM	6	41	29	2	19	18	23	0	31	30	3	0	8	25	7	0	240
5:15 - 5:30 PM	4	40	30	2	20	10	24	1	48	49	2	0	6	25	5	0	263
5:30 - 5:45 PM	4	38	22	0	19	8	27	0	36	40	1	0	10	20	1	0	226
5:45 - 6:00 PM	19	15	19	1	39	31	5	0	10	25	6	0	3	35	20	0	227
															Peak 15 Total		263
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	17	113	108	3	82	76	71	5	146	115	14	4	28	118	18	1	906
4:15 - 5:15 PM	20	124	105	2	76	74	78	2	153	112	15	2	29	114	24	0	924
4:30 - 5:30 PM	20	132	113	4	79	64	81	3	162	136	15	1	32	102	24	0	960
4:45 - 5:45 PM	21	140	110	4	74	56	87	2	158	148	10	0	36	98	17	0	955
5:00 - 6:00 PM	33	134	100	5	97	67	79	1	125	144	12	0	27	105	33	0	956
Peak Hour 4:30 - 5:30 PM	20	132	113	4	79	64	81	3	162	136	15	1	32	102	24	0	960
Peak Hour Factor		0.87				0.92				0.79				0.90			0.91
Peak Hour % Trucks		2%				1%				0%				0%			
Peak 15 Min % Trucks		3%				2%				0%				0%			

Intersection: NW 18th Avenue/NW Hancock Drive Date: 03/10/22
AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	0	0	0	0	0	49	0	0	0	0	2	0	3	17	0	2	71
7:15 - 7:30 AM	0	0	0	0	0	40	0	1	0	0	0	0	1	16	0	2	57
7:30 - 7:45 AM	0	0	0	0	0	53	0	0	0	0	0	0	0	25	0	2	78
7:45 - 8:00 AM	0	0	0	0	0	74	1	4	3	0	1	0	2	63	0	2	144
8:00 - 8:15 AM	0	0	0	0	0	43	2	1	1	0	1	0	1	39	0	1	87
8:15 - 8:30 AM	0	0	0	0	0	52	0	6	1	0	1	0	0	25	0	4	79
8:30 - 8:45 AM	0	0	0	0	0	66	1	2	0	0	2	0	0	28	0	2	97
8:45 - 9:00 AM	0	0	0	0	0	40	1	1	0	0	1	0	0	54	0	3	96
															Peak 15 Total		144
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	0	0	0	0	0	216	1	5	3	0	3	0	6	121	0	8	350
7:15 - 8:15 AM	0	0	0	0	0	210	3	6	4	0	2	0	4	143	0	7	366
7:30 - 8:30 AM	0	0	0	0	0	222	3	11	5	0	3	0	3	152	0	9	388
7:45 - 8:45 AM	0	0	0	0	0	235	4	13	5	0	5	0	3	155	0	9	407
8:00 - 9:00 AM	0	0	0	0	0	201	4	10	2	0	5	0	1	146	0	10	359
Peak Hour 7:45 - 8:45 AM	0	0	0	0	0	235	4	13	5	0	5	0	3	155	0	9	407
Peak Hour Factor		0.00				0.80				0.63				0.61			0.71
Peak Hour % Trucks		0%				5%				0%				6%			
Peak 15 Min % Trucks		0%				5%				0%				3%			

Intersection: NW 18th Avenue/NW Hancock Drive Date: 03/09/22

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	0	0	0	0	0	46	0	3	0	0	1	0	2	51	0	2	100
4:15 - 4:30 PM	0	0	0	0	0	41	0	0	0	0	2	0	1	60	0	0	104
4:30 - 4:45 PM	0	0	0	0	0	28	1	0	0	0	4	0	0	55	0	0	88
4:45 - 5:00 PM	0	0	0	0	0	33	0	1	0	0	2	0	0	61	0	0	96
5:00 - 5:15 PM	0	0	0	0	0	36	0	0	0	0	1	0	0	48	0	0	85
5:15 - 5:30 PM	0	0	0	0	0	35	0	1	0	0	1	0	0	56	0	0	92
5:30 - 5:45 PM	0	0	0	0	0	36	0	0	0	0	1	0	2	46	0	0	85
5:45 - 6:00 PM	0	0	0	0	0	47	0	0	0	0	2	0	1	59	0	0	109
															Peak 15 Total		109
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	0	0	0	0	0	148	1	4	0	0	9	0	3	227	0	2	388
4:15 - 5:15 PM	0	0	0	0	0	138	1	1	0	0	9	0	1	224	0	0	373
4:30 - 5:30 PM	0	0	0	0	0	132	1	2	0	0	8	0	0	220	0	0	361
4:45 - 5:45 PM	0	0	0	0	0	140	0	2	0	0	5	0	2	211	0	0	358
5:00 - 6:00 PM	0	0	0	0	0	154	0	1	0	0	5	0	3	209	0	0	371
Peak Hour 4:00 - 5:00 PM	0	0	0	0	0	148	1	4	0	0	9	0	3	227	0	2	388
Peak Hour Factor		0.00				0.81				0.56				0.94			0.93
Peak Hour % Trucks		0%				3%				0%				1%			
Peak 15 Min % Trucks		0%				0%				0%				0%			

Intersection: NW 16th Avenue/NW Hood Street Date: 03/10/22
AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	0	33	0	1	0	0	0	0	0	21	0	0	0	0	0	0	54
7:15 - 7:30 AM	0	44	0	0	0	0	0	0	1	19	0	1	0	0	0	0	64
7:30 - 7:45 AM	0	50	0	0	0	0	0	0	0	19	0	2	0	0	0	0	69
7:45 - 8:00 AM	0	59	0	1	0	0	1	0	1	41	0	3	0	0	0	0	102
8:00 - 8:15 AM	0	60	0	2	0	0	0	0	0	38	0	3	0	0	0	0	98
8:15 - 8:30 AM	0	43	0	3	0	0	0	0	0	44	0	2	0	0	0	0	87
8:30 - 8:45 AM	0	64	0	5	0	0	0	0	0	36	0	4	0	0	0	0	100
8:45 - 9:00 AM	0	44	0	1	0	0	0	0	0	39	0	2	0	0	0	0	83
															Peak 15 Total		102
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	0	186	0	2	0	0	1	0	2	100	0	6	0	0	0	0	289
7:15 - 8:15 AM	0	213	0	3	0	0	1	0	2	117	0	9	0	0	0	0	333
7:30 - 8:30 AM	0	212	0	6	0	0	1	0	1	142	0	10	0	0	0	0	356
7:45 - 8:45 AM	0	226	0	11	0	0	1	0	1	159	0	12	0	0	0	0	387
8:00 - 9:00 AM	0	211	0	11	0	0	0	0	0	157	0	11	0	0	0	0	368
Peak Hour 7:45 - 8:45 AM	0	226	0	11	0	0	1	0	1	159	0	12	0	0	0	0	387
Peak Hour Factor		0.88				0.25				0.91				0.00			0.95
Peak Hour % Trucks		5%				0%				8%				0%			
Peak 15 Min % Trucks		2%				0%				7%				0%			

Intersection: NW 16th Avenue/NW Hood Street Date: 03/09/22
PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	0	44	0	1	0	0	0	0	0	56	0	5	0	0	0	0	100
4:15 - 4:30 PM	0	46	0	2	0	0	0	0	0	61	0	0	0	0	0	0	107
4:30 - 4:45 PM	0	42	0	1	0	0	0	0	0	65	0	0	0	0	0	0	107
4:45 - 5:00 PM	0	45	0	1	0	0	0	0	0	69	0	0	0	0	0	0	114
5:00 - 5:15 PM	0	42	0	0	0	0	1	0	0	48	0	0	0	0	0	0	91
5:15 - 5:30 PM	0	38	0	0	0	0	0	0	1	57	0	1	0	0	0	0	96
5:30 - 5:45 PM	0	44	0	1	0	0	0	0	0	59	0	1	0	0	0	0	103
5:45 - 6:00 PM	0	51	0	0	1	0	0	0	0	61	0	0	0	0	0	0	113
															Peak 15 Total		114
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	0	177	0	5	0	0	0	0	0	251	0	5	0	0	0	0	428
4:15 - 5:15 PM	0	175	0	4	0	0	1	0	0	243	0	0	0	0	0	0	419
4:30 - 5:30 PM	0	167	0	2	0	0	1	0	1	239	0	1	0	0	0	0	408
4:45 - 5:45 PM	0	169	0	2	0	0	1	0	1	233	0	2	0	0	0	0	404
5:00 - 6:00 PM	0	175	0	1	1	0	1	0	1	225	0	2	0	0	0	0	403
Peak Hour 4:00 - 5:00 PM	0	177	0	5	0	0	0	0	0	251	0	5	0	0	0	0	428
Peak Hour Factor		0.96				0.00				0.91				0.00			0.94
Peak Hour % Trucks		3%				0%				2%				0%			
Peak 15 Min % Trucks		2%				0%				0%				0%			

Intersection: NW Brady Road/NW McIntosh Road Date: 03/10/22

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	0	66	2	0	1	0	21	0	13	28	0	0	0	0	0	0	131
7:15 - 7:30 AM	0	69	1	1	1	0	16	0	9	37	0	5	0	0	0	0	133
7:30 - 7:45 AM	0	99	2	1	0	0	36	1	4	43	0	4	0	0	0	0	184
7:45 - 8:00 AM	0	108	6	3	12	0	32	2	13	61	0	3	0	0	0	0	232
8:00 - 8:15 AM	0	64	6	2	3	0	25	0	5	29	0	1	0	0	0	0	132
8:15 - 8:30 AM	0	62	1	3	7	0	26	1	15	43	0	2	0	0	0	0	154
8:30 - 8:45 AM	0	65	3	1	5	0	19	0	12	43	0	1	0	0	0	0	147
8:45 - 9:00 AM	0	58	2	2	2	0	16	0	11	53	0	4	0	0	0	0	142
															Peak 15 Total		232
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	0	342	11	5	14	0	105	3	39	169	0	12	0	0	0	0	680
7:15 - 8:15 AM	0	340	15	7	16	0	109	3	31	170	0	13	0	0	0	0	681
7:30 - 8:30 AM	0	333	15	9	22	0	119	4	37	176	0	10	0	0	0	0	702
7:45 - 8:45 AM	0	299	16	9	27	0	102	3	45	176	0	7	0	0	0	0	665
8:00 - 9:00 AM	0	249	12	8	17	0	86	1	43	168	0	8	0	0	0	0	575
Peak Hour 7:30 - 8:30 AM	0	333	15	9	22	0	119	4	37	176	0	10	0	0	0	0	702
Peak Hour Factor		0.76				0.80				0.72				0.00			0.76
Peak Hour % Trucks		3%				3%				5%				0%			
Peak 15 Min % Trucks		3%				5%				4%				0%			

Intersection: NW Brady Road/NW McIntosh Road Date: 03/09/22

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	0	47	4	1	7	0	22	2	26	50	0	0	0	0	0	0	156
4:15 - 4:30 PM	0	56	1	0	1	0	23	3	31	68	0	0	0	0	0	0	180
4:30 - 4:45 PM	0	53	2	0	4	0	14	1	25	77	0	1	0	0	0	0	175
4:45 - 5:00 PM	0	43	1	0	2	0	16	0	25	68	0	0	0	0	0	0	155
5:00 - 5:15 PM	0	76	3	3	1	0	21	0	16	78	0	0	0	0	0	0	195
5:15 - 5:30 PM	0	66	4	2	2	0	20	0	27	88	0	0	0	0	0	0	207
5:30 - 5:45 PM	0	62	6	0	3	0	13	0	19	72	0	0	0	0	0	0	175
5:45 - 6:00 PM	0	60	1	0	3	0	19	1	23	69	0	0	0	0	0	0	175
															Peak 15 Total		207
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	0	199	8	1	14	0	75	6	107	263	0	1	0	0	0	0	666
4:15 - 5:15 PM	0	228	7	3	8	0	74	4	97	291	0	1	0	0	0	0	705
4:30 - 5:30 PM	0	238	10	5	9	0	71	1	93	311	0	1	0	0	0	0	732
4:45 - 5:45 PM	0	247	14	5	8	0	70	0	87	306	0	0	0	0	0	0	732
5:00 - 6:00 PM	0	264	14	5	9	0	73	1	85	307	0	0	0	0	0	0	752
Peak Hour 5:00 - 6:00 PM	0	264	14	5	9	0	73	1	85	307	0	0	0	0	0	0	752
Peak Hour Factor		0.88				0.93				0.85				0.00			0.91
Peak Hour % Trucks		2%				1%				0%				0%			
Peak 15 Min % Trucks		3%				0%				0%				0%			

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18th Avenue Subdivision

Site Code:
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NW Hood Street and NW Hancock Drive
Latitude: 0' 0.0000 Undefined

Westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	85th Percent	95th Percent
03/14/22	0	0	0	1	5	2	0	**1**	0	0	0	0	0	0	9	39	47
01:00	0	0	0	1	3	1	1	0	0	0	0	0	0	0	6	40	43
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29	29
03:00	0	0	0	1	3	1	0	0	**1**	0	0	0	0	0	6	50	53
04:00	0	0	0	5	10	5	0	0	0	0	0	0	0	0	20	37	39
05:00	0	0	0	7	29	20	1	0	0	0	0	0	0	0	57	38	39
06:00	1	0	4	25	49	23	**7**	0	0	0	0	0	0	0	109	37	41
07:00	4	**3**	**10**	34	**102**	28	1	1	0	0	0	0	0	**2**	185	35	38
08:00	1	1	8	**42**	96	**37**	0	1	0	0	**1**	0	0	0	**187**	36	39
09:00	1	0	4	31	58	21	4	0	0	**1**	0	0	0	1	121	36	39
10:00	**7**	0	2	31	35	18	5	0	0	0	0	0	0	1	99	37	40
11:00	0	1	3	28	54	32	4	1	0	0	0	0	0	0	123	37	39
12 PM	1	**2**	**8**	33	45	25	4	1	0	0	0	0	0	2	121	37	39
13:00	2	0	4	20	29	24	1	1	0	0	0	0	0	1	82	37	39
14:00	0	0	6	36	61	29	4	1	0	0	0	0	**1**	0	138	37	39
15:00	3	0	3	**38**	**78**	32	4	**3**	0	0	0	0	0	1	**162**	37	39
16:00	**5**	0	3	26	69	26	1	1	0	0	0	**1**	0	**4**	136	36	39
17:00	2	1	2	15	58	**36**	**10**	0	0	0	0	0	0	1	125	38	41
18:00	0	0	0	15	42	32	5	0	0	0	0	0	0	0	94	38	40
19:00	0	0	3	13	33	10	2	0	0	0	0	0	0	0	61	36	39
20:00	0	0	1	7	22	8	0	0	0	0	0	0	0	0	38	36	38
21:00	0	0	1	2	8	7	0	0	0	0	0	0	0	0	18	38	39
22:00	0	0	0	0	8	3	2	0	0	0	0	0	0	0	13	40	43
23:00	0	0	0	2	7	2	0	0	0	0	0	0	0	0	11	35	38
Total	27	8	62	414	904	422	56	11	1	1	1	1	1	13	1922		
Percent	1.4%	0.4%	3.2%	21.5%	47.0%	22.0%	2.9%	0.6%	0.1%	0.1%	0.1%	0.1%	0.1%	0.7%			
AM Peak	10:00	07:00	07:00	08:00	07:00	08:00	06:00	00:00	03:00	09:00	08:00			07:00	08:00		
Vol.	7	3	10	42	102	37	7	1	1	1	1			2	187		
PM Peak	16:00	12:00	12:00	15:00	15:00	17:00	17:00	15:00				16:00	14:00	16:00	15:00		
Vol.	5	2	8	38	78	36	10	3				1	1	4	162		

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Latitude: 0' 0.0000 Undefined

Westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	85th Percent	95th Percent
03/15/22	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	49	49
01:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	38	39
02:00	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	37	39
03:00	0	0	0	4	7	1	0	0	0	0	0	0	0	0	12	34	36
04:00	0	0	0	6	10	3	1	1	0	0	0	0	0	0	21	38	44
05:00	0	0	1	6	28	14	**7**	0	0	0	0	0	0	0	56	39	43
06:00	0	2	5	30	71	16	2	0	**1**	0	0	0	0	0	127	34	38
07:00	2	**6**	4	39	**97**	**39**	2	0	0	0	0	0	0	0	**189**	36	39
08:00	**4**	4	7	**45**	82	34	5	**2**	1	0	0	0	0	**3**	187	37	39
09:00	4	1	**8**	24	52	32	4	0	0	0	0	0	0	1	126	37	39
10:00	4	0	2	29	41	29	2	0	0	0	0	0	0	1	108	37	39
11:00	2	0	4	19	53	27	3	1	0	0	0	0	**1**	0	110	37	39
12 PM	2	0	5	27	60	27	**9**	**1**	0	0	0	0	0	1	132	38	41
13:00	1	1	**7**	**35**	71	20	2	0	**1**	0	0	0	0	1	139	35	39
14:00	2	0	4	26	64	22	3	0	0	0	0	0	0	1	122	36	39
15:00	2	1	7	30	**86**	**35**	3	0	0	0	0	**1**	0	**2**	**167**	37	39
16:00	**4**	0	7	25	75	28	4	0	0	0	0	0	0	1	144	36	39
17:00	1	1	0	20	54	30	2	0	0	0	0	0	0	2	110	37	39
18:00	2	0	0	35	63	28	0	0	0	0	0	0	0	1	129	36	38
19:00	2	**3**	3	11	35	11	1	0	0	0	0	0	0	1	67	35	38
20:00	0	2	2	7	18	10	3	0	0	0	0	0	0	0	42	38	41
21:00	0	0	0	1	11	7	0	1	0	0	0	0	0	0	20	38	45
22:00	0	0	1	0	5	2	1	0	0	0	0	0	0	0	9	39	42
23:00	0	0	0	5	4	2	1	0	0	0	0	0	0	0	12	37	41
Total	32	21	67	426	988	419	55	7	3	0	0	1	1	15	2035		
Percent	1.6%	1.0%	3.3%	20.9%	48.6%	20.6%	2.7%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.7%			
AM Peak	08:00	07:00	09:00	08:00	07:00	07:00	05:00	08:00	06:00				11:00	08:00	07:00		
Vol.	4	6	8	45	97	39	7	2	1				1	3	189		
PM Peak	16:00	19:00	13:00	13:00	15:00	15:00	12:00	12:00	13:00			15:00		15:00	15:00		
Vol.	4	3	7	35	86	35	9	1	1			1		2	167		

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Westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	85th Percent	95th Percent
03/16/22	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29	29
01:00	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3	37	39
02:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	38	39
03:00	0	0	0	4	3	3	0	0	0	0	0	0	0	0	10	37	39
04:00	0	0	0	1	6	6	0	1	0	0	0	0	0	0	14	39	46
05:00	0	0	0	8	25	12	3	0	0	0	0	0	0	0	48	38	40
06:00	0	1	3	22	48	40	4	0	0	0	0	0	0	0	118	38	39
07:00	2	**4**	4	35	**90**	43	**7**	0	0	0	0	0	0	0	185	37	39
08:00	**4**	1	**9**	**37**	89	**48**	4	0	0	0	0	0	0	0	**192**	37	39
09:00	1	0	1	15	45	39	5	0	0	0	0	0	0	**2**	108	38	39
10:00	0	0	4	21	42	22	3	0	0	0	0	0	0	0	92	37	39
11:00	0	0	0	28	52	26	4	**2**	0	0	0	0	0	0	112	37	40
12 PM	2	5	**30**	**57**	37	23	1	0	0	0	0	0	0	0	**155**	35	38
13:00	**26**	**22**	27	27	28	9	4	1	0	**1**	0	0	0	3	148	33	39
14:00	3	4	5	40	64	29	1	0	0	0	0	0	0	2	148	36	38
15:00	0	0	2	17	64	28	**8**	0	0	0	0	0	**1**	0	120	38	41
16:00	6	2	6	27	61	**42**	5	1	0	0	0	**2**	0	3	155	38	40
17:00	3	0	5	21	**70**	40	6	0	0	0	0	0	0	**4**	149	38	39
18:00	1	0	6	29	65	29	3	**2**	0	1	0	0	0	2	138	37	39
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	48	39	102	390	792	441	58	7	0	2	0	2	1	16	1898		
Percent	2.5%	2.1%	5.4%	20.5%	41.7%	23.2%	3.1%	0.4%	0.0%	0.1%	0.0%	0.1%	0.1%	0.8%			
AM Peak	08:00	07:00	08:00	08:00	07:00	08:00	07:00	11:00						09:00	08:00		
Vol.	4	4	9	37	90	48	7	2						2	192		
PM Peak	13:00	13:00	12:00	12:00	17:00	16:00	15:00	18:00		13:00		16:00	15:00	17:00	12:00		
Vol.	26	22	30	57	70	42	8	2		1		2	1	4	155		
Grand Total	107	68	231	1230	2684	1282	169	25	4	3	1	4	3	44	5855		
Percent	1.8%	1.2%	3.9%	21.0%	45.8%	21.9%	2.9%	0.4%	0.1%	0.1%	0.0%	0.1%	0.1%	0.8%			

15th Percentile :	26 MPH
50th Percentile :	32 MPH
85th Percentile :	37 MPH
95th Percentile :	39 MPH

Statistics

10 MPH Pace Speed :	31-40 MPH
Number in Pace :	3971
Percent in Pace :	67.8%
Number of Vehicles > 55 MPH :	55
Percent of Vehicles > 55 MPH :	0.9%
Mean Speed(Average) :	32 MPH

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Eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	85th Percent	95th Percent
03/14/22	0	0	0	4	2	2	0	0	0	0	0	0	0	0	8	37	38
01:00	0	0	0	2	2	1	0	0	0	0	0	0	0	0	5	36	38
02:00	0	0	1	2	2	0	0	0	0	0	0	0	0	0	5	33	34
03:00	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	34	34
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
05:00	1	0	1	0	3	4	0	0	0	0	0	0	0	0	9	38	39
06:00	1	1	**8**	11	9	5	0	0	0	0	0	0	0	0	35	34	38
07:00	0	**4**	8	17	51	19	2	0	0	0	0	0	0	**2**	103	36	39
08:00	**3**	2	5	**31**	**67**	**26**	**5**	0	0	0	**1**	0	0	2	**142**	37	39
09:00	0	2	7	22	38	17	3	0	0	0	0	0	0	1	90	36	39
10:00	1	3	8	24	39	12	2	**1**	0	0	0	0	0	0	90	35	39
11:00	2	0	5	18	46	17	4	0	0	0	1	0	0	0	93	37	40
12 PM	0	0	6	31	55	19	3	**2**	**1**	0	0	0	0	1	118	36	40
13:00	1	**1**	6	21	46	23	3	0	0	0	0	0	0	1	102	37	39
14:00	0	0	3	33	89	30	0	0	0	**1**	0	0	0	0	156	36	38
15:00	**6**	1	**10**	**57**	102	31	3	1	0	0	0	0	**1**	**4**	**216**	35	39
16:00	2	0	2	38	100	35	4	0	0	0	0	0	0	3	184	36	39
17:00	2	1	5	40	**106**	**46**	**6**	1	0	1	0	0	0	3	211	37	39
18:00	1	1	5	26	70	31	5	0	0	0	0	0	0	0	139	37	39
19:00	1	1	2	21	52	21	2	0	0	0	0	0	0	1	101	36	39
20:00	0	0	4	16	36	16	2	2	0	0	0	0	0	0	76	37	40
21:00	0	0	3	7	30	5	2	0	0	0	0	0	0	0	47	34	39
22:00	1	1	2	5	14	7	0	0	0	0	0	0	0	0	30	36	38
23:00	0	0	0	6	12	4	1	0	0	0	0	0	0	0	23	36	39
Total	22	18	91	432	975	371	47	7	1	2	2	0	1	18	1987		
Percent	1.1%	0.9%	4.6%	21.7%	49.1%	18.7%	2.4%	0.4%	0.1%	0.1%	0.1%	0.0%	0.1%	0.9%			
AM Peak	08:00	07:00	06:00	08:00	08:00	08:00	08:00	10:00			08:00			07:00	08:00		
Vol.	3	4	8	31	67	26	5	1			1			2	142		
PM Peak	15:00	13:00	15:00	15:00	17:00	17:00	17:00	12:00	12:00	14:00			15:00	15:00	15:00		
Vol.	6	1	10	57	106	46	6	2	1	1			1	4	216		

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Eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	85th Percent	95th Percent
03/15/22	0	0	0	1	5	2	0	0	**1**	0	0	0	0	0	9	39	52
01:00	0	0	0	1	3	0	1	0	0	0	0	0	0	0	5	41	43
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	43	44
04:00	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	37	39
05:00	0	0	1	0	3	1	0	0	0	0	0	0	0	0	5	36	38
06:00	1	**4**	7	8	11	6	0	0	0	0	0	0	0	0	37	35	38
07:00	4	0	3	25	41	10	3	**1**	0	**1**	0	0	0	0	88	35	41
08:00	**6**	1	**9**	**37**	**63**	29	3	0	0	0	0	0	0	1	**149**	36	39
09:00	0	0	1	15	46	14	3	1	0	0	0	0	0	0	80	37	39
10:00	0	1	4	31	33	21	2	0	0	0	0	0	0	0	92	37	39
11:00	4	0	3	17	54	**32**	**4**	0	0	1	0	0	0	**2**	117	38	39
12 PM	1	3	3	17	47	38	6	0	0	0	0	0	0	0	115	38	40
13:00	3	0	**11**	15	36	26	3	0	0	0	0	0	0	1	95	37	39
14:00	4	1	6	24	85	27	6	0	**1**	0	0	0	0	2	156	37	39
15:00	1	0	8	28	**130**	40	5	0	0	**1**	0	0	0	**3**	216	36	39
16:00	2	0	3	32	119	**56**	**7**	0	0	0	0	0	**1**	1	**221**	37	39
17:00	**6**	**4**	3	**37**	95	50	2	0	1	0	0	0	0	3	201	37	39
18:00	1	1	2	34	69	55	7	0	1	0	0	0	0	2	172	38	39
19:00	0	0	3	15	51	34	3	0	0	0	0	0	0	0	106	38	39
20:00	1	1	2	17	47	16	0	0	0	0	0	0	0	0	84	36	38
21:00	0	0	0	9	33	20	3	0	0	0	**1**	0	0	2	68	38	41
22:00	0	0	0	4	17	5	2	0	0	0	0	0	0	0	28	37	41
23:00	0	0	0	4	8	7	1	0	0	0	0	0	0	0	20	38	40
Total	34	16	69	372	998	490	62	2	4	3	1	0	1	17	2069		
Percent	1.6%	0.8%	3.3%	18.0%	48.2%	23.7%	3.0%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.8%			
AM Peak	08:00	06:00	08:00	08:00	08:00	11:00	11:00	07:00	00:00	07:00				11:00	08:00		
Vol.	6	4	9	37	63	32	4	1	1	1				2	149		
PM Peak	17:00	17:00	13:00	17:00	15:00	16:00	16:00		14:00	15:00	21:00		16:00	15:00	16:00		
Vol.	6	4	11	37	130	56	7		1	1	1		1	3	221		

H. Lee & Associates, PLLC
P.O. Box 1849
Vancouver, WA 98668
(360) 727-3119

18th Avenue Subdivision

Site Code:
Station ID:
NW 18th Avenue between
NW Hood Street and NW Hancock Drive
Latitude: 0' 0.0000 Undefined

Eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	85th Percent	95th Percent
03/16/22	0	0	0	2	6	5	3	0	0	0	0	0	0	0	16	41	43
01:00	0	0	0	1	3	0	0	0	0	0	0	0	0	0	4	34	34
02:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12	14
03:00	0	0	0	0	2	0	1	0	0	0	0	0	0	0	3	42	44
04:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	39	39
05:00	0	1	1	0	4	1	1	0	0	0	0	0	0	0	8	38	42
06:00	0	**4**	**9**	6	16	5	0	0	0	0	0	0	0	0	40	34	38
07:00	**2**	1	5	23	59	20	1	0	0	0	0	0	0	0	111	36	38
08:00	2	1	5	**32**	67	**24**	**6**	0	0	0	**1**	0	**1**	**1**	**140**	37	40
09:00	1	1	1	30	34	13	1	**1**	0	0	0	0	0	0	82	36	39
10:00	0	0	1	14	41	18	3	0	0	0	0	0	0	0	77	37	39
11:00	1	1	0	22	**68**	24	2	0	0	0	0	0	0	0	118	36	39
12 PM	2	1	5	48	65	22	1	0	0	0	0	0	0	2	146	35	38
13:00	**6**	**17**	**49**	47	31	20	1	0	**1**	0	0	0	0	1	173	34	38
14:00	4	3	22	35	65	23	2	0	0	**1**	0	0	0	1	156	35	38
15:00	3	3	14	38	83	42	0	**1**	0	0	0	0	0	0	184	36	39
16:00	1	3	1	23	**146**	**46**	3	1	0	0	0	0	0	1	**225**	36	39
17:00	3	2	2	31	108	46	3	0	0	0	0	0	**1**	**8**	204	37	39
18:00	1	3	8	**49**	88	30	**4**	0	0	0	0	0	0	2	185	36	39
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	27	41	123	401	886	340	32	3	1	1	1	0	2	16	1874		
Percent	1.4%	2.2%	6.6%	21.4%	47.3%	18.1%	1.7%	0.2%	0.1%	0.1%	0.1%	0.0%	0.1%	0.9%			
AM Peak	07:00	06:00	06:00	08:00	11:00	08:00	08:00	09:00			08:00		08:00	08:00	08:00		
Vol.	2	4	9	32	68	24	6	1			1		1	1	140		
PM Peak	13:00	13:00	13:00	18:00	16:00	16:00	18:00	15:00	13:00	14:00			17:00	17:00	16:00		
Vol.	6	17	49	49	146	46	4	1	1	1			1	8	225		
Grand Total	83	75	283	1205	2859	1201	141	12	6	6	4	0	4	51	5930		
Percent	1.4%	1.3%	4.8%	20.3%	48.2%	20.3%	2.4%	0.2%	0.1%	0.1%	0.1%	0.0%	0.1%	0.9%			

15th Percentile :	26 MPH
50th Percentile :	32 MPH
85th Percentile :	37 MPH
95th Percentile :	39 MPH

Statistics

10 MPH Pace Speed :	26-35 MPH
Number in Pace :	4068
Percent in Pace :	68.6%
Number of Vehicles > 55 MPH :	65
Percent of Vehicles > 55 MPH :	1.1%
Mean Speed(Average) :	32 MPH

H. Lee & Associates, PLLC
P.O. Box 1849
Vancouver, WA 98668
(360) 727-3119

Hood Street Subdivision

Site Code:
Station ID:
NW Hood Street between
NW 18th Avenue and NW 16th Avenue
Latitude: 0' 0.0000 Undefined

Southbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	Pace Speed	Number in Pace
07/26/21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	69	8	1	0	0	0	0	0	0	0	0	0	0	0	78	1-10	20
16:00	**135**	**20**	0	0	0	0	0	0	0	0	0	0	0	0	**155**	31-40	39
17:00	109	17	0	0	0	0	0	0	0	0	0	0	0	0	126	31-40	33
18:00	60	8	1	1	0	0	0	0	0	0	0	0	0	0	70	27-36	17
19:00	73	8	0	**4**	0	0	0	0	0	0	0	0	0	0	85	1-10	21
20:00	58	4	**2**	0	0	0	0	0	0	0	0	0	0	0	64	1-10	17
21:00	37	6	0	0	0	0	0	0	0	0	0	0	0	0	43	31-40	11
22:00	7	4	2	0	0	0	0	0	0	0	0	0	0	0	13	36-45	6
23:00	13	3	1	0	0	0	0	0	0	0	0	0	0	0	17	30-39	5
Total	561	78	7	5	0	0	0	0	0	0	0	0	0	0	651		
Percent	86.2%	12.0%	1.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																	
PM Peak Vol.	16:00 135	16:00 20	20:00 2	19:00 4											16:00 155		

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Hood Street Subdivision

Site Code:
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NW Hood Street between
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Latitude: 0' 0.0000 Undefined

Southbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	Pace Speed	Number in Pace
07/27/21	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	*	2
01:00	3	1	0	**1**	0	0	0	0	0	0	0	0	0	0	5	35-44	1
02:00	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8	30-39	3
03:00	20	2	0	1	0	0	0	0	0	0	0	0	0	0	23	1-10	6
04:00	34	7	0	0	0	0	0	0	0	0	0	0	0	0	41	31-40	12
05:00	79	9	0	0	0	0	0	0	0	0	0	0	0	0	88	1-10	23
06:00	147	7	0	0	0	0	0	0	0	0	0	0	0	0	154	26-35	42
07:00	146	**16**	**2**	1	0	0	0	0	0	0	0	0	0	0	165	1-10	42
08:00	159	12	0	0	0	**1**	0	0	0	0	0	0	0	0	172	26-35	45
09:00	134	14	0	0	0	0	0	0	0	0	0	0	0	0	148	26-35	38
10:00	**161**	9	2	1	0	0	0	0	0	0	0	0	0	0	**173**	1-10	46
11:00	143	11	0	0	0	0	0	0	0	0	0	0	0	0	154	1-10	41
12 PM	132	10	0	0	0	0	0	0	0	0	0	0	0	0	142	1-10	38
13:00	115	14	2	1	0	0	0	0	0	0	0	0	0	0	132	1-10	33
14:00	122	9	1	0	0	0	0	0	0	0	0	0	0	0	132	1-10	35
15:00	**136**	**21**	**3**	0	0	0	0	0	0	0	0	0	0	0	**160**	31-40	40
16:00	124	21	0	1	0	0	0	0	0	0	0	0	0	0	146	31-40	39
17:00	108	18	3	0	0	0	0	0	0	0	0	0	0	0	129	31-40	33
18:00	66	11	0	0	0	0	0	0	0	0	0	0	0	0	77	31-40	20
19:00	71	9	0	0	0	0	0	0	0	0	0	0	0	0	80	27-36	20
20:00	45	7	0	**2**	0	0	0	0	0	0	0	0	0	0	54	31-40	13
21:00	36	1	2	0	0	**1**	0	0	0	0	0	0	0	0	40	26-35	10
22:00	9	2	1	0	0	0	0	0	0	0	0	0	0	0	12	36-45	3
23:00	17	1	2	1	0	0	0	0	0	0	0	0	0	0	21	1-10	5
Total	2019	214	18	9	0	2	0	0	0	0	0	0	0	0	2262		
Percent	89.3%	9.5%	0.8%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	07:00	07:00	01:00		08:00									10:00		
Vol.	161	16	2	1		1									173		
PM Peak	15:00	15:00	15:00	20:00		21:00									15:00		
Vol.	136	21	3	2		1									160		

H. Lee & Associates, PLLC
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Hood Street Subdivision

Site Code:
Station ID:
NW Hood Street between
NW 18th Avenue and NW 16th Avenue
Latitude: 0' 0.0000 Undefined

Southbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	Pace Speed	Number in Pace
07/28/21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	27-36	1
01:00	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8	31-40	2
02:00	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8	31-40	2
03:00	12	6	2	0	0	0	0	0	0	0	0	0	0	0	20	31-40	8
04:00	38	7	0	0	0	0	0	0	0	0	0	0	0	0	45	31-40	12
05:00	76	11	0	0	0	0	0	0	0	0	0	0	0	0	87	1-10	22
06:00	132	**24**	1	1	0	0	0	0	0	0	0	0	0	0	158	31-40	43
07:00	**158**	16	1	**2**	0	0	0	0	0	0	0	0	0	0	177	26-35	45
08:00	158	20	1	0	0	0	0	0	0	0	0	0	0	0	**179**	26-35	45
09:00	137	13	4	0	0	0	0	0	0	0	0	0	0	0	154	26-35	39
10:00	130	18	**7**	0	0	0	0	0	0	0	0	0	0	0	155	27-36	37
11:00	147	10	2	0	0	0	0	0	0	0	0	0	0	0	159	26-35	42
12 PM	**144**	13	0	0	0	0	0	0	0	0	0	0	0	0	**157**	26-35	41
13:00	130	13	0	0	0	0	0	0	0	0	0	0	0	0	143	26-35	37
14:00	123	10	0	0	0	0	0	0	0	0	0	0	0	0	133	26-35	35
15:00	130	16	1	0	0	0	0	0	0	0	0	0	0	0	147	26-35	37
16:00	134	20	2	**1**	0	0	0	0	0	0	0	0	0	0	157	31-40	39
17:00	96	**23**	**7**	0	0	0	0	0	0	0	0	0	0	0	126	31-40	37
18:00	73	8	0	0	0	0	0	0	0	0	0	0	0	0	81	1-10	21
19:00	66	7	1	0	0	0	0	0	0	0	0	0	0	0	74	1-10	19
20:00	66	6	0	0	0	0	0	0	0	0	0	0	0	0	72	1-10	19
21:00	31	5	3	0	0	0	0	0	0	0	0	0	0	0	39	32-41	9
22:00	19	2	0	0	0	0	0	0	0	0	0	0	0	0	21	28-37	5
23:00	8	2	1	0	0	0	0	0	0	0	0	0	0	0	11	36-45	3
Total	2026	252	33	4	0	0	0	0	0	0	0	0	0	0	2315		
Percent	87.5%	10.9%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	06:00	10:00	07:00											08:00		
Vol.	158	24	7	2											179		
PM Peak	12:00	17:00	17:00	16:00											12:00		
Vol.	144	23	7	1											157		

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Hood Street Subdivision

Site Code:
Station ID:
NW Hood Street between
NW 18th Avenue and NW 16th Avenue
Latitude: 0' 0.0000 Undefined

Southbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	Pace Speed	Number in Pace
07/29/21	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8	31-40	2
01:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4	35-44	1
02:00	7	5	0	0	0	0	0	0	0	0	0	0	0	0	12	31-40	6
03:00	14	5	**2**	0	0	0	0	0	0	0	0	0	0	0	21	36-45	7
04:00	35	3	0	0	0	0	0	0	0	0	0	0	0	0	38	26-35	10
05:00	73	16	1	0	0	0	0	0	0	0	0	0	0	0	90	31-40	26
06:00	117	17	0	0	**1**	0	0	0	0	0	0	0	0	0	135	28-37	34
07:00	144	**22**	1	0	0	0	0	0	0	0	0	0	0	0	**167**	31-40	43
08:00	**153**	11	1	0	0	0	0	0	0	0	0	0	0	0	165	1-10	44
09:00	11	0	0	0	0	0	0	0	0	0	0	0	0	**1**	12	26-35	3
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	564	81	5	0	1	0	0	0	0	0	0	0	0	1	652		
Percent	86.5%	12.4%	0.8%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%			
AM Peak	08:00	07:00	03:00		06:00									09:00	07:00		
Vol.	153	22	2		1									1	167		
PM Peak																	
Vol.																	
Total	5170	625	63	18	1	2	0	0	0	0	0	0	0	1	5880		
Percent	87.9%	10.6%	1.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	5 MPH
	50th Percentile :	19 MPH
	85th Percentile :	33 MPH
	95th Percentile :	38 MPH
Stats	10 MPH Pace Speed :	26-35 MPH
	Number in Pace :	1477
	Percent in Pace :	25.1%
	Number of Vehicles > 55 MPH :	3
	Percent of Vehicles > 55 MPH :	0.1%
	Mean Speed(Average) :	21 MPH

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Hood Street Subdivision

Site Code:
Station ID:
NW Hood Street between
NW 18th Avenue and NW 16th Avenue
Latitude: 0' 0.0000 Undefined

Northbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	Pace Speed	Number in Pace
07/26/21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	91	3	1	0	0	0	0	0	0	0	0	0	0	0	95	26-35	26
16:00	**206**	**17**	1	0	0	0	0	0	0	0	0	0	0	**1**	**225**	1-10	59
17:00	191	12	**2**	0	0	0	0	0	0	0	0	0	0	0	205	1-10	55
18:00	139	8	0	0	0	0	0	0	0	0	0	0	0	0	147	1-10	40
19:00	114	8	0	0	0	0	0	0	0	0	0	0	0	0	122	1-10	33
20:00	105	1	1	0	0	**1**	0	0	0	0	0	0	0	0	108	26-35	30
21:00	63	2	0	0	0	0	0	0	0	0	0	0	0	0	65	26-35	18
22:00	33	2	0	0	0	0	0	0	0	0	0	0	0	0	35	26-35	9
23:00	18	3	1	**1**	0	0	0	0	0	0	0	0	0	0	23	31-40	6
Total	960	56	6	1	0	1	0	0	0	0	0	0	0	1	1025		
Percent	93.7%	5.5%	0.6%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%			
AM Peak Vol.																	
PM Peak Vol.	16:00 206	16:00 17	17:00 2	23:00 1		20:00 1								16:00 1	16:00 225		

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Latitude: 0' 0.0000 Undefined

Northbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	Pace Speed	Number in Pace
07/27/21	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6	28-37	2
01:00	6	1	**1**	0	0	0	0	0	0	0	0	0	0	0	8	*	2
02:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3	35-44	1
03:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	*	1
04:00	5	0	1	0	0	0	0	0	0	0	0	0	0	0	6	41-50	1
05:00	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24	1-10	7
06:00	52	1	0	0	0	0	0	0	0	0	0	0	0	0	53	1-10	15
07:00	101	2	0	0	0	0	0	0	0	0	0	0	0	0	103	1-10	29
08:00	82	4	0	**1**	0	0	0	0	0	0	0	0	0	0	87	26-35	23
09:00	129	5	0	0	0	0	0	0	0	0	0	0	0	0	134	1-10	37
10:00	**151**	3	0	0	0	0	0	0	0	0	0	0	0	0	**154**	26-35	43
11:00	138	**8**	0	0	0	0	0	0	0	0	0	0	0	0	146	26-35	39
12 PM	143	7	0	0	0	0	0	0	0	0	0	0	0	0	150	1-10	41
13:00	140	7	0	0	0	0	0	0	0	0	0	0	0	0	147	26-35	40
14:00	142	3	**1**	0	0	0	0	0	0	0	0	0	0	0	146	1-10	41
15:00	203	13	0	0	0	0	0	0	0	0	0	0	0	0	216	1-10	58
16:00	**211**	**15**	0	0	0	0	0	0	0	0	0	0	0	0	**226**	26-35	60
17:00	175	13	1	**1**	0	0	0	0	0	0	0	0	0	0	190	1-10	50
18:00	118	10	1	0	0	0	0	0	0	0	0	0	0	0	129	1-10	34
19:00	130	7	0	0	0	0	0	0	0	0	0	0	0	0	137	26-35	37
20:00	89	5	0	0	0	0	0	0	0	0	0	0	0	0	94	26-35	25
21:00	63	5	0	1	0	0	0	0	0	0	0	0	0	0	69	26-35	18
22:00	22	4	0	0	0	0	0	0	0	0	0	0	0	0	26	31-40	7
23:00	25	1	0	0	0	0	0	0	0	0	0	0	0	0	26	26-35	7
Total	2158	116	5	3	0	0	0	0	0	0	0	0	0	0	2282		
Percent	94.6%	5.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	01:00	08:00											10:00		
Vol.	151	8	1	1											154		
PM Peak	16:00	16:00	14:00	17:00											16:00		
Vol.	211	15	1	1											226		

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Latitude: 0' 0.0000 Undefined

Northbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	Pace Speed	Number in Pace
07/28/21	6	3	**2**	0	0	0	0	0	0	0	0	0	0	0	11	34-43	5
01:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5	31-40	2
02:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	35-44	*
03:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	*	2
04:00	6	3	0	0	0	0	0	0	0	0	0	0	0	0	9	31-40	4
05:00	17	2	0	0	0	0	0	0	0	0	0	0	0	0	19	1-10	5
06:00	65	5	0	0	0	0	0	0	0	0	0	0	0	0	70	1-10	19
07:00	99	5	0	0	0	0	0	0	0	0	0	0	0	0	104	26-35	28
08:00	112	6	0	0	0	0	0	0	0	0	0	0	0	0	118	26-35	32
09:00	112	4	0	0	0	0	0	0	0	0	0	0	0	0	116	26-35	32
10:00	107	9	1	0	0	0	0	0	0	0	0	0	0	0	117	1-10	31
11:00	**131**	**13**	0	0	0	0	0	0	0	0	0	0	0	0	**144**	26-35	37
12 PM	124	8	**3**	0	0	0	0	0	0	0	0	0	0	0	135	26-35	35
13:00	169	7	0	0	0	0	0	0	0	0	0	0	0	0	176	26-35	48
14:00	157	12	1	0	0	0	0	0	0	0	0	0	0	0	170	1-10	45
15:00	173	16	2	0	0	0	0	0	0	0	0	0	0	0	191	26-35	49
16:00	**206**	**20**	0	0	0	0	0	0	0	0	0	0	0	0	**226**	1-10	59
17:00	186	13	1	1	0	0	0	0	0	0	0	0	0	0	201	26-35	53
18:00	150	11	0	**2**	0	0	0	0	0	0	0	0	0	0	163	1-10	43
19:00	115	8	1	1	0	0	0	0	0	0	0	0	0	0	125	1-10	33
20:00	81	4	1	0	0	0	0	0	0	0	0	0	0	0	86	26-35	23
21:00	65	2	0	0	0	0	0	0	0	0	0	0	0	0	67	1-10	19
22:00	45	1	0	0	0	0	0	0	0	0	0	0	0	0	46	1-10	13
23:00	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19	26-35	5
Total	2156	153	12	4	0	0	0	0	0	0	0	0	0	0	2325		
Percent	92.7%	6.6%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	00:00												11:00		
Vol.	131	13	2												144		
PM Peak	16:00	16:00	12:00	18:00											16:00		
Vol.	206	20	3	2											226		

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Latitude: 0' 0.0000 Undefined

Northbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	Pace Speed	Number in Pace
07/29/21	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12	27-36	3
01:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	*	2
02:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5	31-40	2
03:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	*	2
04:00	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10	1-10	3
05:00	31	1	0	0	0	0	0	0	0	0	0	0	0	0	32	1-10	9
06:00	49	**4**	0	0	0	0	0	0	0	0	0	0	0	0	53	1-10	14
07:00	93	4	0	0	0	0	0	0	0	0	0	0	0	0	97	1-10	27
08:00	**132**	2	**1**	0	0	0	0	0	0	0	0	0	0	0	**135**	1-10	38
09:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	29-38	1
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	346	14	1	0	0	0	0	0	0	0	0	0	0	0	361		
Percent	95.8%	3.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	06:00	08:00												08:00		
Vol.	132	4	1												135		
PM Peak Vol.																	
Total	5620	339	24	8	0	1	0	0	0	0	0	0	0	1	5993		
Percent	93.8%	5.7%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	5 MPH
	50th Percentile :	18 MPH
	85th Percentile :	31 MPH
	95th Percentile :	36 MPH
Stats	10 MPH Pace Speed :	1-10 MPH
	Number in Pace :	1606
	Percent in Pace :	26.8%
	Number of Vehicles > 55 MPH :	2
	Percent of Vehicles > 55 MPH :	0.0%
	Mean Speed(Average) :	19 MPH

APPENDIX B

EXISTING LEVEL OF SERVICE

Intersection Level Of Service Report
Intersection 1: NW 16th Avenue/NW Brady Road

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.646

Intersection Setup

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	270.00	100.00	100.00	210.00	100.00	100.00	225.00	100.00	100.00	280.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Base Volume Input [veh/h]	112	124	68	28	148	92	68	156	92	156	256	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.00	4.00	4.00	1.00	1.00	1.00	6.00	6.00	6.00	1.00	1.00	1.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	112	124	68	28	148	92	68	156	92	156	256	92
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	31	17	7	37	23	17	39	23	39	64	23
Total Analysis Volume [veh/h]	112	124	68	28	148	92	68	156	92	156	256	92
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	13.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	5	2	2	1	6	6	7	4	4	3	8	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	5	5	5	5	5	5	5
Maximum Green [s]	6	38	38	8	40	40	6	18	18	8	20	20
Amber [s]	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	30	30	30	30	30	30	30	30	30	30	30	30
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	11	11	0	11	11	0	11	11	0	11	11
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	L	C
C, Cycle Length [s]	43	43	43	43	43	43	43	43
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.50	0.00	2.50	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	16	10	16	8	18	9	18	11
g / C, Green / Cycle	0.37	0.23	0.37	0.18	0.42	0.22	0.42	0.25
(v / s)_i Volume / Saturation Flow Rate	0.08	0.11	0.02	0.14	0.06	0.15	0.11	0.19
s, saturation flow rate [veh/h]	1365	1732	1346	1766	1212	1699	1385	1801
c, Capacity [veh/h]	615	408	640	323	576	368	679	450
d1, Uniform Delay [s]	9.48	14.24	8.84	16.74	8.34	15.56	8.44	15.10
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.14	0.85	0.03	3.39	0.09	2.15	0.17	2.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.18	0.47	0.04	0.74	0.12	0.67	0.23	0.77
d, Delay for Lane Group [s/veh]	9.62	15.09	8.87	20.13	8.43	17.70	8.61	17.97
Lane Group LOS	A	B	A	C	A	B	A	B
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.55	1.40	0.13	2.16	0.32	2.18	0.69	2.90
50th-Percentile Queue Length [ft/ln]	13.79	35.11	3.26	54.07	7.98	54.41	17.27	72.43
95th-Percentile Queue Length [veh/ln]	0.99	2.53	0.23	3.89	0.57	3.92	1.24	5.21
95th-Percentile Queue Length [ft/ln]	24.81	63.19	5.86	97.32	14.37	97.93	31.08	130.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.62	15.09	15.09	8.87	20.13	20.13	8.43	17.70	17.70	8.61	17.97	17.97
Movement LOS	A	B	B	A	C	C	A	B	B	A	B	B
d_A, Approach Delay [s/veh]	13.07			18.96			15.71			15.07		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	15.53											
Intersection LOS	B											
Intersection V/C	0.646											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	11.97	11.97	11.97	11.97
l_p,int, Pedestrian LOS Score for Intersection	2.221	2.135	2.144	2.195
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1762	1854	834	927
d_b, Bicycle Delay [s]	0.31	0.11	7.33	6.21
l_b,int, Bicycle LOS Score for Intersection	2.061	2.002	2.081	2.391
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: NW 18th Avenue/NW Hancock Drive

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Base Volume Input [veh/h]	4	12	252	8	4	296
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	3.00	3.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	12	252	8	4	296
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	3	63	2	1	74
Total Analysis Volume [veh/h]	4	12	252	8	4	296
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.46	9.70	0.00	0.00	7.80	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	1.79	1.79	0.00	0.00	0.17	0.17
d_A, Approach Delay [s/veh]	10.39		0.00		0.10	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.34					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: NW Brady Road/NW McIntosh Road

Control Type:	Two-way stop	Delay (sec / veh):	19.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.348

Intersection Setup

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Base Volume Input [veh/h]	244	52	24	432	128	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.00	4.00	3.00	3.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	244	52	24	432	128	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	13	6	108	32	12
Total Analysis Volume [veh/h]	244	52	24	432	128	48
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.35	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.91	0.00	19.94	10.05
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.00	1.53	0.20
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.46	0.00	38.14	5.03
d_A, Approach Delay [s/veh]	0.00		0.42		17.24	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.47					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: NW Hood Street/Project Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	NW 16th Avenue	NW Hood Street
Approach	Northbound	Southbound
Lane Configuration		
Turning Movement	Thru	Thru
Lane Width [ft]	12.00	12.00
No. of Lanes in Entry Pocket	1	1
Entry Pocket Length [ft]	100.00	100.00
No. of Lanes in Exit Pocket	0	0
Exit Pocket Length [ft]	0.00	0.00
Speed [mph]	35.00	35.00
Grade [%]	0.00	0.00
Crosswalk	Yes	Yes

Volumes

Name	NW 16th Avenue	NW Hood Street
Base Volume Input [veh/h]	164	236
Base Volume Adjustment Factor	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.00	2.00
Growth Factor	1.0000	1.0000
In-Process Volume [veh/h]	0	0
Site-Generated Trips [veh/h]	0	0
Diverted Trips [veh/h]	0	0
Pass-by Trips [veh/h]	0	0
Existing Site Adjustment Volume [veh/h]	0	0
Other Volume [veh/h]	0	0
Total Hourly Volume [veh/h]	164	236
Peak Hour Factor	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	59
Total Analysis Volume [veh/h]	164	236
Pedestrian Volume [ped/h]	0	0

Intersection Settings

Priority Scheme	Free	Free
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance		
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00
Movement LOS	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00
d_A, Approach Delay [s/veh]	0.00	0.00
Approach LOS	A	A
d_I, Intersection Delay [s/veh]	0.00	
Intersection LOS	A	

18th Avenue Subdivision

Vistro File: O:\...\EX CON AM.vistro
Report File: O:\...\B - EX CON AM.pdf
Scenario: Base Scenario
10/20/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	112	124	68	28	148	92	68	156	92	156	256	92	1392

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	4	12	252	8	4	296	576

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	244	52	24	432	128	48	928

ID	Intersection Name	Northbound	Southbound	Total Volume
		Thru	Thru	
4	NW Hood Street/Project Access	164	236	400

18th Avenue Subdivision

Vistro File: O:\...\EX CON AM.vistro
Report File: O:\...\B - EX CON AM.pdf
Scenario: Base Scenario
10/20/2022

Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	Final Base	112	124	68	28	148	92	68	156	92	156	256	92	1392
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**112**	**124**	**68**	**28**	**148**	**92**	**68**	**156**	**92**	**156**	**256**	**92**	**1392**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	Final Base	4	12	252	8	4	296	576
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**4**	**12**	**252**	**8**	**4**	**296**	**576**

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	Final Base	244	52	24	432	128	48	928
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**244**	**52**	**24**	**432**	**128**	**48**	**928**

ID	Intersection Name	Volume Type	Northbound	Southbound	Total Volume
			Thru	Thru	
4	NW Hood Street/Project Access	Final Base	164	236	400
		Growth Factor	1.00	1.00	-
		In Process	0	0	0
		Net New Trips	0	0	0
		Other	0	0	0
		Future Total	**164**	**236**	**400**

Intersection Level Of Service Report
Intersection 1: NW 16th Avenue/NW Brady Road

Control Type:	Signalized	Delay (sec / veh):	14.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.635

Intersection Setup

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	270.00	100.00	100.00	210.00	100.00	100.00	225.00	100.00	100.00	280.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Base Volume Input [veh/h]	8	196	192	120	160	16	20	100	24	96	40	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	3.00	3.00	3.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	196	192	120	160	16	20	100	24	96	40	80
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	49	48	30	40	4	5	25	6	24	10	20
Total Analysis Volume [veh/h]	8	196	192	120	160	16	20	100	24	96	40	80
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	13.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	5	2	2	1	6	6	7	4	4	3	8	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	5	5	5	5	5	5	5
Maximum Green [s]	6	38	38	8	40	40	6	18	18	8	20	20
Amber [s]	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	30	30	30	30	30	30	30	30	30	30	30	30
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	11	11	0	11	11	0	11	11	0	11	11
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	L	C
C, Cycle Length [s]	40	40	40	40	40	40	40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.50	0.00	2.50	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	19	11	19	15	12	4	12	6
g / C, Green / Cycle	0.49	0.28	0.49	0.36	0.29	0.09	0.29	0.15
(v / s)_i Volume / Saturation Flow Rate	0.01	0.22	0.10	0.10	0.01	0.07	0.06	0.07
s, saturation flow rate [veh/h]	1315	1747	1236	1826	1449	1837	1524	1673
c, Capacity [veh/h]	832	492	669	663	607	174	628	254
d1, Uniform Delay [s]	5.40	13.32	6.62	9.00	10.33	17.65	10.80	15.55
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.86	0.13	0.21	0.02	5.36	0.11	1.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.79	0.18	0.27	0.03	0.71	0.15	0.47
d, Delay for Lane Group [s/veh]	5.40	16.18	6.74	9.22	10.35	23.01	10.91	16.91
Lane Group LOS	A	B	A	A	B	C	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.02	2.83	0.36	0.81	0.11	1.24	0.51	0.91
50th-Percentile Queue Length [ft/ln]	0.55	70.69	8.98	20.33	2.74	31.10	12.64	22.83
95th-Percentile Queue Length [veh/ln]	0.04	5.09	0.65	1.46	0.20	2.24	0.91	1.64
95th-Percentile Queue Length [ft/ln]	0.99	127.25	16.16	36.60	4.94	55.98	22.75	41.09

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.40	16.18	16.18	6.74	9.22	9.22	10.35	23.01	23.01	10.91	16.91	16.91
Movement LOS	A	B	B	A	A	A	B	C	C	B	B	B
d_A, Approach Delay [s/veh]	15.97			8.21			21.25			14.25		
Approach LOS	B			A			C			B		
d_I, Intersection Delay [s/veh]	14.16											
Intersection LOS	B											
Intersection V/C	0.635											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	10.52	10.52	10.52	10.52
l_p,int, Pedestrian LOS Score for Intersection	2.168	2.122	1.953	2.186
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1899	1999	900	1000
d_b, Bicycle Delay [s]	0.05	0.00	6.06	5.01
l_b,int, Bicycle LOS Score for Intersection	2.213	2.048	1.797	1.916
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: NW 18th Avenue/NW Hancock Drive

Control Type:	Two-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Base Volume Input [veh/h]	8	0	236	4	0	188
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	0	236	4	0	188
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	59	1	0	47
Total Analysis Volume [veh/h]	8	0	236	4	0	188
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.20	9.55	0.00	0.00	7.69	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.03	1.03	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.20		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.21					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: NW Brady Road/NW McIntosh Road

Control Type:	Two-way stop	Delay (sec / veh):	16.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.199

Intersection Setup

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Base Volume Input [veh/h]	352	108	16	264	80	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	3.00	3.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	352	108	16	264	80	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	27	4	66	20	2
Total Analysis Volume [veh/h]	352	108	16	264	80	8
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.20	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	8.33	0.00	16.18	10.61
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.04	0.00	0.73	0.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.11	0.00	18.33	0.94
d_A, Approach Delay [s/veh]	0.00		0.48		15.68	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	1.83					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: NW Hood Street/Project Access

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	NW 16th Avenue	NW Hood Street
Approach	Northbound	Southbound
Lane Configuration		
Turning Movement	Thru	Thru
Lane Width [ft]	12.00	12.00
No. of Lanes in Entry Pocket	1	1
Entry Pocket Length [ft]	100.00	100.00
No. of Lanes in Exit Pocket	0	0
Exit Pocket Length [ft]	0.00	0.00
Speed [mph]	35.00	35.00
Grade [%]	0.00	0.00
Crosswalk	Yes	Yes

Volumes

Name	NW 16th Avenue	NW Hood Street
Base Volume Input [veh/h]	276	180
Base Volume Adjustment Factor	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.00
Growth Factor	1.0000	1.0000
In-Process Volume [veh/h]	0	0
Site-Generated Trips [veh/h]	0	0
Diverted Trips [veh/h]	0	0
Pass-by Trips [veh/h]	0	0
Existing Site Adjustment Volume [veh/h]	0	0
Other Volume [veh/h]	0	0
Total Hourly Volume [veh/h]	276	180
Peak Hour Factor	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	45
Total Analysis Volume [veh/h]	276	180
Pedestrian Volume [ped/h]	0	0

Intersection Settings

Priority Scheme	Free	Free
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance		
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00
Movement LOS	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00
d_A, Approach Delay [s/veh]	0.00	0.00
Approach LOS	A	A
d_I, Intersection Delay [s/veh]	0.00	
Intersection LOS	A	

18th Avenue Subdivision

Vistro File: O:\...\EX CON PM.vistro
Report File: O:\...\B - EX CON PM.pdf
Scenario: Base Scenario
10/20/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	8	196	192	120	160	16	20	100	24	96	40	80	1052

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	8	0	236	4	0	188	436

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	352	108	16	264	80	8	828

ID	Intersection Name	Northbound	Southbound	Total Volume
		Thru	Thru	
4	NW Hood Street/Project Access	276	180	456

18th Avenue Subdivision

Vistro File: O:\...\EX CON PM.vistro
Report File: O:\...\B - EX CON PM.pdf
Scenario: Base Scenario
10/20/2022

Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	Final Base	8	196	192	120	160	16	20	100	24	96	40	80	1052
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**8**	**196**	**192**	**120**	**160**	**16**	**20**	**100**	**24**	**96**	**40**	**80**	**1052**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	Final Base	8	0	236	4	0	188	436
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**8**	**0**	**236**	**4**	**0**	**188**	**436**

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	Final Base	352	108	16	264	80	8	828
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**352**	**108**	**16**	**264**	**80**	**8**	**828**

ID	Intersection Name	Volume Type	Northbound	Southbound	Total Volume
			Thru	Thru	
4	NW Hood Street/Project Access	Final Base	276	180	456
		Growth Factor	1.00	1.00	-
		In Process	0	0	0
		Net New Trips	0	0	0
		Other	0	0	0
		Future Total	**276**	**180**	**456**

APPENDIX C

ACCIDENT DATA

INTERSECTIONS

16th AVE @ BRADY RD
16th AVE @ HOOD ST - *No Reported Crashes*
18th AVE @ ASTOR ST - *No Reported Crashes*
18th AVE @ HANCOCK DR - *No Reported Crashes*
18th AVE @ HOOD ST - *No Reported Crashes*
ASTOR ST @ FOREST HOME RD - *No Reported Crashes*
BRADY RD @ MCINTOSH RD

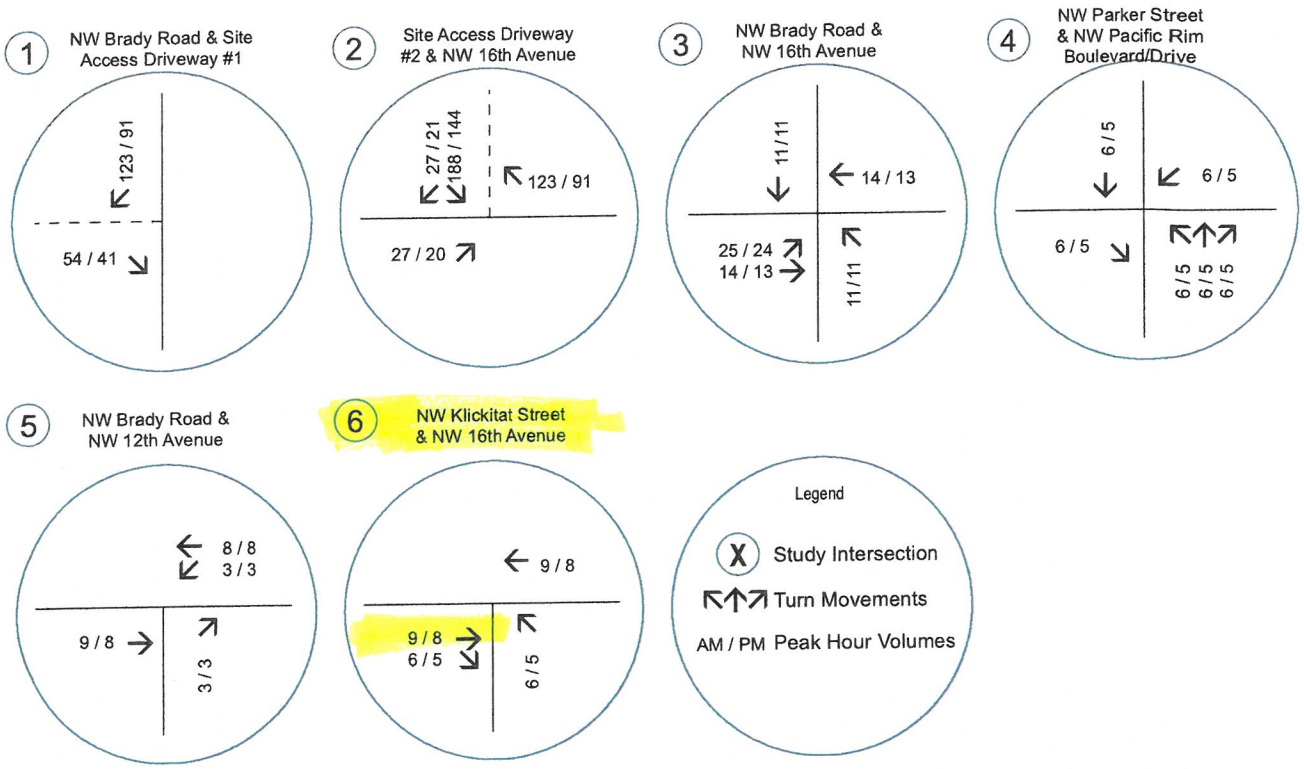
OFFICER REPORTED CRASHES THAT OCCURRED *at* or *in the vicnity of* MULTIPLE INTERSECTIONS IN THE CITY OF CAMAS
01/01/2017 - *available 2021* *See 2nd tab below for road information*

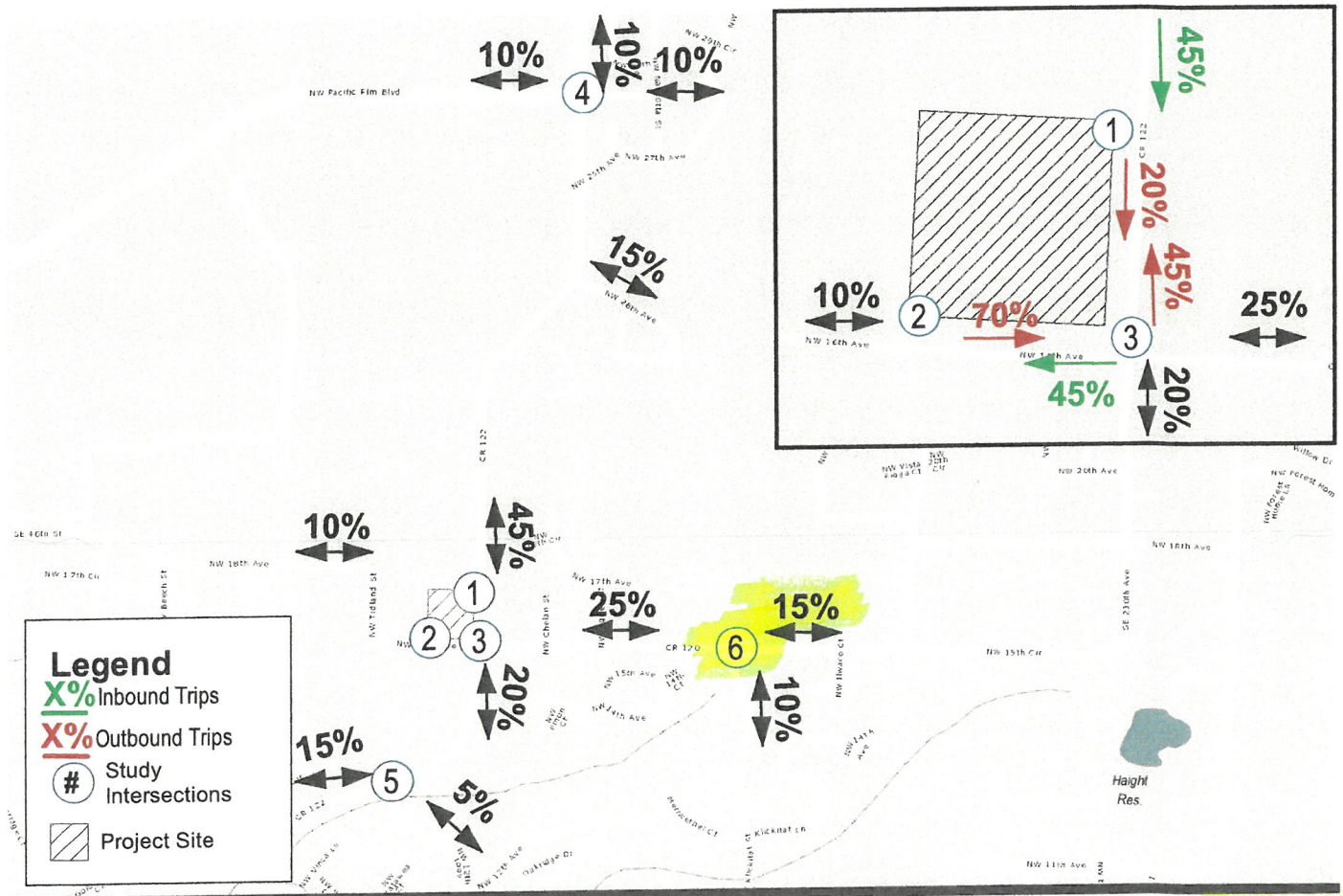
Under 23 U.S. Code § 148 and 23 U.S. Code § 407, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	CITY	PRIMARY TRAFFICWAY	BLOCK NUMBER	INTERSECTING TRAFFICWAY	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME	MILEPOST	A / B	SR ONLY HISTORY/ SUSPENSE	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE	VEHICLE 2 TYPE	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	WA STATE PLANE SOUTH - X 2010 - FORWARD	WA STATE PLANE SOUTH - Y 2010 - FORWARD
City Street	Clark	Camas	NW 16TH AVE	0	NW BRADY RD							No	E927909	06/06/2019	17:27	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Overcast	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Slowing	Stopped for Traffic	East	West	Vehicle Stopped	Vehicle Stopped	Unknown Distraction		None		Lane of Primary Trafficway	1140524.42	100033.23
City Street	Clark	Camas	NW 16TH AVE	0	NW BRADY RD							No	EA22449	03/10/2020	17:55	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Overcast	Dry	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Did Not Grant RW to Vehicle		None		Lane of Primary Trafficway	1140524.42	100033.22
City Street	Clark	Camas	NW 16TH AVE	0	NW BRADY RD							No	EA13244	12/24/2019	21:00	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Raining	Wet	Dark-Street Lights On	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	North	East	South	North	Did Not Grant RW to Vehicle		None		Lane of Primary Trafficway	1140524.42	100033.22
City Street	Clark	Camas	NW BRADY RD	0	NW 16TH AVE							No	E838168	09/05/2018	07:01	Suspected Minor Injury	1	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	North	East	South	North	Did Not Grant RW to Vehicle		None		Lane of Primary Trafficway	1140524.42	100033.23
City Street	Clark	Camas	NW BRADY RD	0	NW 16TH AVE							No	EA17171	02/21/2020	14:20	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Making Right Turn	Going Straight Ahead	South	East	West	East	Other Contributing Circ Not Listed		None		Lane of Primary Trafficway	1140524.42	100033.22
City Street	Clark	Camas	NW BRADY RD	0	NW 16TH AVE							No	E697830	07/30/2017	19:59	Died in Hospital	1	1	2	0	0	Motorcycle	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	North	South	West	East	Disregard Stop Sign - Flashing Red	Exceeding Reas. Safe Speed	None		Lane of Primary Trafficway	1140524.42	100033.23
City Street	Clark	Camas	NW BRADY RD	0	NW 16TH AVE							No	E984562	11/11/2019	08:52	No Apparent Injury	0	0	3	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	North	East	South	North	Did Not Grant RW to Vehicle		None		Lane of Primary Trafficway	1140524.42	100033.22
City Street	Clark	Camas	NW BRADY RD	0	NW 16TH AVE							No	E708673	08/29/2017	22:21	Possible Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Entering at angle	Going Straight Ahead	Going Straight Ahead	West	East	North	South	None		Disregard Stop Sign - Flashing Red	Did Not Grant RW to Vehicle	Lane of Primary Trafficway	1140524.42	100033.23
City Street	Clark	Camas	NW BRADY RD	0	NW MCINTOSH RD							No	E829210	08/17/2017	12:09	Suspected Minor Injury	2	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	South	North	East	South	None		Did Not Grant RW to Vehicle		Lane of Primary Trafficway	1139002.96	98479.44
City Street	Clark	Camas	NW BRADY RD	4600	NW MCINTOSH RD							No	E966063	09/08/2019	11:36	No Apparent Injury	0	0	1	0	0	Pickup,Panel Truck or Vanette under 10,000 lb		At Intersection and Related	Overcast	Wet	Daylight	Linear Curb	Making Right Turn		Southeast	East			Under Influence of Alcohol				Intersecting Trafficway	1139024.47	98463.24
City Street	Clark	Camas	NW BRADY RD	0	NW MCINTOSH RD							No	E673603	05/21/2017	16:55	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Making Left Turn	Going Straight Ahead	East	South	North	South	None		None		Lane of Primary Trafficway	1139002.96	98479.44
City Street	Clark	Camas	NW BRADY RD	0	NW MCINTOSH RD							No	E900545	03/06/2019	07:39	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car	At Intersection and Related	Sleet or Hail or Freezing Rain	Wet	Daylight	Entering at angle	Making Left Turn	Going Straight Ahead	East	South	South	North	Did Not Grant RW to Vehicle		None		Lane of Primary Trafficway	1139002.96	98479.44
City Street	Clark	Camas	NW BRADY RD	20900		106	F	S	NW 16TH AVE			No	E810631	06/16/2018	12:42	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Going Straight Ahead	Going Straight Ahead	North	South	North	South	Inattention		Inattention		Lane of Primary Trafficway	1140521.2	99926.95
City Street	Clark	Camas	NW BRADY RD	20800		500	F	S	NW 16TH AVE			No	E841548	09/24/2018	15:15	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - both moving - head-on	Going Straight Ahead	Going Straight Ahead	South	North	North	South	Inattention		None		Lane of Primary Trafficway	1140463.87	99541.35
City Street	Clark	Camas	NW BRADY RD	20800		195	F	SW	NW MCINTOSH RD			No	EB22271	04/12/2021	19:13	Suspected Minor Injury	1	0	1	0	0	Motorcycle		Not at Intersection and Not Related	Clear	Dry	Daylight	Vehicle Strikes Deer	Going Straight Ahead		Southwest	Northeast			Other Contributing Circ Not Listed				Lane of Primary Trafficway	1138915.87	98304.51
City Street	Clark	Camas	NW BRADY RD	20600		417	F	SW	NW MCINTOSH RD			No	EB05875	02/05/2021	14:59	Suspected Minor Injury	2	0	3	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	Driveway Related but Not at Driveway	Overcast	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	West	East	Vehicle Stopped	Vehicle Stopped	Follow Too Closely		None		Lane of Primary Trafficway	1138780.84	98127.04

APPENDIX D

IN-PROCESS INFORMATION





lancaster mobley

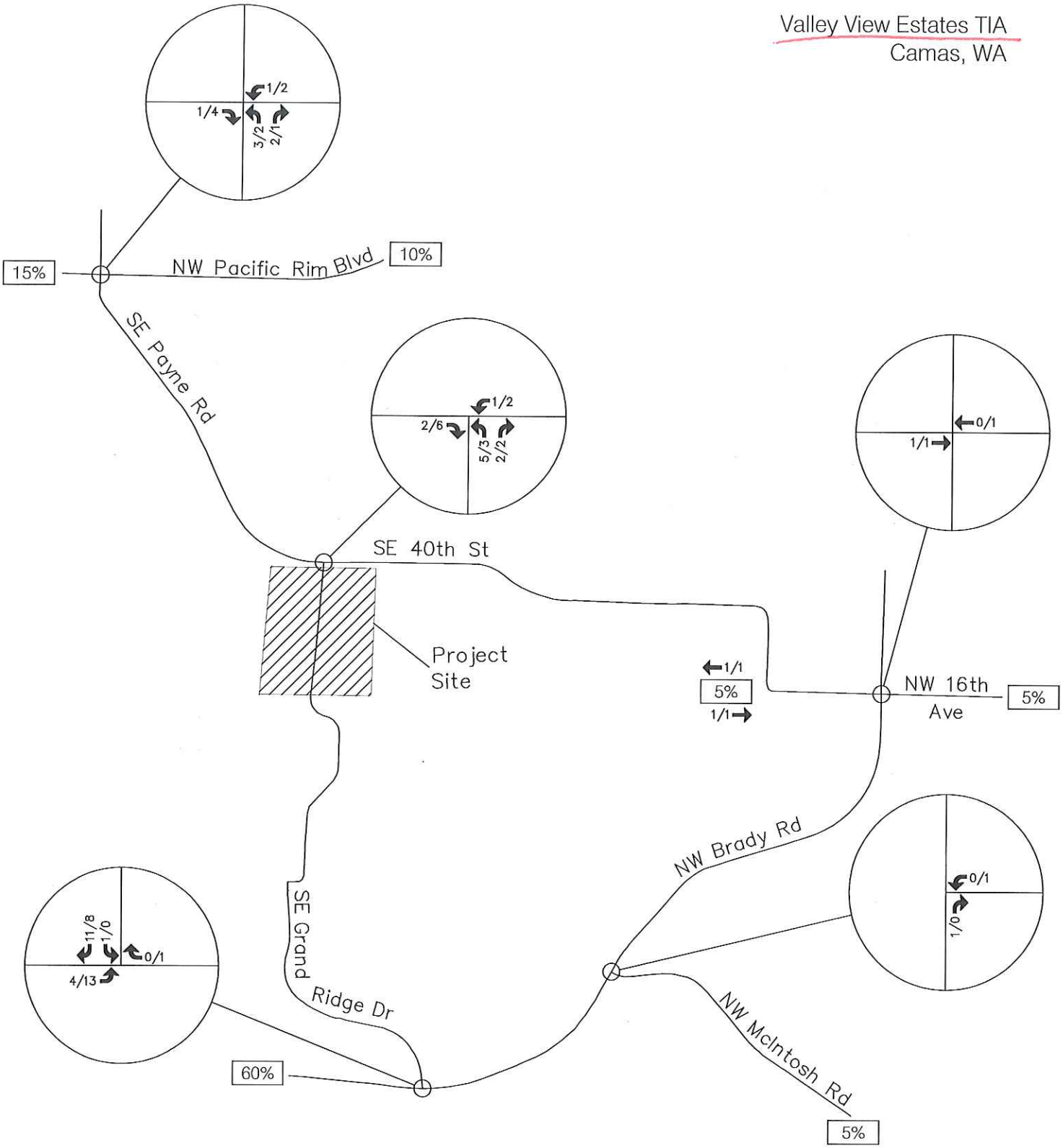
TRAFFIC VOLUMES
Trip Distribution & Assignment
AM & PM Peak Hour

NOT TO SCALE

Figure 3
Camas Station TIS
2/3/2022

0% Build-Out 8-12-21

Valley View Estates TIA
Camas, WA



LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

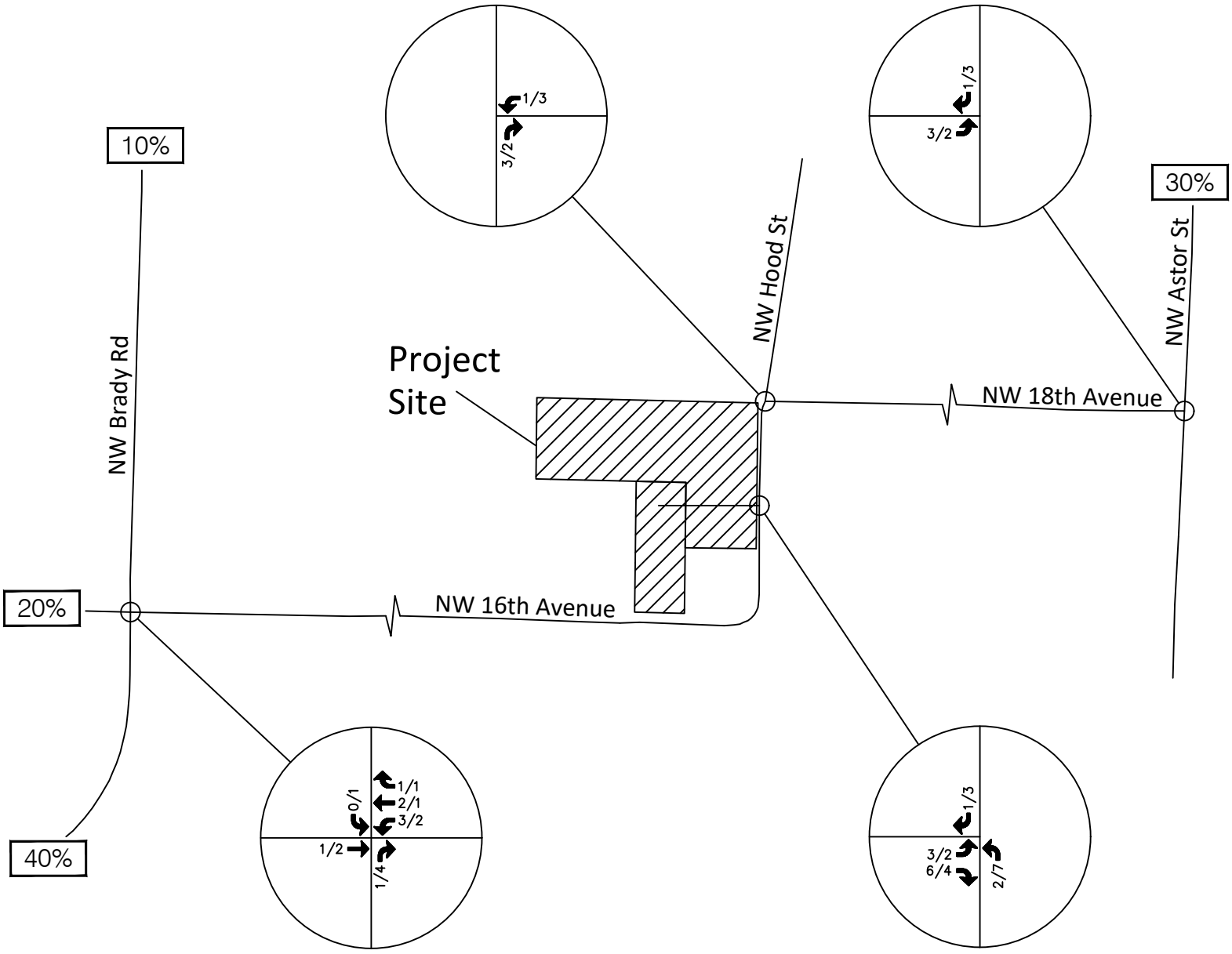
10% Peak Hour Trip Distribution

NOT TO SCALE

FIGURE 6
Trip Distribution and Assignment
Traffic Volumes

18006_Figures.Dwg

Hood Street Subdivision TIA
Camas, WA



LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

10% Peak Hour Trip Distribution

NOT TO SCALE

FIGURE 6
Trip Distribution and Assignment
Traffic Volumes

20033_Figures.Dwg

APPENDIX E

2027 "WITHOUT PROJECT" LEVEL OF SERVICE

Intersection Level Of Service Report
Intersection 1: NW 16th Avenue/NW Brady Road

Control Type:	Signalized	Delay (sec / veh):	17.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	270.00	100.00	100.00	210.00	100.00	100.00	225.00	100.00	100.00	280.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Base Volume Input [veh/h]	135	137	76	31	174	102	100	188	102	175	299	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.00	4.00	4.00	1.00	1.00	1.00	6.00	6.00	6.00	1.00	1.00	1.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	135	137	76	31	174	102	100	188	102	175	299	103
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	34	19	8	44	26	25	47	26	44	75	26
Total Analysis Volume [veh/h]	135	137	76	31	174	102	100	188	102	175	299	103
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	13.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	5	2	2	1	6	6	7	4	4	3	8	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	5	5	5	5	5	5	5
Maximum Green [s]	6	38	38	8	40	40	6	18	18	8	20	20
Amber [s]	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	30	30	30	30	30	30	30	30	30	30	30	30
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	11	11	0	11	11	0	11	11	0	11	11
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	L	C
C, Cycle Length [s]	49	49	49	49	49	49	49	49
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.50	0.00	2.50	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	19	12	19	10	22	12	22	13
g / C, Green / Cycle	0.38	0.25	0.38	0.20	0.44	0.25	0.44	0.27
(v / s)_i Volume / Saturation Flow Rate	0.10	0.12	0.02	0.16	0.09	0.17	0.13	0.22
s, saturation flow rate [veh/h]	1326	1731	1318	1770	1174	1704	1329	1803
c, Capacity [veh/h]	560	436	596	357	534	432	635	492
d1, Uniform Delay [s]	10.96	15.79	10.00	18.68	9.44	16.61	9.29	16.84
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.20	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.22	0.85	0.04	3.59	0.17	1.82	0.44	3.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.49	0.05	0.77	0.19	0.67	0.28	0.82
d, Delay for Lane Group [s/veh]	11.18	16.64	10.03	22.28	9.61	18.43	9.73	20.24
Lane Group LOS	B	B	B	C	A	B	A	C
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.83	1.84	0.18	2.92	0.56	2.86	0.96	4.01
50th-Percentile Queue Length [ft/ln]	20.64	45.96	4.42	72.96	13.95	71.62	24.08	100.34
95th-Percentile Queue Length [veh/ln]	1.49	3.31	0.32	5.25	1.00	5.16	1.73	7.22
95th-Percentile Queue Length [ft/ln]	37.16	82.73	7.95	131.33	25.11	128.92	43.34	180.61

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.18	16.64	16.64	10.03	22.28	22.28	9.61	18.43	18.43	9.73	20.24	20.24
Movement LOS	B	B	B	B	C	C	A	B	B	A	C	C
d_A, Approach Delay [s/veh]	14.52			21.04			16.17			17.05		
Approach LOS	B			C			B			B		
d_I, Intersection Delay [s/veh]	17.05											
Intersection LOS	B											
Intersection V/C	0.706											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	14.89	14.89	14.89	14.89
l_p,int, Pedestrian LOS Score for Intersection	2.282	2.196	2.203	2.249
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1541	1622	730	811
d_b, Bicycle Delay [s]	1.30	0.88	9.95	8.72
l_b,int, Bicycle LOS Score for Intersection	2.134	2.066	2.203	2.512
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO
Version 2022 (SP 0-9)

H. Lee & Associates, PLLC
18th Avenue Subdivision

Intersection Level Of Service Report
Intersection 2: NW 18th Avenue/NW Hancock Drive

Control Type:	Two-way stop	Delay (sec / veh):	13.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Base Volume Input [veh/h]	4	13	281	9	4	328
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	3.00	3.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	13	281	9	4	328
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	3	70	2	1	82
Total Analysis Volume [veh/h]	4	13	281	9	4	328
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.11	9.89	0.00	0.00	7.87	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	2.00	2.00	0.00	0.00	0.17	0.17
d_A, Approach Delay [s/veh]	10.65		0.00		0.09	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.33					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: NW Brady Road/NW McIntosh Road

Control Type:	Two-way stop	Delay (sec / veh):	23.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.427

Intersection Setup

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Base Volume Input [veh/h]	269	57	26	477	141	53
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.00	4.00	3.00	3.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	269	57	26	477	141	53
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	14	7	119	35	13
Total Analysis Volume [veh/h]	269	57	26	477	141	53
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.43	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	7.99	0.00	23.76	10.28
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.00	2.05	0.23
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.62	0.00	51.37	5.81
d_A, Approach Delay [s/veh]	0.00		0.41		20.08	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	4.01					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: NW Hood Street/Project Access

Control Type:	Two-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	NW 16th Avenue		NW Hood Street		Hood Street Subdivision Access	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW 16th Avenue		NW Hood Street		Hood Street Subdivision Access	
Base Volume Input [veh/h]	2	181	261	1	3	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.00	7.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	181	261	1	3	6
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	45	65	0	1	2
Total Analysis Volume [veh/h]	2	181	261	1	3	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	7.83	0.00	0.00	0.00	11.36	9.67
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.04	0.04
95th-Percentile Queue Length [ft/ln]	0.12	0.00	0.00	0.00	0.98	0.98
d_A, Approach Delay [s/veh]	0.09		0.00		10.23	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.24					
Intersection LOS	B					

18th Avenue Subdivision

Vistro File: O:\...\WOP AM.vistro
Report File: O:\...\E - WOP AM.pdf
Scenario: Base Scenario
10/20/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	135	137	76	31	174	102	100	188	102	175	299	103	1622

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	4	13	281	9	4	328	639

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	269	57	26	477	141	53	1023

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
4	NW Hood Street/Project Access	2	181	261	1	3	6	454

18th Avenue Subdivision

Vistro File: O:\...\WOP AM.vistro
Report File: O:\...\E - WOP AM.pdf

Scenario: Base Scenario
10/20/2022

Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	Final Base	135	137	76	31	174	102	100	188	102	175	299	103	1622
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**135**	**137**	**76**	**31**	**174**	**102**	**100**	**188**	**102**	**175**	**299**	**103**	**1622**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	Final Base	4	13	281	9	4	328	639
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**4**	**13**	**281**	**9**	**4**	**328**	**639**

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	Final Base	269	57	26	477	141	53	1023
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**269**	**57**	**26**	**477**	**141**	**53**	**1023**

ID	Intersection Name	Volume Type	Northbound		Southbound		Eastbound		Total Volume
			Left	Thru	Thru	Right	Left	Right	
4	NW Hood Street/Project Access	Final Base	2	181	261	1	3	6	454
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**2**	**181**	**261**	**1**	**3**	**6**	**454**

Intersection Level Of Service Report
Intersection 1: NW 16th Avenue/NW Brady Road

Control Type:	Signalized	Delay (sec / veh):	15.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	270.00	100.00	100.00	210.00	100.00	100.00	225.00	100.00	100.00	280.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Base Volume Input [veh/h]	20	216	216	133	188	18	46	126	26	108	59	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	3.00	3.00	3.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	216	216	133	188	18	46	126	26	108	59	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	54	54	33	47	5	12	32	7	27	15	22
Total Analysis Volume [veh/h]	20	216	216	133	188	18	46	126	26	108	59	89
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	13.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	5	2	2	1	6	6	7	4	4	3	8	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	5	5	5	5	5	5	5
Maximum Green [s]	6	38	38	8	40	40	6	18	18	8	20	20
Amber [s]	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	30	30	30	30	30	30	30	30	30	30	30	30
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	11	11	0	11	11	0	11	11	0	11	11
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	L	C
C, Cycle Length [s]	44	44	44	44	44	44	44	44
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.50	0.00	2.50	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	22	13	22	16	13	5	13	7
g / C, Green / Cycle	0.50	0.30	0.50	0.37	0.30	0.11	0.30	0.15
(v / s)_i Volume / Saturation Flow Rate	0.02	0.25	0.11	0.11	0.03	0.08	0.07	0.09
s, saturation flow rate [veh/h]	1295	1746	1192	1827	1454	1844	1490	1691
c, Capacity [veh/h]	798	531	620	677	579	211	593	251
d1, Uniform Delay [s]	5.79	14.26	7.38	9.90	11.30	18.94	11.72	17.61
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	3.08	0.17	0.25	0.06	4.57	0.15	2.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.03	0.81	0.21	0.30	0.08	0.72	0.18	0.59
d, Delay for Lane Group [s/veh]	5.81	17.34	7.55	10.15	11.36	23.51	11.87	19.79
Lane Group LOS	A	B	A	B	B	C	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.06	3.58	0.47	1.12	0.29	1.63	0.65	1.34
50th-Percentile Queue Length [ft/ln]	1.62	89.38	11.75	28.00	7.24	40.72	16.37	33.59
95th-Percentile Queue Length [veh/ln]	0.12	6.44	0.85	2.02	0.52	2.93	1.18	2.42
95th-Percentile Queue Length [ft/ln]	2.91	160.88	21.16	50.39	13.04	73.30	29.47	60.47

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.81	17.34	17.34	7.55	10.15	10.15	11.36	23.51	23.51	11.87	19.79	19.79
Movement LOS	A	B	B	A	B	B	B	C	C	B	B	B
d_A, Approach Delay [s/veh]	16.83			9.13			20.69			16.45		
Approach LOS	B			A			C			B		
d_I, Intersection Delay [s/veh]	15.27											
Intersection LOS	B											
Intersection V/C	0.674											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	12.46	12.46	12.46	12.46
l_p,int, Pedestrian LOS Score for Intersection	2.217	2.173	1.990	2.242
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1720	1811	815	905
d_b, Bicycle Delay [s]	0.43	0.20	7.76	6.62
l_b,int, Bicycle LOS Score for Intersection	2.305	2.119	1.886	1.982
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: NW 18th Avenue/NW Hancock Drive

Control Type:	Two-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Base Volume Input [veh/h]	9	0	263	4	0	211
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	0	263	4	0	211
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	66	1	0	53
Total Analysis Volume [veh/h]	9	0	263	4	0	211
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.64	9.73	0.00	0.00	7.75	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.24	1.24	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.64		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.22					
Intersection LOS	B					

Generated with PTV VISTRO
Version 2022 (SP 0-9)

H. Lee & Associates, PLLC
18th Avenue Subdivision

Intersection Level Of Service Report
Intersection 3: NW Brady Road/NW McIntosh Road

Control Type:	Two-way stop	Delay (sec / veh):	18.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.243

Intersection Setup

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Base Volume Input [veh/h]	389	119	18	291	88	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	3.00	3.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	389	119	18	291	88	9
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	97	30	5	73	22	2
Total Analysis Volume [veh/h]	389	119	18	291	88	9
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.24	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	8.48	0.00	18.08	10.95
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.00	0.94	0.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.31	0.00	23.39	1.11
d_A, Approach Delay [s/veh]	0.00		0.49		17.42	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	2.02					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: NW Hood Street/Project Access

Control Type:	Two-way stop	Delay (sec / veh):	12.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	NW 16th Avenue		NW Hood Street		Hood Street Subdivision Access	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW 16th Avenue		NW Hood Street		Hood Street Subdivision Access	
Base Volume Input [veh/h]	7	305	199	3	2	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	305	199	3	2	4
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	76	50	1	1	1
Total Analysis Volume [veh/h]	7	305	199	3	2	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.62	0.00	0.00	0.00	12.00	9.30
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.38	0.00	0.00	0.00	0.65	0.65
d_A, Approach Delay [s/veh]	0.17		0.00		10.20	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.22					
Intersection LOS	B					

18th Avenue Subdivision

Vistro File: O:\...\WOP PM.vistro
Report File: O:\...\E - WOP PM.pdf
Scenario: Base Scenario
10/20/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	20	216	216	133	188	18	46	126	26	108	59	89	1245

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	9	0	263	4	0	211	487

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	389	119	18	291	88	9	914

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
4	NW Hood Street/Project Access	7	305	199	3	2	4	520

18th Avenue Subdivision

Vistro File: O:\...\WOP PM.vistro
Report File: O:\...\E - WOP PM.pdf

Scenario: Base Scenario
10/20/2022

Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	Final Base	20	216	216	133	188	18	46	126	26	108	59	89	1245
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**20**	**216**	**216**	**133**	**188**	**18**	**46**	**126**	**26**	**108**	**59**	**89**	**1245**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	Final Base	9	0	263	4	0	211	487
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**9**	**0**	**263**	**4**	**0**	**211**	**487**

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	Final Base	389	119	18	291	88	9	914
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**389**	**119**	**18**	**291**	**88**	**9**	**914**

ID	Intersection Name	Volume Type	Northbound		Southbound		Eastbound		Total Volume
			Left	Thru	Thru	Right	Left	Right	
4	NW Hood Street/Project Access	Final Base	7	305	199	3	2	4	520
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**7**	**305**	**199**	**3**	**2**	**4**	**520**

APPENDIX F

2027 "WITH PROJECT" LEVEL OF SERVICE

Intersection Level Of Service Report
Intersection 1: NW 16th Avenue/NW Brady Road

Control Type:	Signalized	Delay (sec / veh):	17.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	270.00	100.00	100.00	210.00	100.00	100.00	225.00	100.00	100.00	280.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Base Volume Input [veh/h]	135	137	78	32	174	102	100	189	102	182	302	105
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.00	4.00	4.00	1.00	1.00	1.00	6.00	6.00	6.00	1.00	1.00	1.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	135	137	78	32	174	102	100	189	102	182	302	105
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	34	20	8	44	26	25	47	26	46	76	26
Total Analysis Volume [veh/h]	135	137	78	32	174	102	100	189	102	182	302	105
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	13.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	5	2	2	1	6	6	7	4	4	3	8	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	5	5	5	5	5	5	5
Maximum Green [s]	6	38	38	8	40	40	6	18	18	8	20	20
Amber [s]	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	30	30	30	30	30	30	30	30	30	30	30	30
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	11	11	0	11	11	0	11	11	0	11	11
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	L	C
C, Cycle Length [s]	50	50	50	50	50	50	50	50
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.50	0.00	2.50	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	19	12	19	10	22	13	22	14
g / C, Green / Cycle	0.38	0.25	0.38	0.20	0.44	0.25	0.44	0.27
(v / s)_i Volume / Saturation Flow Rate	0.10	0.12	0.02	0.16	0.09	0.17	0.14	0.23
s, saturation flow rate [veh/h]	1325	1729	1318	1770	1169	1705	1332	1803
c, Capacity [veh/h]	557	433	592	357	531	431	637	497
d1, Uniform Delay [s]	11.05	15.96	10.10	18.79	9.46	16.74	9.33	16.87
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.22	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.22	0.88	0.04	3.61	0.17	1.85	0.51	3.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.50	0.05	0.77	0.19	0.68	0.29	0.82
d, Delay for Lane Group [s/veh]	11.27	16.84	10.13	22.40	9.63	18.60	9.84	20.29
Lane Group LOS	B	B	B	C	A	B	A	C
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.83	1.88	0.18	2.94	0.56	2.90	1.02	4.09
50th-Percentile Queue Length [ft/ln]	20.87	46.97	4.61	73.50	14.00	72.56	25.45	102.19
95th-Percentile Queue Length [veh/ln]	1.50	3.38	0.33	5.29	1.01	5.22	1.83	7.36
95th-Percentile Queue Length [ft/ln]	37.56	84.55	8.30	132.29	25.19	130.61	45.81	183.94

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.27	16.84	16.84	10.13	22.40	22.40	9.63	18.60	18.60	9.84	20.29	20.29
Movement LOS	B	B	B	B	C	C	A	B	B	A	C	C
d_A, Approach Delay [s/veh]	14.69			21.12			16.30			17.06		
Approach LOS	B			C			B			B		
d_I, Intersection Delay [s/veh]	17.14											
Intersection LOS	B											
Intersection V/C	0.708											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	15.02	15.02	15.02	15.02
l_p,int, Pedestrian LOS Score for Intersection	2.288	2.197	2.204	2.256
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1532	1613	726	807
d_b, Bicycle Delay [s]	1.36	0.93	10.06	8.83
l_b,int, Bicycle LOS Score for Intersection	2.137	2.068	2.205	2.531
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: NW 18th Avenue/NW Hancock Drive

Control Type:	Two-way stop	Delay (sec / veh):	13.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Base Volume Input [veh/h]	4	18	281	9	6	328
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	3.00	3.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	18	281	9	6	328
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	5	70	2	2	82
Total Analysis Volume [veh/h]	4	18	281	9	6	328
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.20	9.93	0.00	0.00	7.88	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.10	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	2.53	2.53	0.00	0.00	0.25	0.25
d_A, Approach Delay [s/veh]	10.52		0.00		0.14	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.43					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: NW Brady Road/NW McIntosh Road

Control Type:	Two-way stop	Delay (sec / veh):	24.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.432

Intersection Setup

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Base Volume Input [veh/h]	271	57	26	484	141	53
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.00	4.00	3.00	3.00	5.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	271	57	26	484	141	53
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	14	7	121	35	13
Total Analysis Volume [veh/h]	271	57	26	484	141	53
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.43	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	8.00	0.00	24.16	10.29
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.00	2.09	0.23
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.62	0.00	52.32	5.83
d_A, Approach Delay [s/veh]	0.00		0.41		20.37	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	4.03					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: NW Hood Street/Project Access

Control Type:	Two-way stop	Delay (sec / veh):	12.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name	NW 16th Avenue			NW Hood Street			Ho St			Project Access		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW 16th Avenue			NW Hood Street			Ho St			Project Access		
Base Volume Input [veh/h]	2	181	4	0	261	1	3	0	6	12	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.00	7.00	7.00	2.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	181	4	0	261	1	3	0	6	12	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	45	1	0	65	0	1	0	2	3	0	0
Total Analysis Volume [veh/h]	2	181	4	0	261	1	3	0	6	12	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	7.83	0.00	0.00	7.59	0.00	0.00	11.95	12.18	9.68	12.13	12.26	9.33
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.07	0.07	0.07
95th-Percentile Queue Length [ft/ln]	0.12	0.00	0.00	0.00	0.00	0.00	1.02	1.02	1.02	1.78	1.78	1.78
d_A, Approach Delay [s/veh]	0.08			0.00			10.44			12.13		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	0.54											
Intersection LOS	B											

18th Avenue Subdivision

Vistro File: O:\...\WP AM.vistro
Report File: O:\...\F - WP AM.pdf
Scenario: Base Scenario
10/21/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	135	137	78	32	174	102	100	189	102	182	302	105	1638

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	4	18	281	9	6	328	646

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	271	57	26	484	141	53	1032

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	NW Hood Street/Project Access	2	181	4	0	261	1	3	0	6	12	0	0	470

18th Avenue Subdivision

Vistro File: O:\...\WP AM.vistro
Report File: O:\...\F - WP AM.pdf

Scenario: Base Scenario
10/21/2022

Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	Final Base	135	137	78	32	174	102	100	189	102	182	302	105	1638
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**135**	**137**	**78**	**32**	**174**	**102**	**100**	**189**	**102**	**182**	**302**	**105**	**1638**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	Final Base	4	18	281	9	6	328	646
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**4**	**18**	**281**	**9**	**6**	**328**	**646**

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	Final Base	271	57	26	484	141	53	1032
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**271**	**57**	**26**	**484**	**141**	**53**	**1032**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	NW Hood Street/Project Access	Final Base	2	181	4	0	261	1	3	0	6	12	0	0	470
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**2**	**181**	**4**	**0**	**261**	**1**	**3**	**0**	**6**	**12**	**0**	**0**	**470**

Intersection Level Of Service Report
Intersection 1: NW 16th Avenue/NW Brady Road

Control Type:	Signalized	Delay (sec / veh):	15.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.686

Intersection Setup

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	270.00	100.00	100.00	210.00	100.00	100.00	225.00	100.00	100.00	280.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Brady Road			NW Brady Road			NW 16th Avenue			NW 16th Avenue		
Base Volume Input [veh/h]	20	216	223	135	188	18	46	130	26	113	61	90
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	3.00	3.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	216	223	135	188	18	46	130	26	113	61	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	54	56	34	47	5	12	33	7	28	15	23
Total Analysis Volume [veh/h]	20	216	223	135	188	18	46	130	26	113	61	90
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	13.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	5	2	2	1	6	6	7	4	4	3	8	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	5	5	5	5	5	5	5
Maximum Green [s]	6	38	38	8	40	40	6	18	18	8	20	20
Amber [s]	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	30	30	30	30	30	30	30	30	30	30	30	30
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	11	11	0	11	11	0	11	11	0	11	11
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0	20.0	6.0	6.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	L	C
C, Cycle Length [s]	45	45	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.50	0.00	2.50	0.00	2.50	0.00	2.50
g_i, Effective Green Time [s]	23	14	23	17	14	5	14	7
g / C, Green / Cycle	0.50	0.31	0.50	0.38	0.30	0.12	0.30	0.15
(v / s)_i Volume / Saturation Flow Rate	0.02	0.26	0.11	0.11	0.03	0.09	0.08	0.09
s, saturation flow rate [veh/h]	1272	1716	1182	1827	1424	1817	1485	1692
c, Capacity [veh/h]	785	534	607	688	565	215	584	259
d1, Uniform Delay [s]	5.86	14.50	7.60	9.96	11.55	19.35	12.02	17.90
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	3.23	0.18	0.24	0.06	4.63	0.16	2.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.03	0.82	0.22	0.30	0.08	0.73	0.19	0.58
d, Delay for Lane Group [s/veh]	5.88	17.73	7.79	10.20	11.61	23.98	12.18	19.97
Lane Group LOS	A	B	A	B	B	C	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.07	3.77	0.50	1.15	0.30	1.72	0.71	1.40
50th-Percentile Queue Length [ft/ln]	1.68	94.16	12.40	28.69	7.49	42.98	17.81	35.04
95th-Percentile Queue Length [veh/ln]	0.12	6.78	0.89	2.07	0.54	3.09	1.28	2.52
95th-Percentile Queue Length [ft/ln]	3.02	169.49	22.32	51.65	13.48	77.36	32.06	63.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.88	17.73	17.73	7.79	10.20	10.20	11.61	23.98	23.98	12.18	19.97	19.97
Movement LOS	A	B	B	A	B	B	B	C	C	B	B	B
d_A, Approach Delay [s/veh]	17.22			9.24			21.17			16.63		
Approach LOS	B			A			C			B		
d_I, Intersection Delay [s/veh]	15.58											
Intersection LOS	B											
Intersection V/C	0.686											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	13.00	13.00	13.00	13.00
l_p,int, Pedestrian LOS Score for Intersection	2.224	2.176	1.994	2.254
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1676	1765	794	882
d_b, Bicycle Delay [s]	0.59	0.31	8.24	7.08
l_b,int, Bicycle LOS Score for Intersection	2.317	2.122	1.893	1.995
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: NW 18th Avenue/NW Hancock Drive

Control Type:	Two-way stop	Delay (sec / veh):	11.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Hancock Drive		NW 18th Avenue		NW 18th Avenue	
Base Volume Input [veh/h]	9	4	263	4	6	211
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	4	263	4	6	211
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	1	66	1	2	53
Total Analysis Volume [veh/h]	9	4	263	4	6	211
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.80	9.76	0.00	0.00	7.76	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	1.67	1.67	0.00	0.00	0.25	0.25
d_A, Approach Delay [s/veh]	11.18		0.00		0.21	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.39					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: NW Brady Road/NW McIntosh Road

Control Type:	Two-way stop	Delay (sec / veh):	18.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.247

Intersection Setup

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Brady Road		NW Brady Road		NW McIntosh Road	
Base Volume Input [veh/h]	396	119	18	296	88	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	3.00	3.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	396	119	18	296	88	9
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	99	30	5	74	22	2
Total Analysis Volume [veh/h]	396	119	18	296	88	9
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.25	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	8.50	0.00	18.36	11.00
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.00	0.96	0.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.31	0.00	23.88	1.12
d_A, Approach Delay [s/veh]	0.00		0.49		17.68	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	2.02					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: NW Hood Street/Project Access

Control Type:	Two-way stop	Delay (sec / veh):	13.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	NW 16th Avenue			NW Hood Street			Ho St			Project Access		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW 16th Avenue			NW Hood Street			Ho St			Project Access		
Base Volume Input [veh/h]	7	305	13	0	199	3	2	0	4	8	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	305	13	0	199	3	2	0	4	8	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	76	3	0	50	1	1	0	1	2	0	0
Total Analysis Volume [veh/h]	7	305	13	0	199	3	2	0	4	8	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	7.62	0.00	0.00	7.90	0.00	0.00	12.82	12.99	9.31	12.97	13.02	10.05
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.38	0.00	0.00	0.00	0.00	0.00	0.68	0.68	0.68	1.33	1.33	1.33
d_A, Approach Delay [s/veh]	0.16			0.00			10.48			12.97		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	0.41											
Intersection LOS	B											

18th Avenue Subdivision

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Scenario: Base Scenario
10/21/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	20	216	223	135	188	18	46	130	26	113	61	90	1266

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	9	4	263	4	6	211	497

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	396	119	18	296	88	9	926

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	NW Hood Street/Project Access	7	305	13	0	199	3	2	0	4	8	0	0	541

18th Avenue Subdivision

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Report File: O:\...\F - WP PM.pdf

Scenario: Base Scenario
10/21/2022

Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	NW 16th Avenue/NW Brady Road	Final Base	20	216	223	135	188	18	46	130	26	113	61	90	1266
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**20**	**216**	**223**	**135**	**188**	**18**	**46**	**130**	**26**	**113**	**61**	**90**	**1266**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
2	NW 18th Avenue/NW Hancock Drive	Final Base	9	4	263	4	6	211	497
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**9**	**4**	**263**	**4**	**6**	**211**	**497**

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
3	NW Brady Road/NW McIntosh Road	Final Base	396	119	18	296	88	9	926
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**396**	**119**	**18**	**296**	**88**	**9**	**926**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	NW Hood Street/Project Access	Final Base	7	305	13	0	199	3	2	0	4	8	0	0	541
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**7**	**305**	**13**	**0**	**199**	**3**	**2**	**0**	**4**	**8**	**0**	**0**	**541**