

TRAFFIC ANALYSIS REPORT

FOR

MANNING MEADOWS SUBDIVISION

NE 339TH STREET

CITY OF LA CENTER

SUBMITTED BY



May 2025

Project 25-14

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Prepared By

CHARBONNEAU Engineering LLC



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FL2539

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INTRODUCTION

This traffic study has been prepared to evaluate and document the operations and safety conditions for the Manning Meadows Subdivision development being planned in La Center, Washington. The development will build a subdivision with 85 single-family homes. The project site is located in northeast La Center and generally southwest of the intersection at NE 339th Street and NE Tanoak Avenue. Figure 'a' in the appendix is a vicinity map highlighting the project location.

In accordance with the City's requirements the study area was defined as the surrounding neighborhood including the site access point on NE 339th Street and several key intersections along La Center Road, East 4th Street, and Lockwood Street.

TRAFFIC ANALYSIS CONSIDERATIONS

In the project scope established with City of La Center staff, a number of important elements were identified and considered in the study.

- Inventory and record pertinent information such as traffic control devices, circulation patterns, lane conditions, pedestrian & bicycle facilities, transit zones, parking, and street characteristics.
- Record data on typical weekdays during the AM & PM peak traffic hours.
- Obtain traffic counts at the study intersections on NE 339th Street, La Center Road, East 4th Street, and Lockwood Street.
- The project buildout is estimated to occur in year 2028. Three years of traffic growth at 2% per year was applied to establish the year 2028 background volumes. The City confirmed that in-process traffic for several sites were applicable, and furnished the data.
- Prepare trip generation for 85 single-family homes using the latest edition of the ITE Trip Generation manual (11th edition, year 2021).
- Level of service (LOS) analysis of the study intersections to measure the approach delays and LOS for comparison to City of La Center standards.
- Review intersection sight distance at the proposed access on NE 339th Street.
- Prepare peak hour signal warrants and left turn lane warrants.
- Review crash data furnished by WSDOT. Identify crash rates at the study intersections.
- Review the City's Transportation Capital Facilities Plan dated 7/25/2018 to identify future transportation system projects.

SITE DESCRIPTION, STREETS, ACCESS, AND CRITICAL INTERSECTIONS

Development of the Manning Meadows Subdivision project will include construction of 85 single-family homes. The project's location is situated on approximately 11.55 acres (tax lot

#209048-000) near the corner of NE 339th Street and Tanoak Avenue. The address is 1819 NE 339th Street, La Center. The development parcel is currently vacant.

Access to the proposed development includes three street approaches with the north access (Willow Avenue) connecting to NE 339th Street. An east access (8th Street) will connect to Tanoak Avenue. To the south, Spruce Avenue will provide connectivity all the way to Lockwood Creek Road. The project site plan (Figure 'b') illustrates the access locations. The approaches will require stop control. The site's internal streets will include sidewalks and provide connectivity within the site for circulation purposes.

The study intersections included the following;

- | | |
|---|---|
| 1. La Center Rd at Paradise Park Rd | 6. E 4 th St at Highland/Ivy St |
| 2. La Center Rd at Timmen Road | 7. Lockwood Creed Rd at Spruce Ave |
| 3. E 4 th St at La Center Rd | 8. 339 th St at Tanoak Avenue |
| 4. E 4 th St at Aspen Avenue | 9. Willow Ave/site access at 339 th St |
| 5. E 4 th St at Cedar Avenue | 10. 8 th St at Tanoak Avenue |

The study intersection on East 4th Street at NE Highland Street/Lockwood Road, and Ivy Street is currently under construction to install a traffic signal. The intersection at East 4th Street and La Center Road is configured as a traffic circle. The other study intersection are controlled by stop signing.

In the future according to WSDOT's Six Year TIP for 2016-2021 and the City's Capital Facilities Plan (year 2018) the intersection of La Center Road at Timmen Road will become signalized or converted to a roundabout. The intersection at La Center Road and Paradise Park Road will include signalization. The existing and proposed lane configurations and traffic control are presented in Figures 'c' & 'd', respectively.

NE 339th Street at Tanoak Avenue is configured as a tee-shaped design and controlled by stop signing on the northbound Tanoak Avenue approach. There are no separate turn lanes at the intersection. Pedestrian crosswalks are not marked.

East 4th Street at NE Highland Street/Lockwood Creek Road and Ivy Street is becoming signalized (now under construction). The new design will provide separate left turn lanes on each approach with marked pedestrian crosswalks and signals on all sides.

East 4th Street at East Cedar Avenue is configured as a tee-shaped design and controlled by stop signing on the southbound Cedar Avenue approach. There are no separate turn lanes at the intersection. The pedestrian crosswalks are marked on the north and west legs.

East 4th Street at Aspen Avenue is configured as a tee-shaped design and controlled by stop signing on the southbound Aspen Avenue approach. There are no separate turn lanes at the intersection. A pedestrian crosswalk is marked on the north leg.

East 4th Street at La Center Road is as a three-approach round-about with yield control posted on all approaches. Pedestrian crosswalks are marked on each approach.

La Center Road at Timmen Road is configured as a tee-shaped intersection containing stop signing on the Timmen Road approach where there are separate left and right turn lanes. There is a separate westbound left turn lane on La Center Road. The travel speed is posted at 40 MPH on La Center Road. There are no bike lanes or sidewalks at this location.

La Center Road at Paradise Park Road is configured as a four-way design with stop control on the approaches to La Center Road. There are separate left turn lanes on all approaches. Pedestrian crosswalks are marked on the north and south intersection legs. No bike lanes are present.

TRAFFIC OPERATIONAL ANALYSIS

In order to evaluate traffic flow and delay at the study intersections level of service (LOS) and safety conditions were determined. A total of 10 study intersections were evaluated.

The traffic analysis included the determination of the LOS and average delay per vehicle in the peak hours for the following scenarios:

- Year 2025 Existing Traffic
- Year 2028 Background Traffic
- Year 2028 Total Traffic

In order to perform the LOS analysis at the critical intersections video traffic counts were conducted during the AM peak (7:00-9:00AM) & PM peak (4:00-6:00 PM) traffic hours. The counts were collected in May 2025. Figures 1a & 1b depict the existing AM & PM peak hour traffic volumes, respectively.

Three years of traffic growth (2% per year) plus in-process traffic has been added to the existing volumes to account for the background traffic volumes. In-process traffic included the Asa's View subdivision, Paradise Park commercial, Breeze Trail Subdivision, Vineyard Vista Subdivision, Larsen Drive Subdivision, and Juniper Ridge. The in-process traffic is shown on Figures 2a & 2b. The year 2028 background traffic volumes are illustrated in Figures 3a & 3b.

The year 2028 total traffic scenario (background plus site generated traffic) is presented in Figures 6a & 6b.

VEHICULAR TRIP GENERATION

Trip rates presented in the Institute of Transportation Engineers (ITE) Trip Generation manual 11th edition (year 2021) were utilized to estimate the site's trip generation. The trip

generation is summarized in Table 1. Trip rates for land-use code #210, single-family housing was applied.

Table 1 Trip Generation Summary

ITE Land Use	Units (#)	Weekday						
		ADT	AM Peak Hour			PM Peak Hour		
			Total	Enter	Exit	Total	Enter	Exit
Single-Family (#210)	85							
Generation Rate ¹		9.43	0.70	25%	75%	0.94	63%	37%
Site Trips		802	60	15	45	80	50	30

¹ Source: *Trip Generation*, 11th Edition, ITE, 2021, average rates.

The proposed development is expected to generate a net total 802 daily trips, 60 AM peak hour trips, and 80 PM peak hour trips.

The trip distribution was based on the existing traffic counts, intersection traffic control, site access locations, and engineering judgment. Figure 4 presents the trip distribution results and Figures 5a & 5b display the trip assignments for the AM & PM peak hours, respectively.

CAPACITY ANALYSIS

Capacity analyses were performed to determine the levels of service for the weekday peak hours. Synchro v11.1 software based on the year 2016 Highway Capacity Manual methodology was used to determine the LOS and approach delays for the study intersections. The results are summarized in the following table. Copies of the capacity analysis summaries are included in the appendix.

Table 2 Capacity Analysis Summary

Intersection	Type of Control	Peak Hour	Traffic Scenario											
			2025 Existing				2028 Background				2028 Total			
			Crit. Mov't	LOS	Delay	v/c	Crit. Mov't	LOS	Delay	v/c	Crit. Mov't	LOS	Delay	v/c
1. Paradise Park Rd at La Center Rd	Two-way Stop	AM	NB	E	36.3	0.07	NB	F	57.6	0.06	NB	F	65.1	0.07
		PM	NB	E	48.9	0.03	NB	F	76.0	0.05	NB	F	86.0	0.05
	<i>Mitigated</i> ¹	AM	-	-	-	-	-	B	10.0	0.35	-	B	10.2	0.36
		PM	-	-	-	-	-	A	8.7	0.23	-	A	9.0	0.43
2. NW Timmen Road at La Center Rd	Two-way Stop	AM	NB	C	16.5	0.08	NB	C	23.1	0.11	NB	C	24.8	0.12
		PM	NB	C	23.2	0.31	NB	E	37.2	0.47	NB	E	42.7	0.52
	<i>Mitigated</i> ²	AM	-	-	-	-	-	B	12.3	0.28	-	B	13.6	0.29
		PM	-	-	-	-	-	C	23.7	0.46	-	D	28.6	0.48
3. NW Pacific Hwy at E 4th Street	Roundabout	AM	-	A	9.7	0.34	-	C	15.2	0.42	-	C	17.5	0.44
		PM	-	B	10.5	0.44	-	B	14.6	0.55	-	C	16.6	0.57
4. Aspen Avenue and E 4th Street	Two-way Stop	AM	SB	C	16.9	0.29	SB	C	22.9	0.46	SB	D	26.0	0.38
		PM	SB	B	14.3	0.17	SB	C	19.5	0.26	SB	C	21.4	0.28
5. E Cedar Avenue and E 4th Street	Two-way Stop	AM	SB	C	20.0	0.18	SB	C	24.5	0.24	SB	D	27.6	0.26
		PM	SB	C	17.2	0.20	SB	C	21.1	0.26	SB	C	23.6	0.29
6. NE Highland Ave/ NE Ivy Avenue and E 4th Street	Two-way Stop	AM	NB	E	39.4	0.11	-	-	-	-	-	-	-	-
		PM	NB	C	22.5	0.05	-	-	-	-	-	-	-	-
	Signal	AM	-	-	-	-	-	C	22.9	0.38	-	C	24.3	0.40
		PM	-	-	-	-	-	B	18.1	0.29	-	B	18.6	0.31
7. NE Lockwood Crk Rd at Spruce Ave	Two-way Stop	AM	SB	B	13.5	0.14	SB	C	15.4	0.17	SB	C	15.8	0.25
		PM	SB	A	9.7	0.03	SB	B	10.0	0.04	SB	B	10.1	0.06
8. NE 339th Street and Tanoak Avenue	Two-way Stop	AM	NB	B	10.1	0.03	NB	B	10.2	0.03	NB	B	10.2	0.03
		PM	NB	B	10.3	0.00	NB	B	10.5	0.00	NB	B	10.5	0.01
9. North Site Access and NE 339th Street	Two-way Stop	AM	-	-	-	-	-	-	-	-	NB	B	10.0	0.03
		PM	-	-	-	-	-	-	-	-	NB	B	10.4	0.02
10. East Site Access and Tanoak Avenue	Two-way Stop	AM	-	-	-	-	-	-	-	-	EB	A	8.6	0.00
		PM	-	-	-	-	-	-	-	-	EB	A	8.6	0.00

Notes: 2016 Highway Capacity Manual methodology used in analysis, Synchro v11. NB - Northbound, SB - Southbound, EB - Eastbound, WB - Westbound, LT - Left Turn, Crit. Mov't - Critical movement or critical approach.

¹ Mitigation: Traffic signal (consistent with 2016-2036 Transportation Capital Facilities Plan) - Not recommended with development

² Mitigation: RAB (consistent with 2016-2036 Transportation Capital Facilities Plan) - Not recommended with development.

According to the City's Comprehensive Plan policy the minimum acceptable level of service mobility standard for stop-controlled intersections is LOS 'E'.

The analysis has confirmed the following intersections (location reference #'s 3-10) will operate at acceptable LOS 'D' or better through the year 2028 total traffic scenario without requiring mitigation.

- | | |
|--|---|
| 3. E 4 th St at La Center Rd | 7. Lockwood Creed Rd at Spruce Ave |
| 4. E 4 th St at Aspen Avenue | 8. 339 th St at Tanoak Avenue |
| 5. E 4 th St at Cedar Avenue | 9. Willow Ave/site access at 339 th St |
| 6. E 4 th St at Highland/Ivy St | 10. 8 th St at Tanoak Avenue |

La Center Road at NW Paradise Park Road (intersection #1) currently operates at LOS 'E' during the existing peak hours. During the background and total traffic scenarios, the northbound left turn movement will operate at LOS 'F'. The mitigation for the intersection, which is identified in the La Center Transportation Capital Facilities Plan, is to install a traffic signal which improves the operations to LOS 'B'. As a dedicated improvement is planned and the failing condition occurs due to background traffic no intersection improvements are necessary in conjunction with the proposed development.

La Center Road at NW Timmen Road (intersection #2) northbound's left turn movement operates at LOS 'E' during the existing PM peak hour. During the background AM & PM peak hours, the northbound left turn movement will operate at LOS 'E' and LOS 'F', respectively. During the total traffic AM and PM peak hours, the northbound left turn movement will operate at LOS 'F'. The mitigation for the intersection, which is identified in the La Center Transportation Capital Facilities Plan, is to construct a single-lane roundabout. As a dedicated improvement is planned and the failing condition occurs due to background traffic no intersection improvements are necessary in conjunction with the proposed development.

Generally, LOS 'A', 'B', 'C', and 'D' are desirable service levels ranging from no vehicle delays to average or longer than average delays in the peak hours. Level 'E' represents longer delays and is considered to be the limit of acceptable delay for unsignalized and signalized intersections. Signalization warrants need to be reviewed and signals considered only if warrants are met. Level 'F' indicates that intersection improvements, such as widening and signalization, may be required. According to the Highway Capacity Manual (HCM), the following delay times are associated with the LOS at stop controlled unsignalized and signalized intersections.

Level of Service criteria defined in <u>Highway Capacity Manual</u>		
Level of Service (LOS)	Unsignalized Control Stopped Delay (sec/veh)	Signalized Control Stopped Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

QUEUING ANALYSIS

Traffic queues at the study intersections were established in the capacity analyses based on the 95th percentile values. The results for several critical intersections are described as follows.

At the intersections surrounding site property, including NE 339th Street at Willow Avenue, NE 339th Street at Tanoak Avenue, and 8th Street at Tanoak Avenue, queues on the stop-controlled approaches will not exceed one vehicle in the peak hours through the year 2028 total traffic scenario.

The southbound queue on Spruce Avenue at Lockwood Creek Road will not exceed one vehicle in the peak hours through the year 2028 total traffic scenario.

The northbound queues on Timmen Road at La Center Road will not exceed two to three cars in the left turn lane and one vehicle in the right turn lane through the year 2028 total traffic scenario.

The LOS reports containing the queue results are contained in the appendix.

SIGHT DISTANCE

Sight distance at the proposed access (Willow Avenue) on NE 339th Street was reviewed in accordance with the AASHTO standards. The posted speed of 35 MPH on NE 339th Street requires an intersection sight distance of 390 feet in both directions. The sight distance was determined to be obstructed to less than 300 feet to the west and less than 350 feet to the east due to large fir trees along the property's north frontage. It is anticipated that the trees will be removed or pruned in conjunction with the development so the required intersection sight distance standard will be met.

LEFT TURN LANE REQUIREMENTS

Separate westbound left turn lanes are not warranted on NE 339th Street at the site access (Willow Avenue) or at Tanoak Avenue intersections due to the low peak hour volumes on NE 339th Street and the westbound left turn demand volume (no cars turn left into the site at Willow Avenue, less than six cars turn left at Tanoak Avenue). The warrant curve results (Exhibit 1310-7a, WSDOT Design Manual) are included in the appendix.

At the Cedar Avenue and the East 4th Street intersection, the eastbound left turn lane warrant is met with 2025 existing PM peak volumes. As the turn lane is currently warranted due to existing traffic conditions, construction of the lane is not recommended in conjunction with the proposed development.

TRAFFIC SIGNAL WARRANTS

The peak hour signal warrant was evaluated for the stop-controlled study intersections. The peak hour warrant data is included in the appendix.

The intersections on La Center Road at Timmen Road and at Paradise Park Road met the peak hour signal warrant in the PM peak hour for the year 2028 background and year 2028 total traffic scenarios. Therefore, the signal need is not attributed to the development and is not proposed in conjunction with the project. According to WSDOT's Six Year TIP for 2016-2021 traffic signals or roundabouts are planned at these locations.

Traffic signals are not warranted at the other study intersections.

ACCIDENT HISTORY

Crash data for the study intersections was obtained from WSDOT staff and reviewed to identify potential safety issues. The latest available data covered the years 2020-2024.

The accident rates presented in Table 3 below are based on the number of accidents per million entering vehicles (MEV) per year. Typically, an intersection is not considered unsafe unless the crash rate exceeds the threshold value of 1.0 accidents per MEV.

Table 3 Crash Rate Results

Intersection	Crash History (Years)	Number of Crashes	Crashes per year	Annual Traffic Entering (veh/yr)	Crash rate per M.E.V.*
Paradise Park Rd and NW La Center Rd	5	3	0.6	5263108	0.11
NW Timmen Rd and NW La Center Rd	5	5	1.0	5379985	0.19
NW Pacific Hwy and E 4th St	5	1	0.2	5613739	0.04
Aspen Ave and E 4th St	5	0	0.0	4298875	0.00
E Cedar Ave and E 4th St	5	0	0.0	3367513	0.00
NE Highland Ave/NE Ivy Ave and E 4th St	5	0	0.0	3126454	0.00
NE Lockwood Creek Rd and E Spruce Ave	5	2	0.4	1734890	0.23
NE 339th St and Tanoak Avenue	5	0	0.0	953276	0.00

* M.E.V. - million entering vehicles.

None of the intersections experienced a crash rate above 0.23 crashes per MEV per year indicating safety mitigation is not necessary.

PEDESTRIANS, BICYCLES, & BUSES

Sidewalk will be provided on the south side of NE 339th Street along the development's property frontage and on both sides of the all streets constructed internally within the site's property. The new sidewalk will provide safe pedestrian connectivity from the property site to the existing sidewalk system.

No bicycle lanes are provided in the area. No bike lanes are planned with the project.

C-Tran provides limited service to La Center with the Connector route which runs on weekdays only. The service operates between downtown La Center (bus stop at the 4th Street Park & Ride) and the 99th Street Transit Center in Vancouver.

SUMMARY AND RECOMMENDATIONS

The traffic study for Manning Meadows Subdivision has been prepared to determine the potential impacts at the site access point on NE 339th Street and the other study intersections along La Center Road, East 4th Street, and Lockwood Creek Road . Development of the site includes 85 single-family housing units. The trip generation is projected to be 802 daily trips with 60 AM peak hour trips and 80 PM peak hour trips.

Sight distance at the proposed access (Willow Avenue) on NE 339th Street was reviewed in accordance with the AASHTO standards. The posted speed of 35 MPH requires an intersection sight distance of 390 feet in both directions. The sightlines are obstructed due to large fir trees along the property's north frontage and it will be necessary for the trees to be pruned or removed in conjunction with the development so the required sight distance standard will be met. The sight distance standards shall be maintained for safety purposes, and potential obstruction by vegetation, walls, parking, signing, buildings, above ground utilities, or other items must be avoided.

The analysis has determined that two intersections will experience failing LOS conditions as follows.

- **La Center Road at NW Paradise Park Road (intersection #1)** - During the background and total traffic scenarios, the northbound left turn movement will operate at LOS 'F'. The mitigation for the intersection, which is identified in the La Center Transportation Capital Facilities Plan, is to install a traffic signal which improves the operations to LOS 'B'. As a dedicated improvement is planned by the City, and the failing condition occurs due to background traffic, no intersection improvements are necessary in conjunction with the proposed development.
- **La Center Road at NW Timmen Road (intersection #2)** - In the background AM & PM peak hours, the northbound left turn movement will operate at LOS 'E' and LOS 'F', respectively. During the total traffic AM and PM peak hours, the northbound left turn movement will operate at LOS 'F'. The mitigation for the intersection, which is

identified in the La Center Transportation Capital Facilities Plan, is to construct a single-lane roundabout. As a dedicated improvement is planned by the City, and the failing condition occurs due to background traffic, no intersection improvements are necessary in conjunction with the proposed development.

Traffic queues at the study intersections were established in the capacity analyses based on the 95th percentile values. The results for several critical intersections are described as follows.

- At the intersections surrounding site property, including NE 339th Street at Willow Avenue, NE 339th Street at Tanoak Avenue, and 8th Street at Tanoak Avenue the queues on the stop-controlled approaches will not exceed one vehicle in the peak hours.
- The southbound queue on Spruce Avenue at Lockwood Creek Road will not exceed one vehicle in the peak hours.

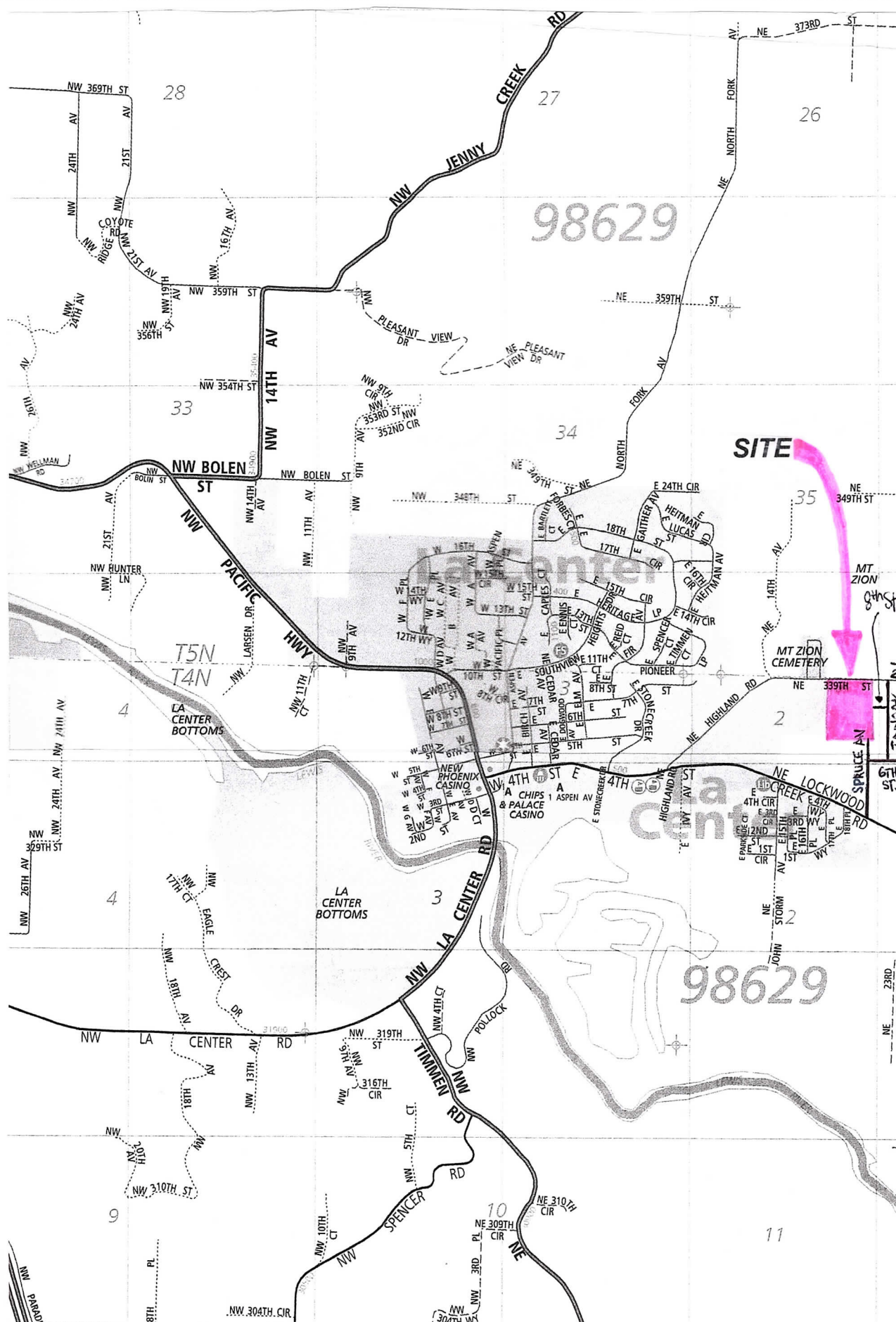
Crash data for the study intersections was obtained from WSDOT staff and reviewed to identify potential safety issues. The latest five years of available data was reviewed. None of the intersection crash rates exceed 0.23 accidents per MEV per year indicating safety mitigation is not necessary.

Based on evaluation of the study intersections no intersection improvements beyond those planned at the site access and along the property frontage are required in conjunction with the proposed development. The site access (Willow Avenue) at NE 339th Street will require stop sign control and inclusion of a stop bar pavement marking.

APPENDIX

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PLOT DATE: 05.08.25



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NOTES:
NO SCALE



VICINITY MAP
MANNING MEADOWS SUBDIVISION

FIGURE

a

FILE NAME: 2514flow.dwg

PLOT DATE: 05.08.25



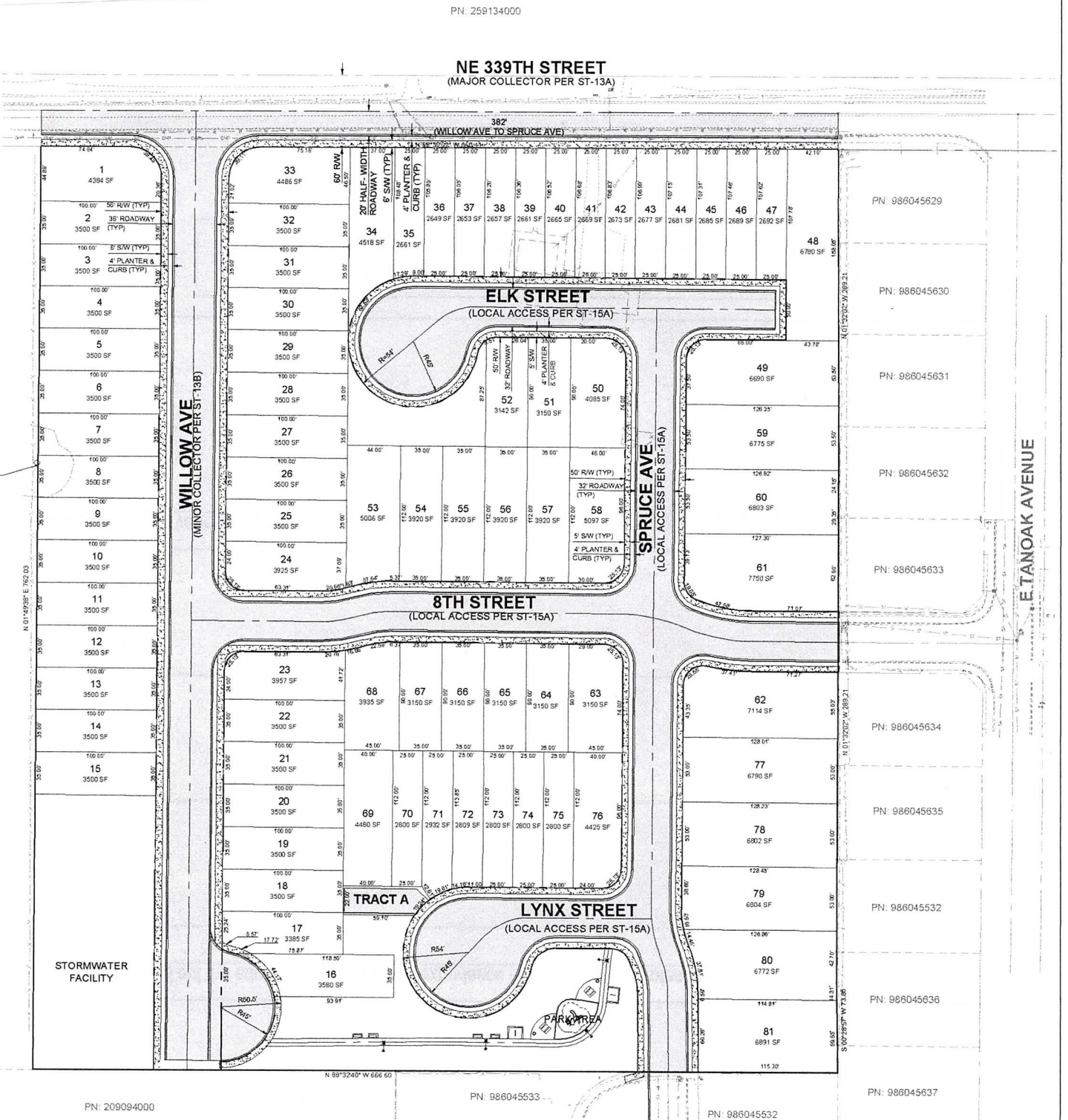
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PROJECT: 25-14

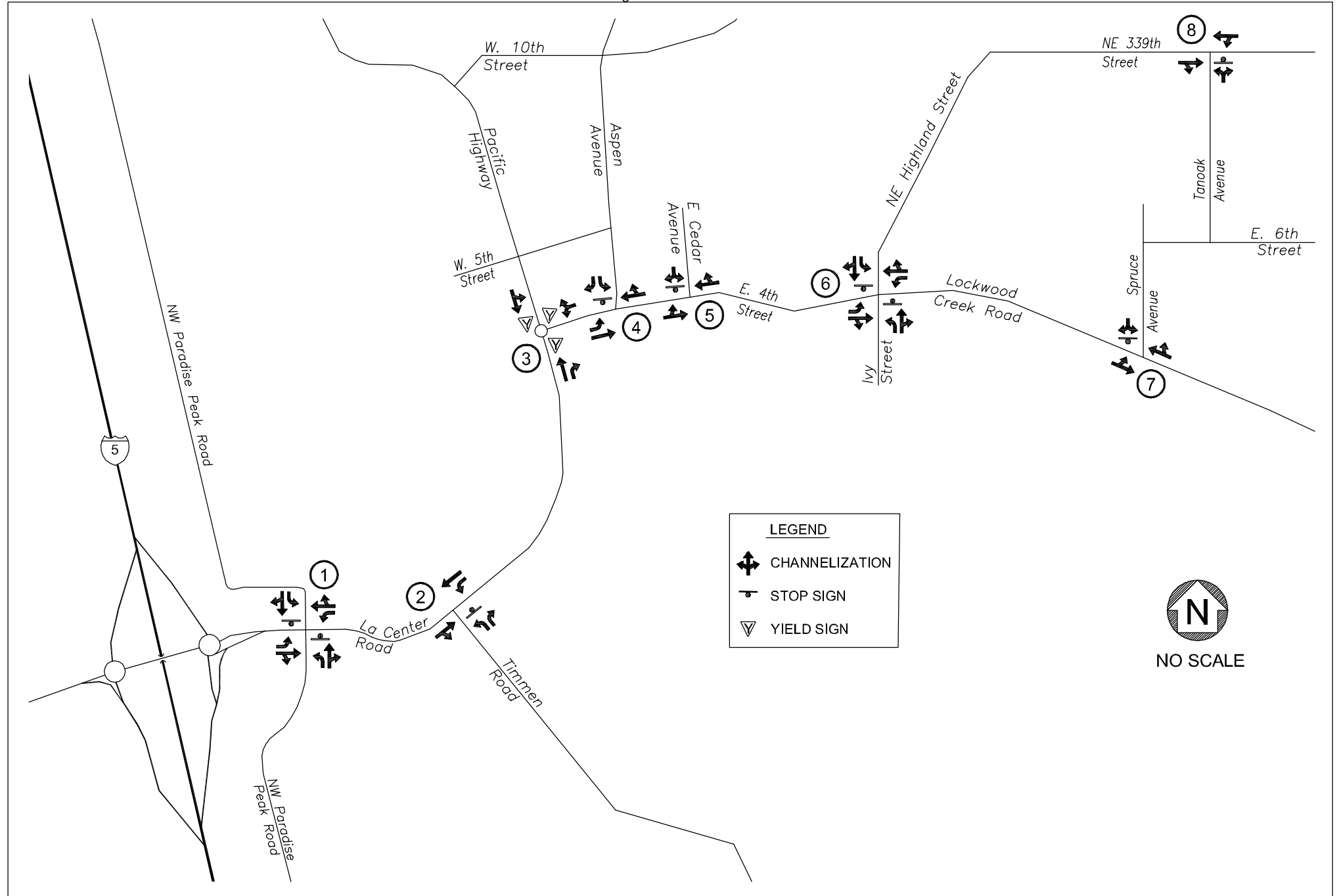
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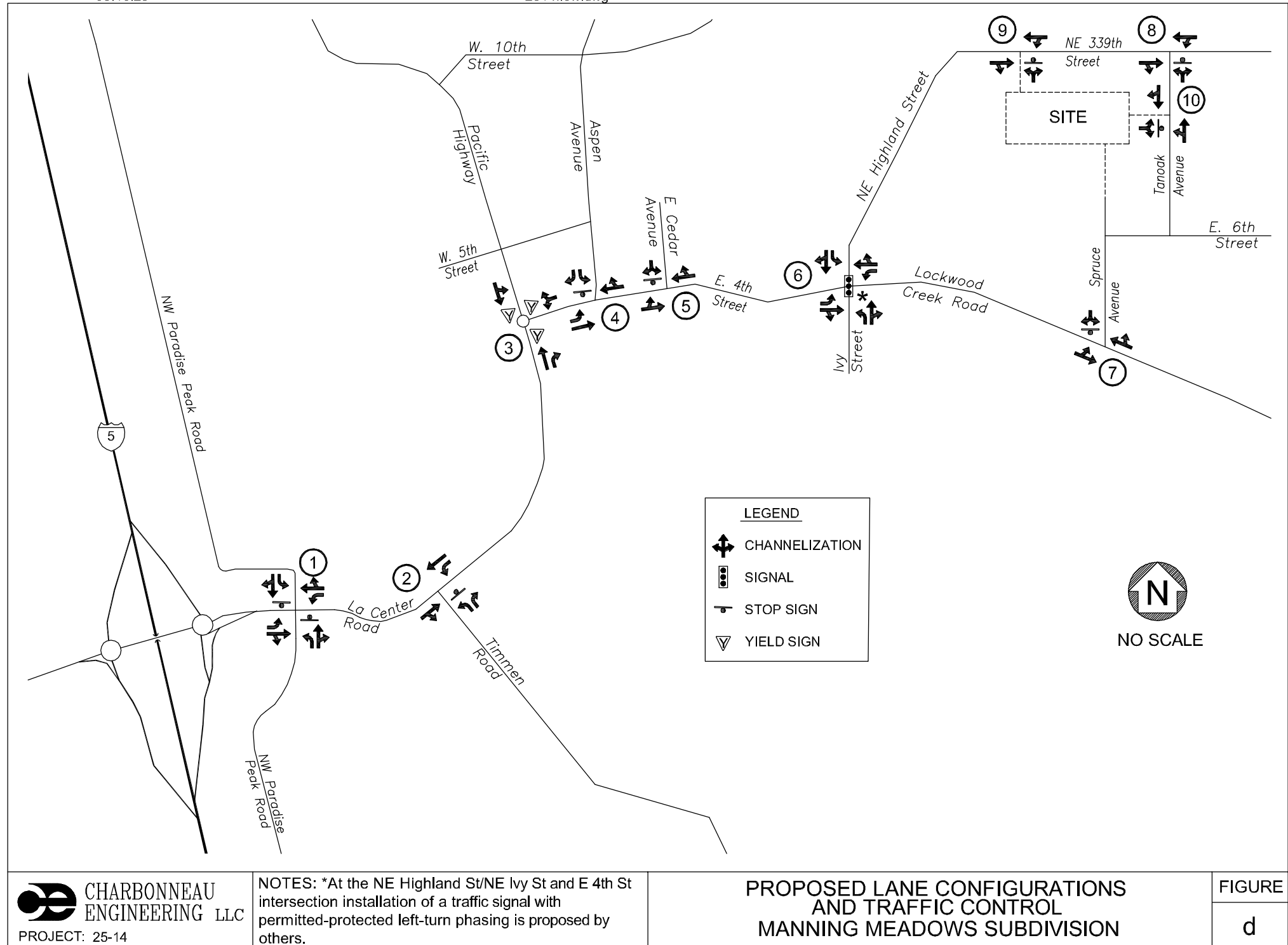


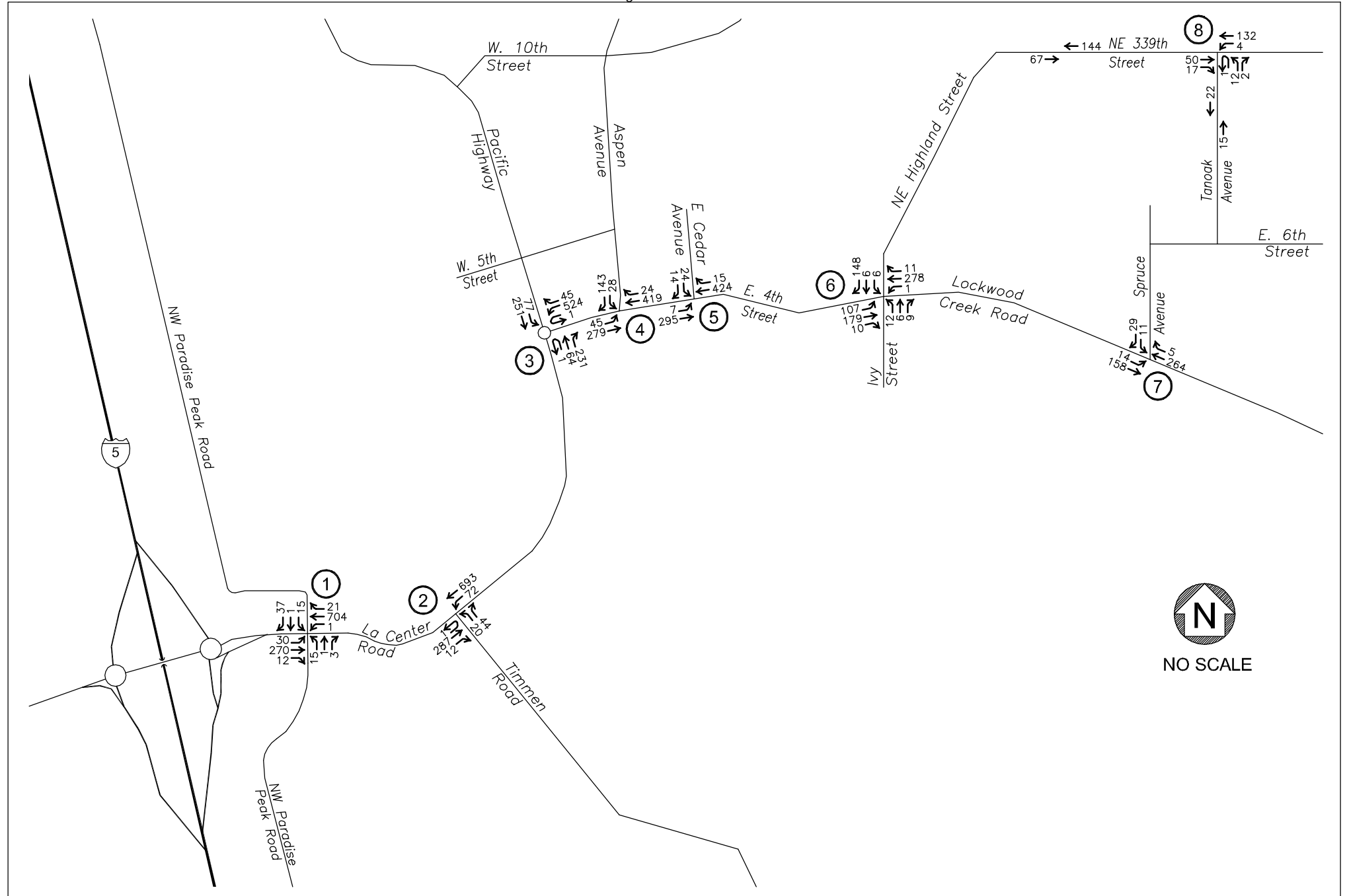
SITE PLAN
MANNING MEADOWS SUBDIVISION

FIGURE
b

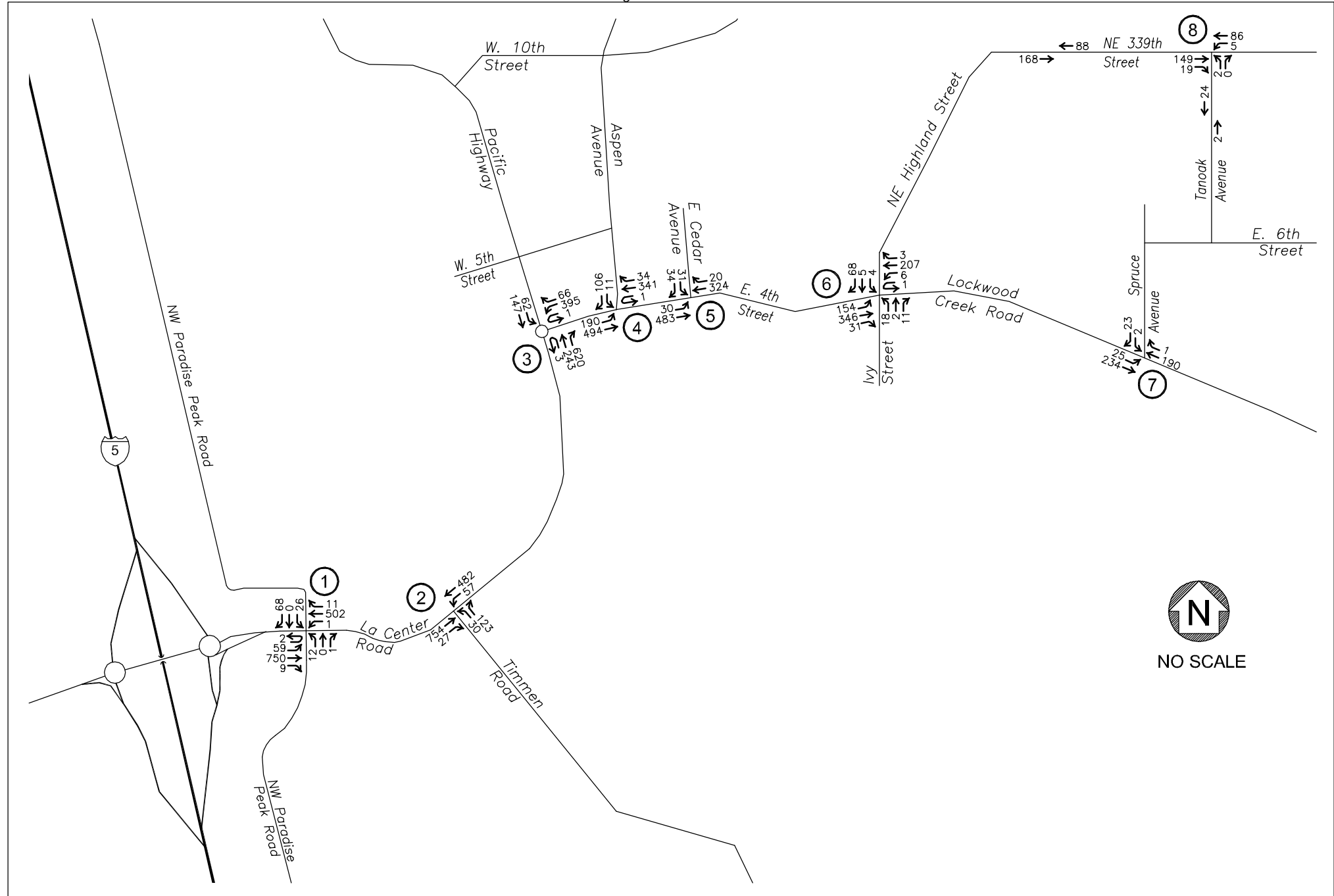


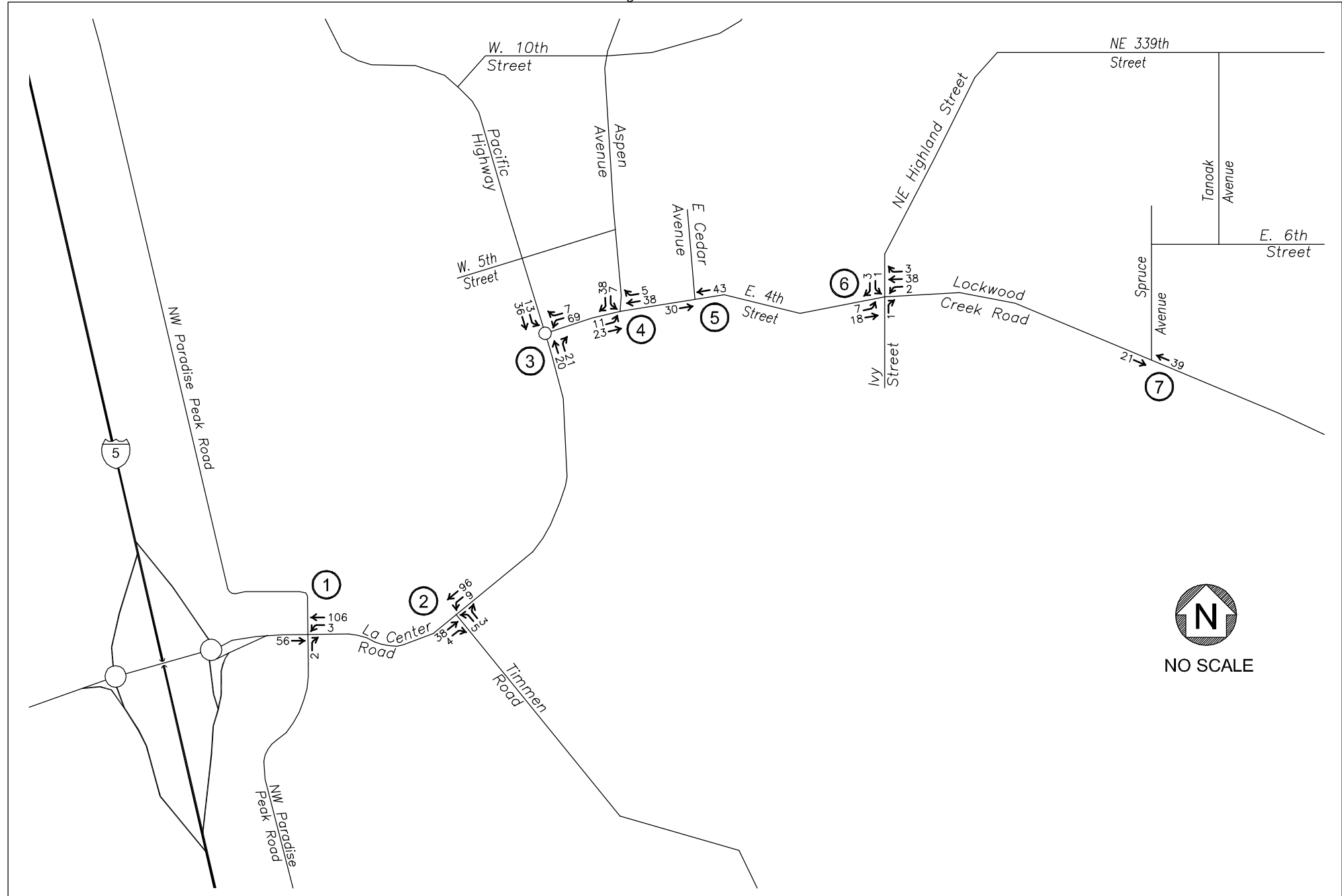


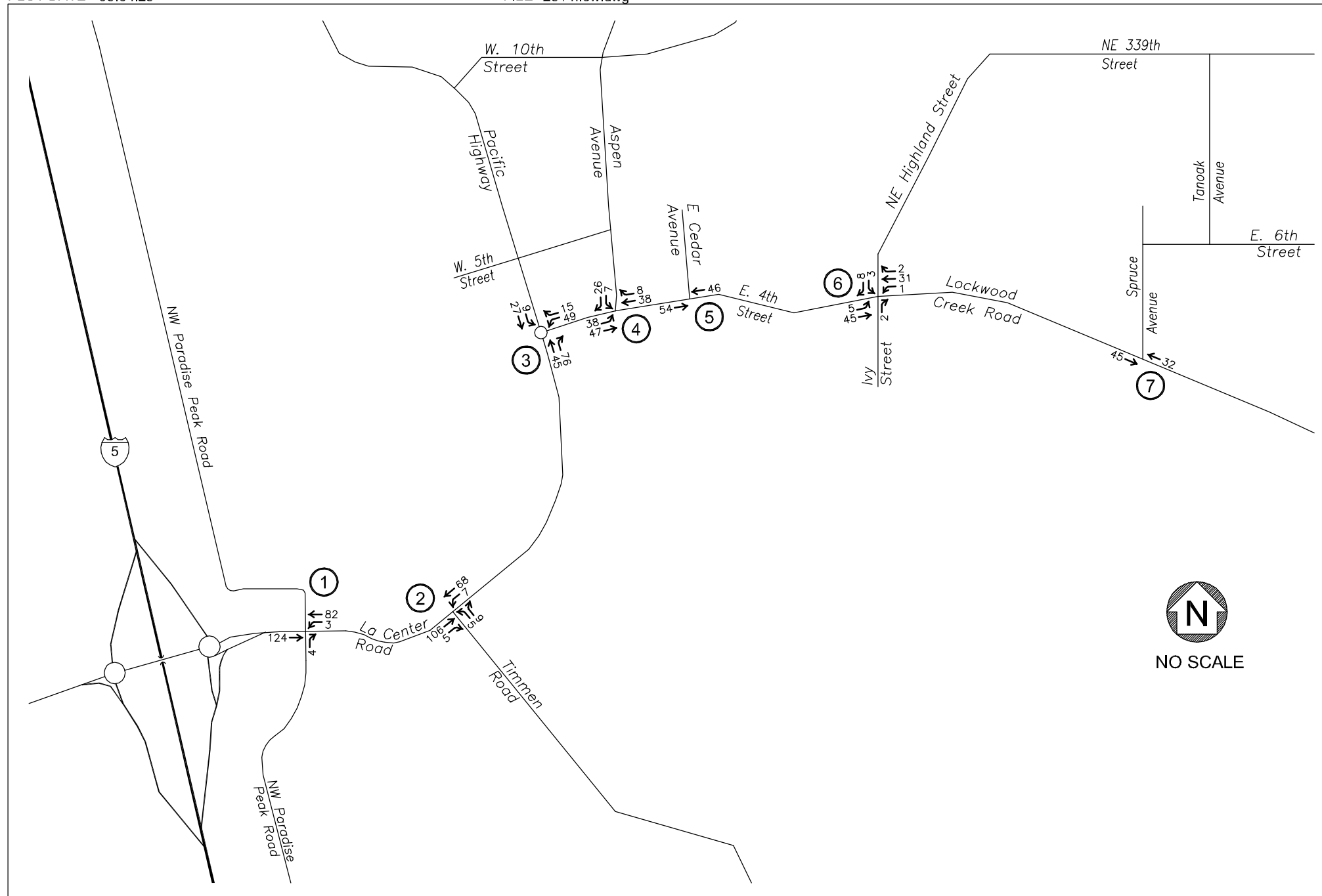


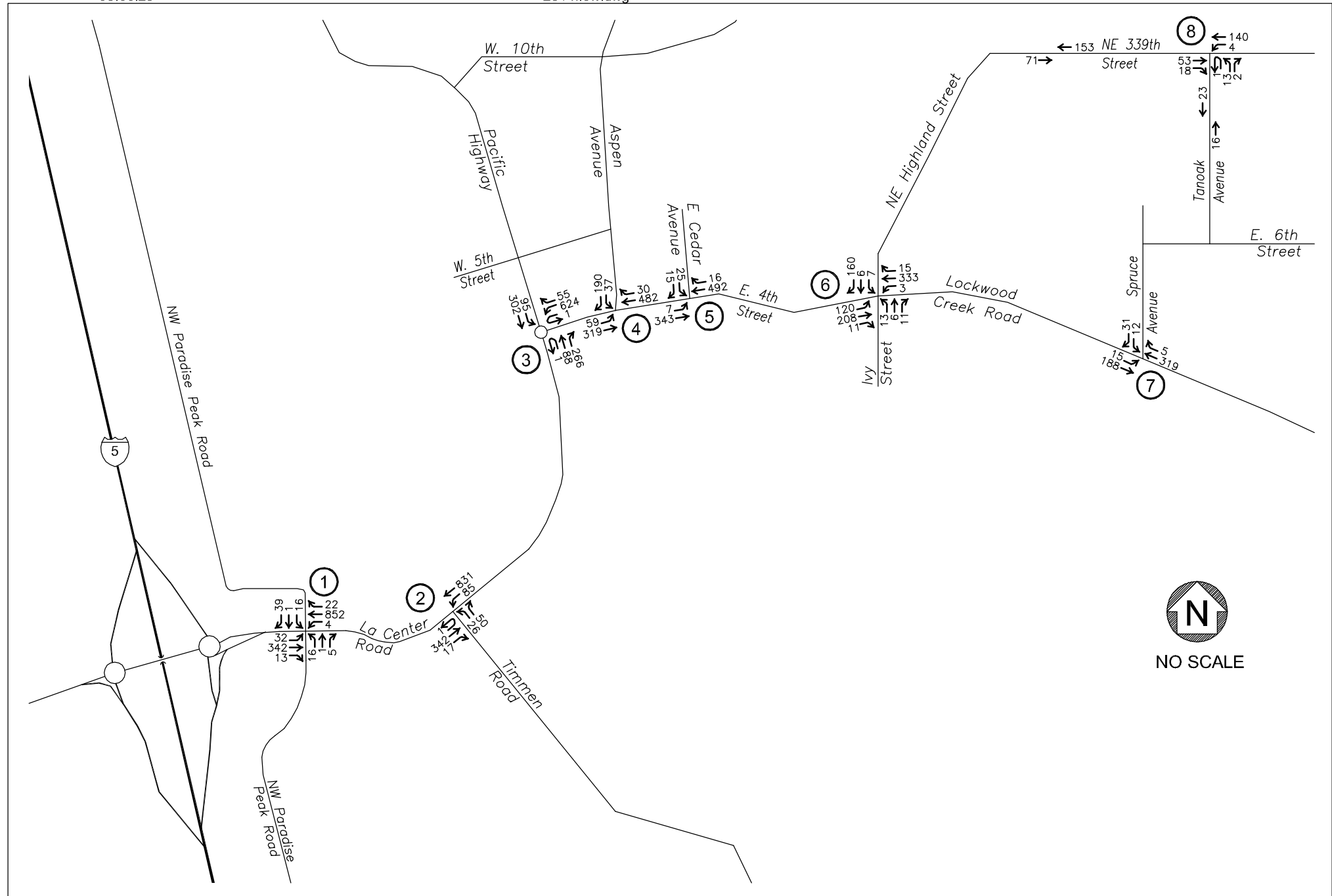


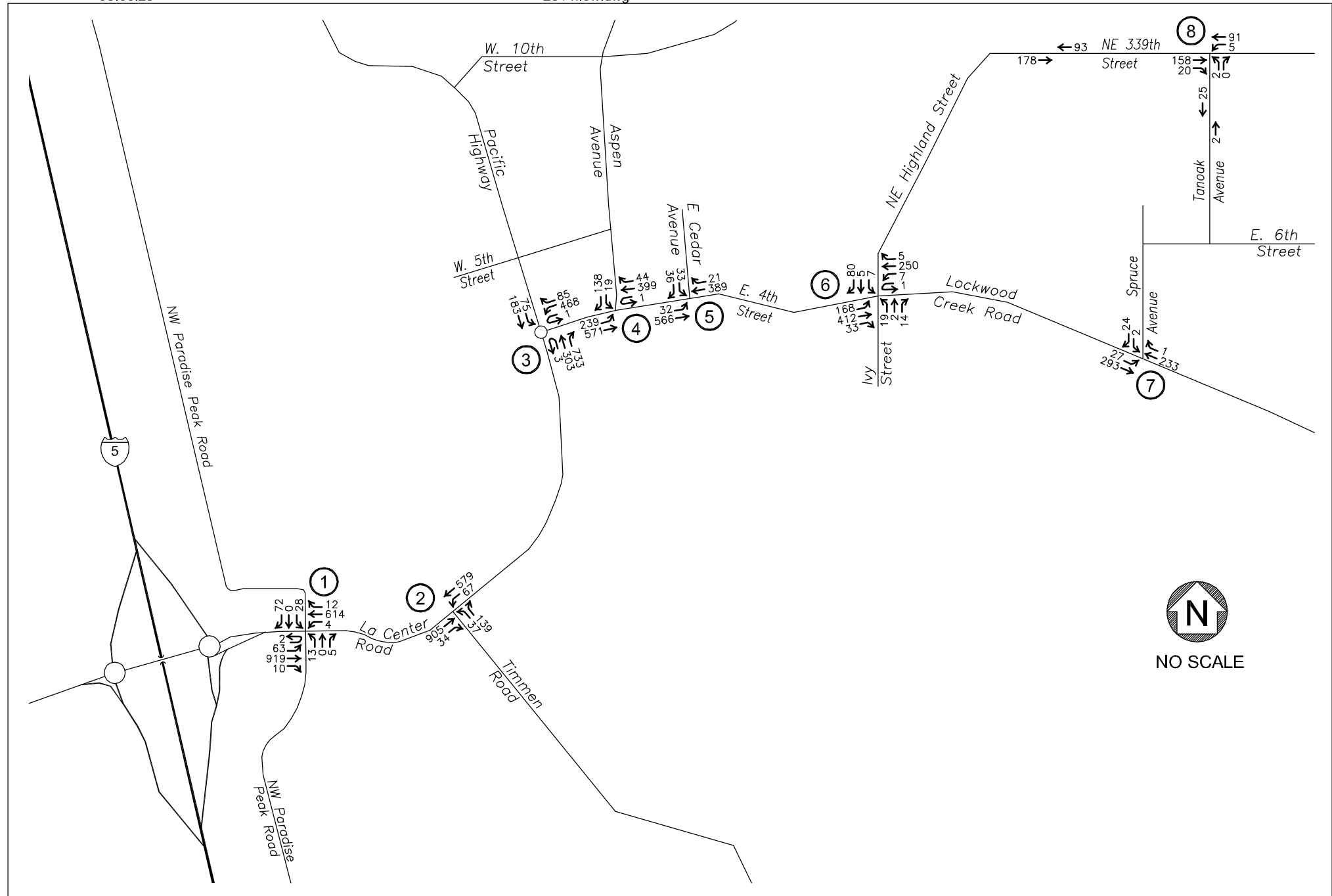
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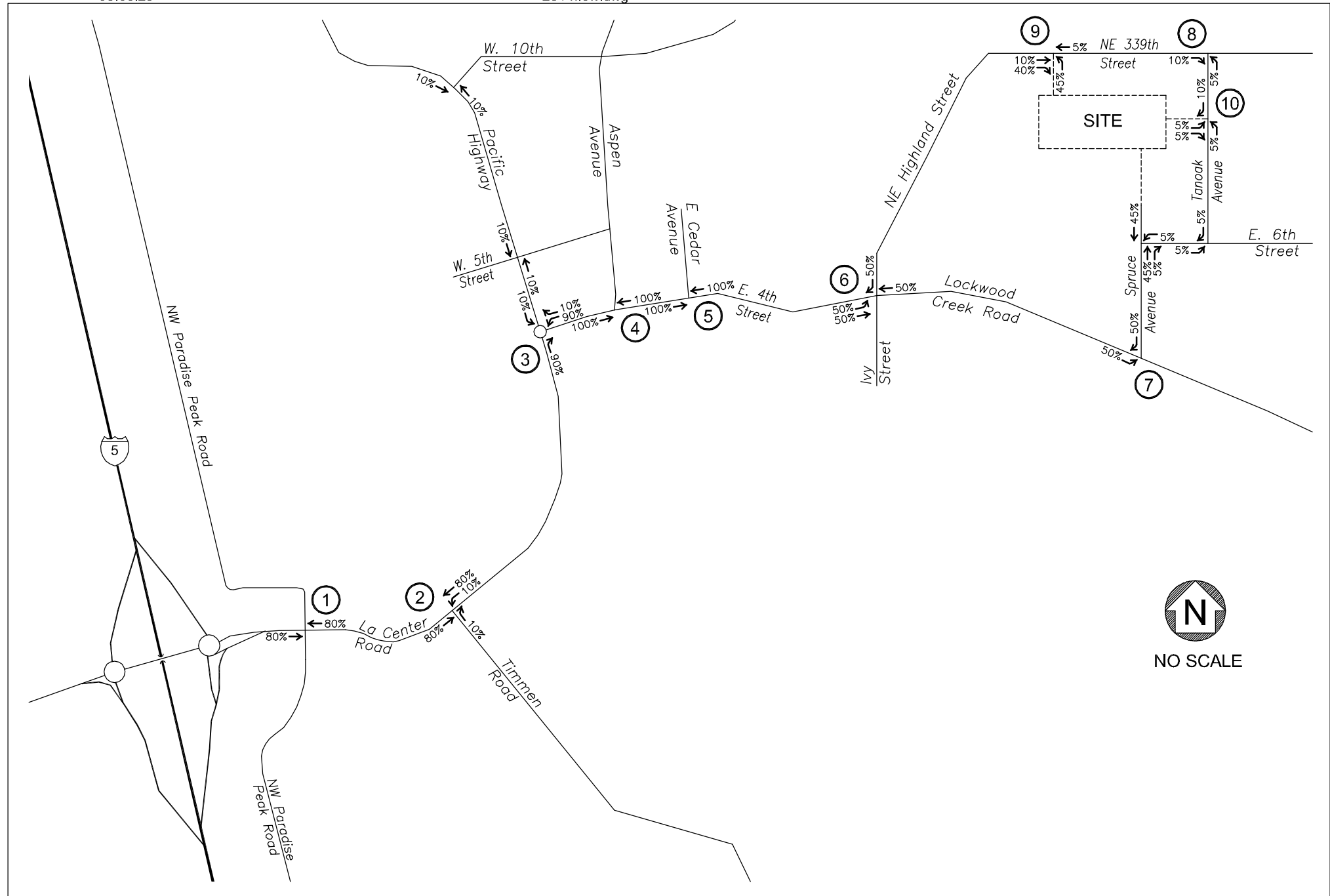


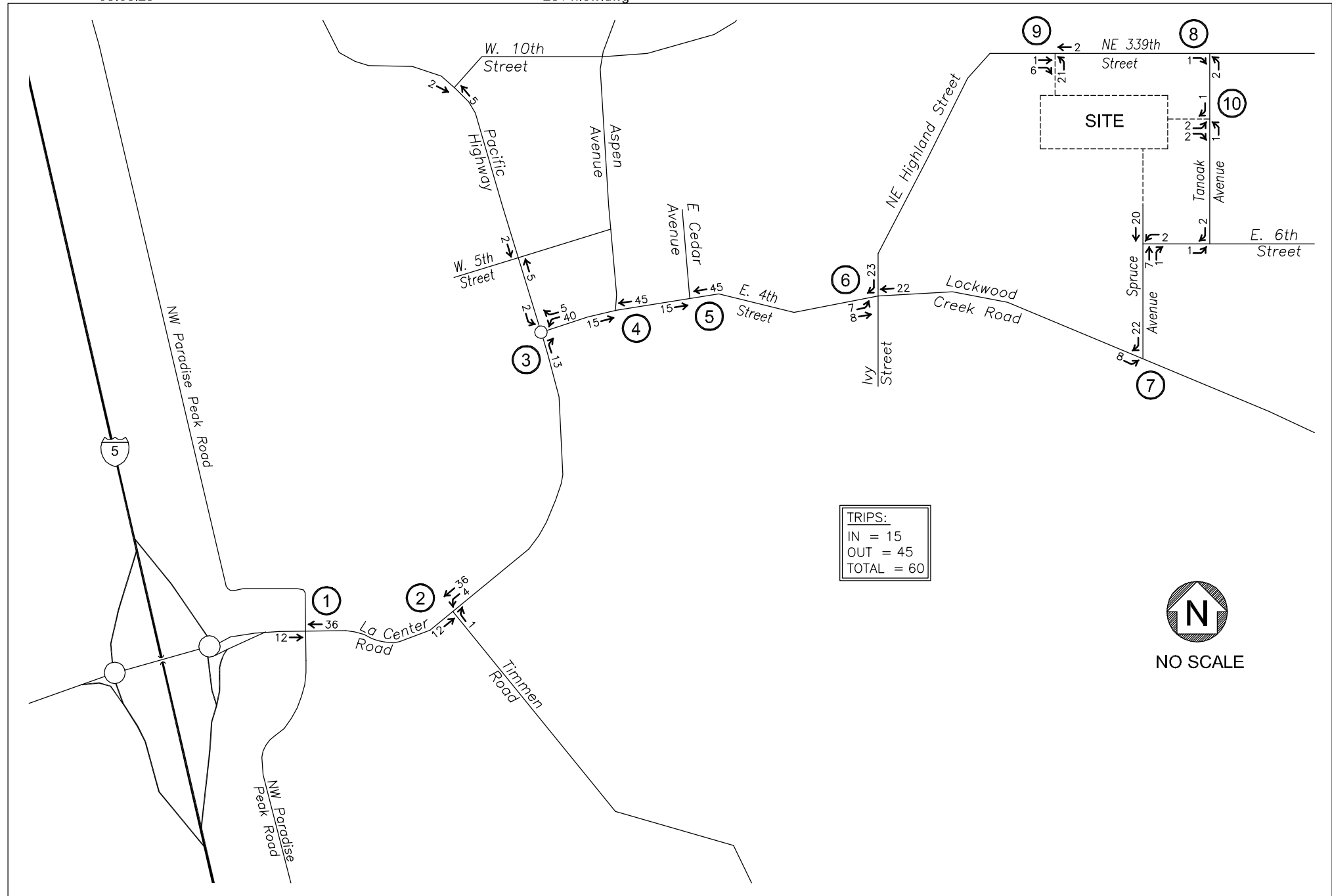


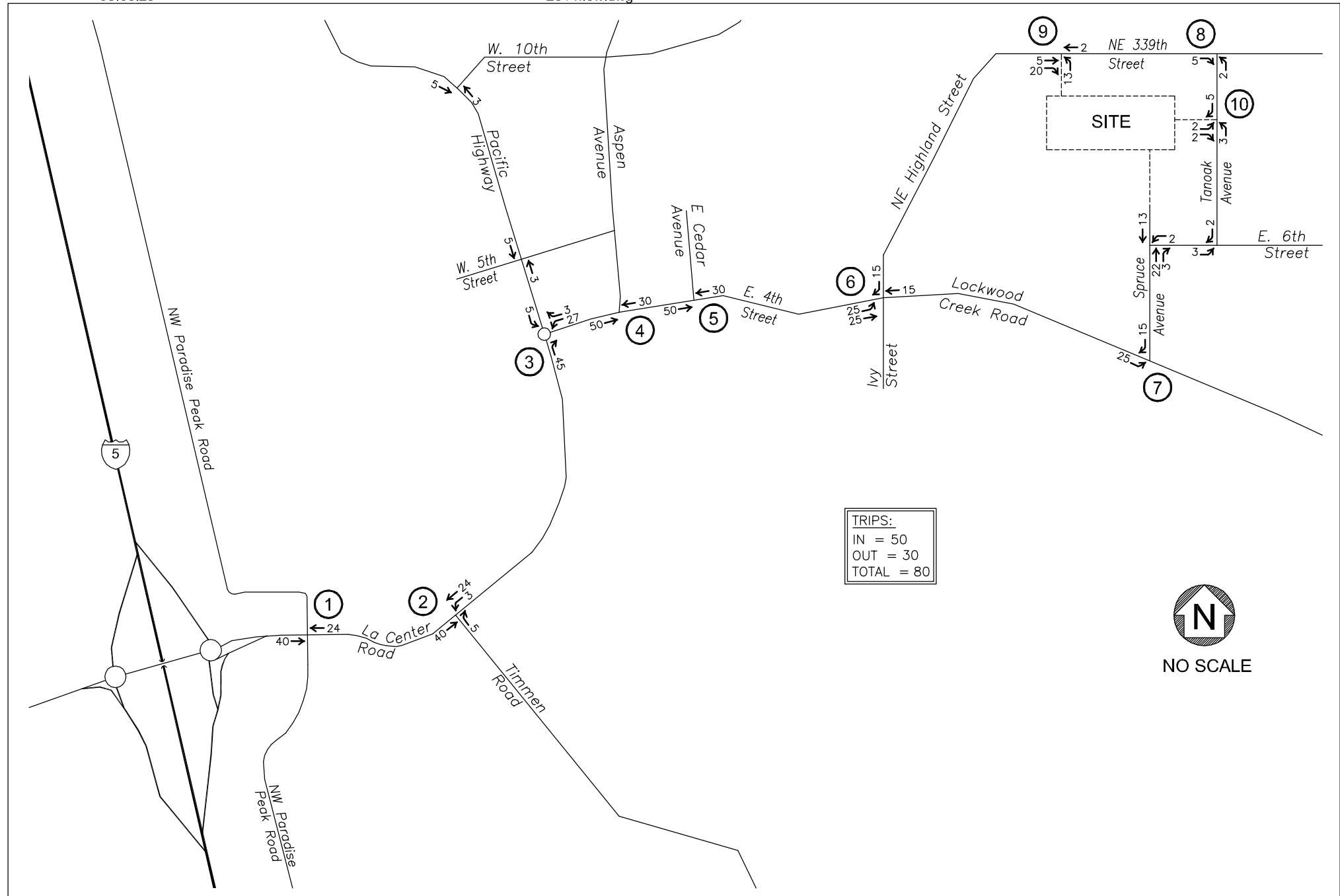


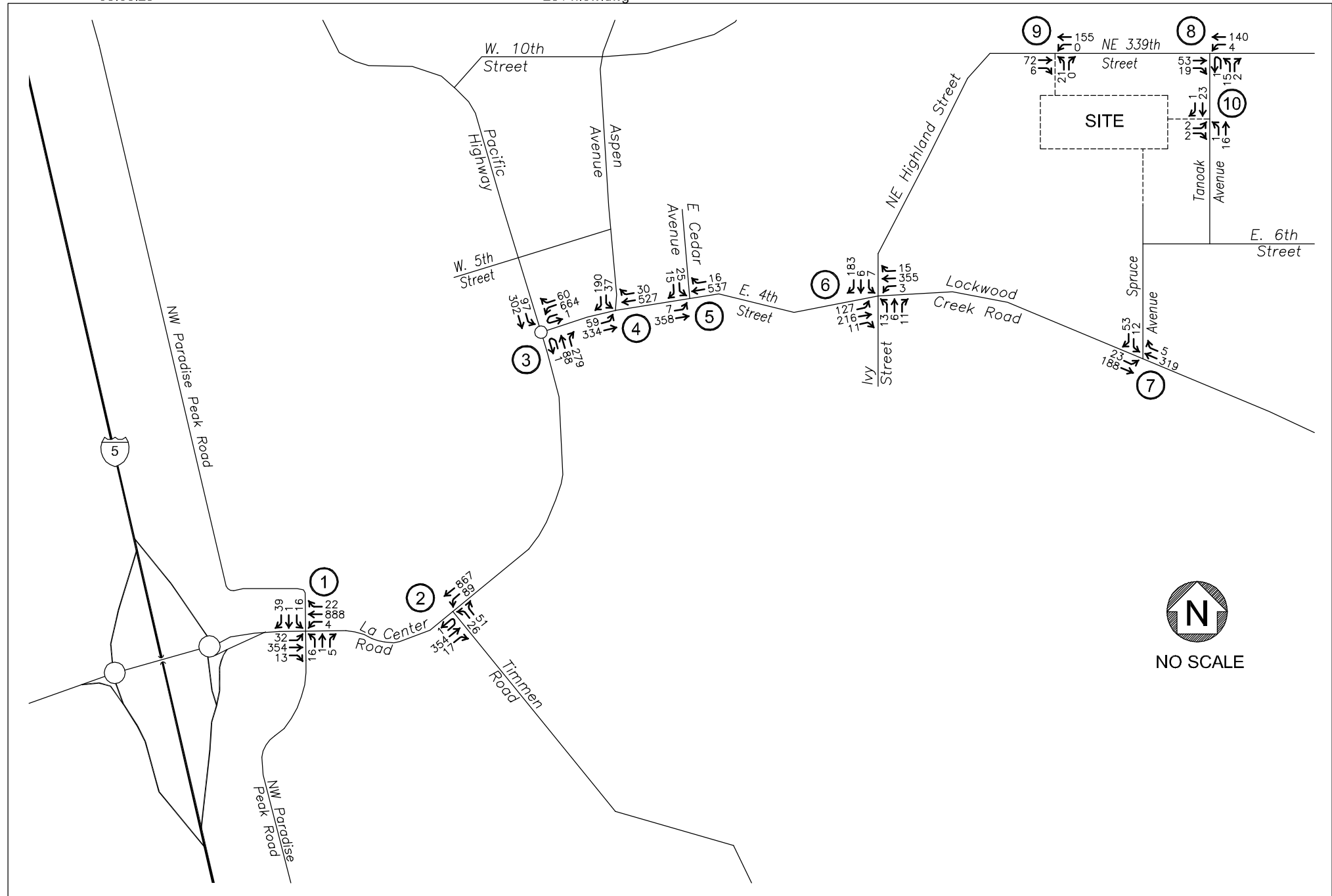


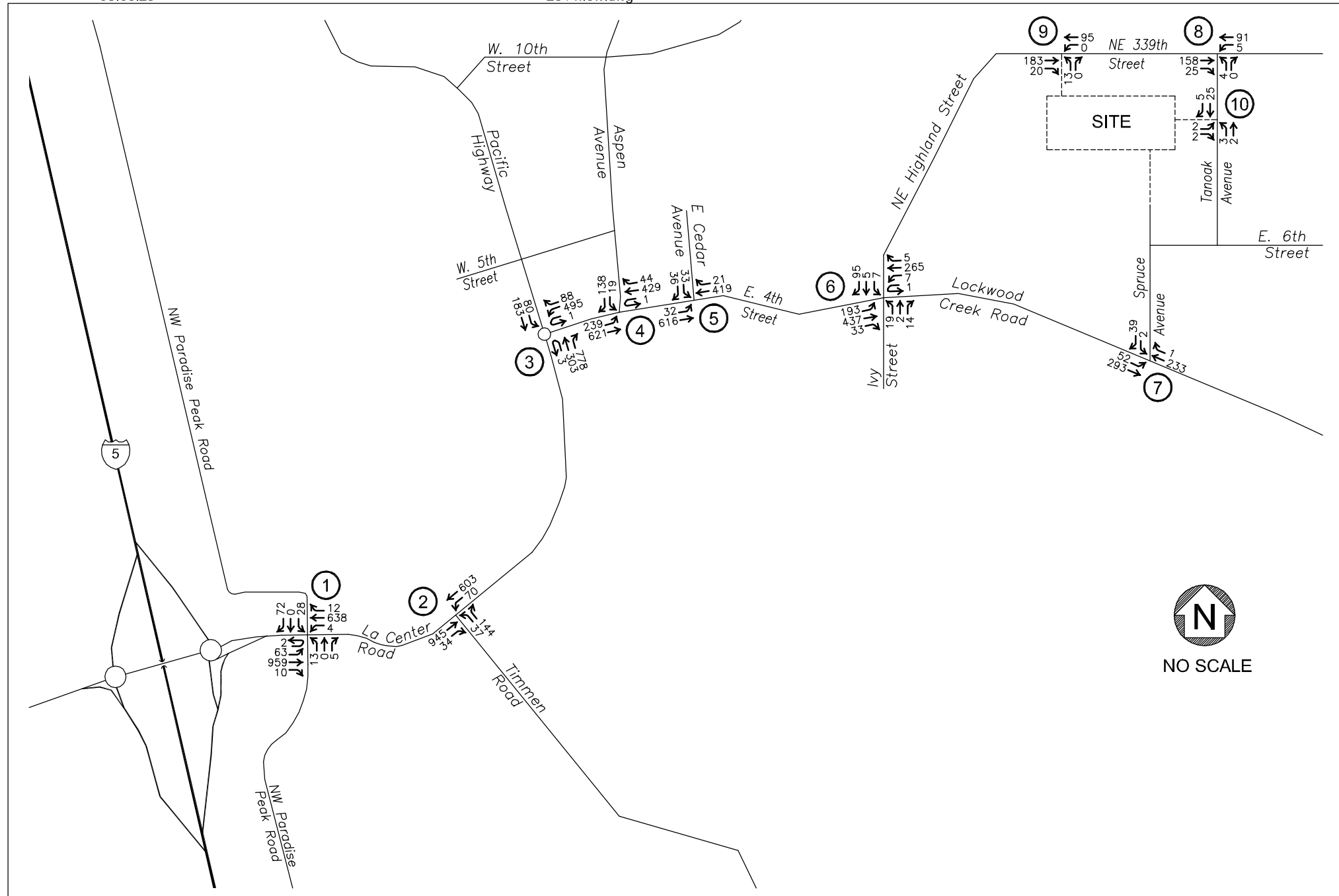












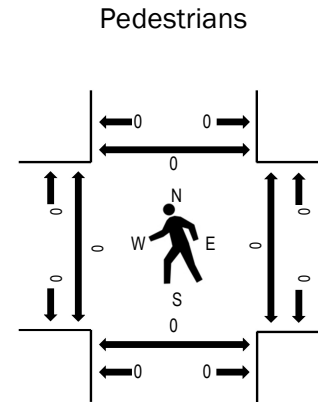
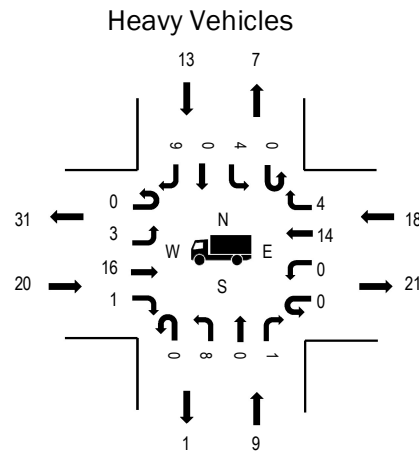
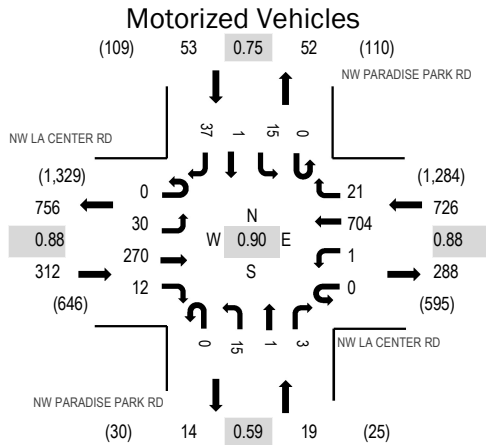
Location: 1 NW PARADISE PARK RD & NW LA CENTER RD AM

Date: Thursday, May 1, 2025

Peak Hour: 07:05 AM - 08:05 AM

Peak 15-Minutes: 07:20 AM - 07:35 AM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	6.4%	0.88
WB	2.5%	0.88
NB	47.4%	0.59
SB	24.5%	0.75
All	5.4%	0.90

Traffic Counts - Motorized Vehicles

Interval Start Time	NW LA CENTER RD				NW LA CENTER RD				NW PARADISE PARK RD				NW PARADISE PARK RD				Total	Rolling Hour
	Eastbound				Westbound				Northbound				Southbound					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	12	0	0	0	56	2	0	1	0	0	0	1	0	7	79	1,109
7:05 AM	0	2	25	2	0	0	38	0	0	3	0	1	0	2	0	3	76	1,110
7:10 AM	0	1	23	0	0	0	58	2	0	2	0	1	0	1	0	1	89	1,110
7:15 AM	0	1	19	1	0	0	65	3	0	0	0	0	0	0	1	4	94	1,099
7:20 AM	0	4	25	1	0	0	62	2	0	1	0	0	0	0	0	5	100	1,075
7:25 AM	0	3	23	1	0	0	68	2	0	0	1	0	0	2	0	6	106	1,060
7:30 AM	0	3	20	3	0	0	68	1	0	2	0	0	0	2	0	5	104	1,029
7:35 AM	0	3	23	0	0	0	66	3	0	1	0	1	0	0	0	1	98	1,009
7:40 AM	0	0	17	0	0	0	63	1	0	2	0	0	0	1	0	4	88	993
7:45 AM	0	5	17	1	0	0	61	2	0	0	0	0	0	2	0	2	90	984
7:50 AM	0	2	23	2	0	0	65	1	0	1	0	0	0	2	0	2	98	979
7:55 AM	0	5	29	0	0	0	43	2	0	2	0	0	0	2	0	4	87	966
8:00 AM	0	1	26	1	0	1	47	2	0	1	0	0	0	1	0	0	80	955
8:05 AM	0	4	27	1	0	0	38	1	0	0	0	0	0	3	0	2	76	
8:10 AM	0	5	25	1	0	1	43	0	0	0	1	0	0	0	0	2	78	
8:15 AM	0	1	20	2	0	0	39	0	0	1	0	0	0	2	1	4	70	
8:20 AM	0	2	28	0	0	0	51	1	0	0	0	0	0	0	0	3	85	
8:25 AM	0	5	32	3	0	0	33	0	0	1	0	0	0	1	0	0	75	
8:30 AM	0	1	29	2	0	0	46	1	0	0	0	0	0	1	1	3	84	
8:35 AM	0	4	17	0	0	0	53	0	0	0	0	0	0	2	0	6	82	
8:40 AM	0	3	31	0	0	0	37	8	0	0	0	0	0	0	0	0	79	
8:45 AM	0	2	23	0	0	1	51	7	0	0	0	0	0	0	0	1	85	
8:50 AM	0	1	26	2	0	0	47	1	0	2	0	0	0	2	0	4	85	
8:55 AM	0	4	20	1	0	0	37	4	0	0	0	0	0	5	0	5	76	
Count Total	0	62	560	24	0	3	1,235	46	0	20	2	3	0	32	3	74	2,064	
Peak Hour	0	30	270	12	0	1	704	21	0	15	1	3	0	15	1	37	1,110	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	3	1	2	4	10	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	2	2	1	4	9	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	2	1	2	5	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	1	0	2	1	4	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	2	1	1	1	5	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	1	0	1	1	3	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	2	1	1	0	4	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	2	1	3	0	6	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	1	0	1	1	3	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	3	0	2	1	6	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	1	1	1	3	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	5	1	2	1	9	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	1	0	2	0	3	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	1	0	2	1	4	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	1	0	3	1	5	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	0	0	2	2	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	1	0	1	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	1	0	0	0	1	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	4	0	4	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	0	1	0	1	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	3	0	11	0	14	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	1	0	12	0	13	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	1	0	1	0	2	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	4	0	2	0	6	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	35	10	57	21	123	Count Total	0	0	0	0	0	Count Total	0	0	0	0	0
Peak Hour	20	9	18	13	60	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0



ALL TRAFFIC DATA SERVICES

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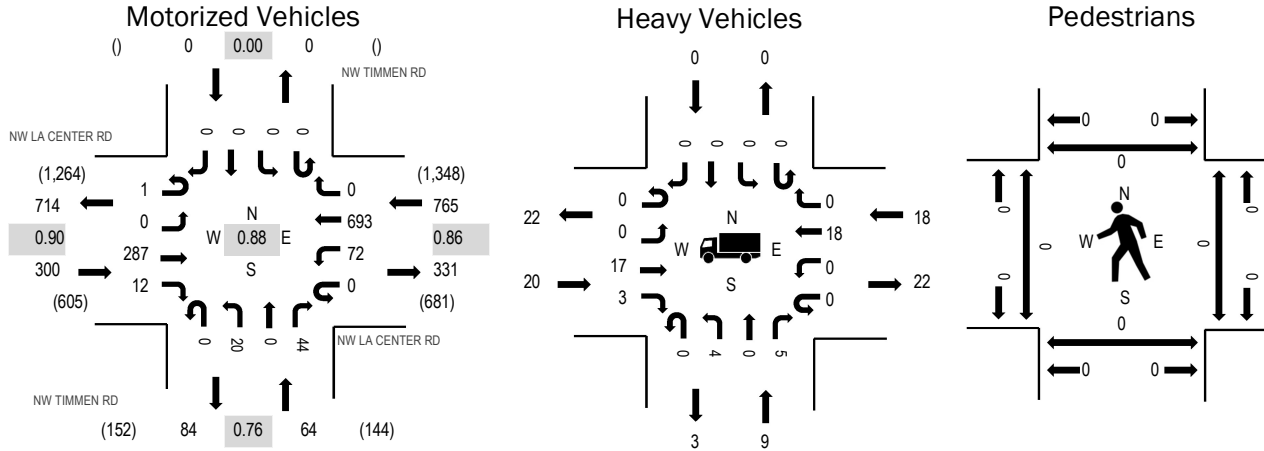
Location: 2 NW TIMMEN RD & NW LA CENTER RD AM

Date: Thursday, May 1, 2025

Peak Hour: 07:10 AM - 08:10 AM

Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	6.7%	0.90
WB	2.4%	0.86
NB	14.1%	0.76
SB	0.0%	0.00
All	4.2%	0.88

Traffic Counts - Motorized Vehicles

Interval Start Time	NW LA CENTER RD Eastbound				NW LA CENTER RD Westbound				NW TIMMEN RD Northbound				NW TIMMEN RD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	14	0	0	5	51	0	0	1	0	3	0	0	0	0	74	1,115
7:05 AM	0	0	21	1	0	5	42	0	0	2	0	3	0	0	0	0	74	1,122
7:10 AM	1	0	25	2	0	6	53	0	0	1	0	2	0	0	0	0	90	1,129
7:15 AM	0	0	16	0	0	5	63	0	0	0	0	7	0	0	0	0	91	1,111
7:20 AM	0	0	27	0	0	5	71	0	0	1	0	3	0	0	0	0	107	1,097
7:25 AM	0	0	31	2	0	4	76	0	0	3	0	6	0	0	0	0	122	1,069
7:30 AM	0	0	15	0	0	6	54	0	0	0	0	2	0	0	0	0	77	1,026
7:35 AM	0	0	27	0	0	11	69	0	0	4	0	4	0	0	0	0	115	1,049
7:40 AM	0	0	20	1	0	6	57	0	0	1	0	8	0	0	0	0	93	1,007
7:45 AM	0	0	20	0	0	7	62	0	0	1	0	1	0	0	0	0	91	1,008
7:50 AM	0	0	22	2	0	10	60	0	0	1	0	4	0	0	0	0	99	1,002
7:55 AM	0	0	29	2	0	5	42	0	0	0	0	4	0	0	0	0	82	975
8:00 AM	0	0	22	2	0	4	46	0	0	6	0	1	0	0	0	0	81	982
8:05 AM	0	0	33	1	0	3	40	0	0	2	0	2	0	0	0	0	81	
8:10 AM	0	0	23	0	0	5	39	0	0	0	0	5	0	0	0	0	72	
8:15 AM	0	0	23	2	0	3	40	0	0	3	0	6	0	0	0	0	77	
8:20 AM	0	0	26	0	0	2	45	0	0	4	0	2	0	0	0	0	79	
8:25 AM	0	0	29	1	0	8	34	0	0	1	0	6	0	0	0	0	79	
8:30 AM	0	0	34	1	0	5	46	0	0	4	0	10	0	0	0	0	100	
8:35 AM	0	0	22	1	0	5	42	0	0	2	0	1	0	0	0	0	73	
8:40 AM	0	0	26	0	0	7	51	0	0	7	0	3	0	0	0	0	94	
8:45 AM	0	0	23	0	0	5	51	0	0	3	0	3	0	0	0	0	85	
8:50 AM	0	0	23	1	0	5	40	0	0	0	0	3	0	0	0	0	72	
8:55 AM	0	0	33	1	0	5	42	0	0	0	0	8	0	0	0	0	89	
Count Total	1	0	584	20	0	132	1,216	0	0	47	0	97	0	0	0	0	2,097	
Peak Hour	1	0	287	12	0	72	693	0	0	20	0	44	0	0	0	0	1,129	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	2	0	2	0	4	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	4	2	0	0	6	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	2	1	1	0	4	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	2	2	0	4	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	1	1	1	0	3	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	2	0	1	0	3	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	2	0	0	0	2	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	3	1	2	0	6	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	2	2	0	4	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	4	0	1	0	5	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	1	1	1	0	3	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	3	0	1	0	4	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	1	1	1	0	3	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	1	0	5	0	6	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	1	0	0	0	1	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	2	0	0	2	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	1	0	1	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	1	0	0	1	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	2	2	0	4	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	1	2	0	3	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	1	1	15	0	17	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	1	2	4	0	7	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	1	0	0	0	1	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	0	2	0	2	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	30	20	46	0	96	Count Total	0	0	0	0	0	Count Total	0	0	0	0	0
Peak Hour	20	9	18	0	47	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

Location: 3 NW PACIFIC HWY & W 4TH ST AM

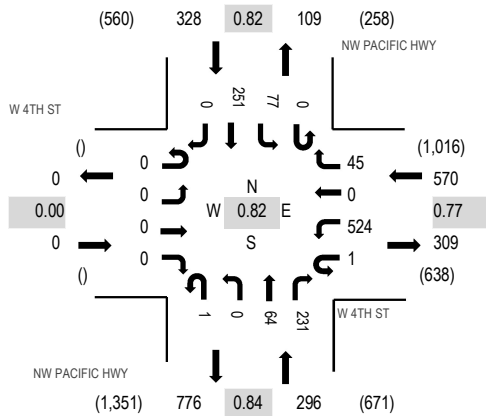
Date: Thursday, May 1, 2025

Peak Hour: 07:00 AM - 08:00 AM

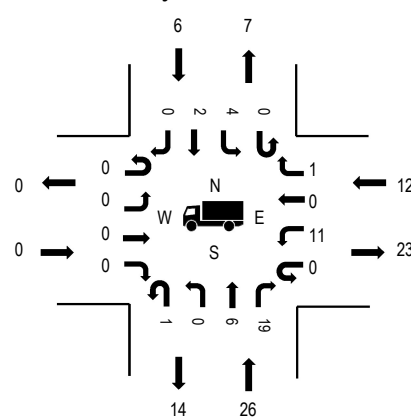
Peak 15-Minutes: 07:25 AM - 07:40 AM

Peak Hour

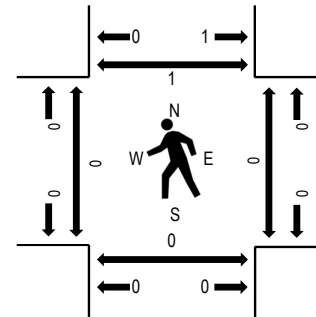
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	2.1%	0.77
NB	8.8%	0.84
SB	1.8%	0.82
All	3.7%	0.82

Traffic Counts - Motorized Vehicles

Interval Start Time	W 4TH ST Eastbound				W 4TH ST Westbound				NW PACIFIC HWY Northbound				NW PACIFIC HWY Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	0	35	0	2	0	0	3	11	0	3	23	0	77	1,194
7:05 AM	0	0	0	0	0	30	0	0	0	0	4	17	0	3	21	0	75	1,190
7:10 AM	0	0	0	0	1	38	0	0	0	0	1	26	0	5	25	0	96	1,192
7:15 AM	0	0	0	0	0	43	0	1	0	0	7	16	0	3	26	0	96	1,190
7:20 AM	0	0	0	0	0	42	0	4	0	0	8	23	0	11	23	0	111	1,171
7:25 AM	0	0	0	0	0	60	0	3	0	0	6	34	0	12	24	0	139	1,146
7:30 AM	0	0	0	0	0	47	0	4	0	0	3	17	0	11	16	0	98	1,098
7:35 AM	0	0	0	0	0	57	0	6	0	0	3	23	0	13	24	0	126	1,111
7:40 AM	0	0	0	0	0	46	0	12	0	0	5	21	0	6	10	0	100	1,072
7:45 AM	0	0	0	0	0	58	0	6	0	0	6	11	0	4	15	0	100	1,085
7:50 AM	0	0	0	0	0	40	0	3	0	0	8	16	0	3	22	0	92	1,072
7:55 AM	0	0	0	0	0	28	0	4	1	0	10	16	0	3	22	0	84	1,060
8:00 AM	0	0	0	0	0	32	0	0	0	0	8	20	0	2	11	0	73	1,053
8:05 AM	0	0	0	0	0	29	0	1	0	0	9	19	0	5	14	0	77	
8:10 AM	0	0	0	0	0	37	0	1	0	0	11	21	0	6	18	0	94	
8:15 AM	0	0	0	0	0	24	0	1	1	0	9	23	0	8	11	0	77	
8:20 AM	0	0	0	0	0	28	0	4	0	0	4	22	0	7	21	0	86	
8:25 AM	0	0	0	0	0	27	0	4	0	0	11	22	0	10	17	0	91	
8:30 AM	0	0	0	0	0	34	0	2	0	0	13	28	0	17	17	0	111	
8:35 AM	0	0	0	0	1	42	0	5	0	0	12	15	0	5	7	0	87	
8:40 AM	0	0	0	0	0	50	0	5	0	0	14	30	0	5	9	0	113	
8:45 AM	0	0	0	0	0	46	0	4	0	0	9	14	0	3	11	0	87	
8:50 AM	0	0	0	0	0	38	0	5	0	0	7	17	0	3	10	0	80	
8:55 AM	0	0	0	0	0	26	0	0	0	0	10	26	0	0	15	0	77	
Count Total	0	0	0	0	2	937	0	77	2	0	181	488	0	148	412	0	2,247	
Peak Hour	0	0	0	0	1	524	0	45	1	0	64	231	0	77	251	0	1,194	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	2	0	1	3	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	1	1
7:05 AM	0	4	0	0	4	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	2	1	0	3	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	2	2	0	4	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	1	0	1	2	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	2	1	1	4	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	1	1	2	4	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	4	2	0	6	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	1	2	0	3	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	2	1	0	3	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	3	1	0	4	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	2	1	1	4	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	1	1	0	2	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	0	4	0	4	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	2	0	0	2	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	1	0	0	1	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	0	3	3	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	1	3	4	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	0	2	2	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	1	2	0	3	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	1	14	2	17	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	1	1	2	4	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	1	2	0	3	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	0	34	37	18	89	Count Total	0	0	0	0	0	Count Total	0	0	0	1	1
Peak Hour	0	26	12	6	44	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	1	1



ALL TRAFFIC DATA SERVICES

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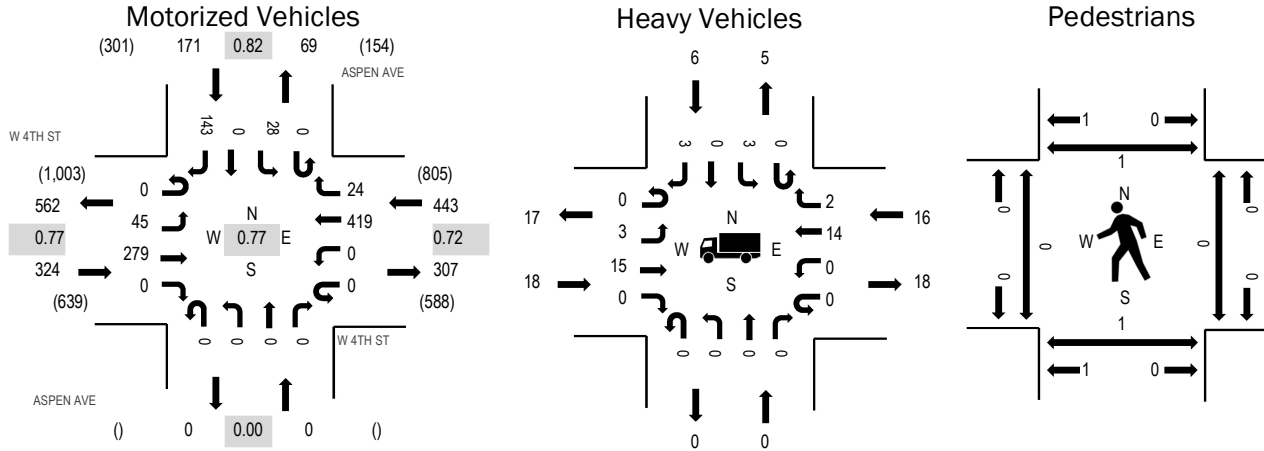
www.alltrafficdata.net

Location: 4 ASPEN AVE & W 4TH ST AM

Date: Thursday, May 1, 2025

Peak Hour: 07:10 AM - 08:10 AM

Peak 15-Minutes: 07:25 AM - 07:40 AM

Peak Hour

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	5.6%	0.77
WB	3.6%	0.72
NB	0.0%	0.00
SB	3.5%	0.82
All	4.3%	0.77

Traffic Counts - Motorized Vehicles

Interval Start Time	W 4TH ST Eastbound				W 4TH ST Westbound				ASPEN AVE Northbound				ASPEN AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	1	11	0	0	0	26	0	0	0	0	0	0	1	0	7	46	926
7:05 AM	0	3	19	0	0	0	21	0	0	0	0	0	0	2	0	8	53	932
7:10 AM	0	8	24	0	0	0	22	1	0	0	0	0	0	0	0	17	72	938
7:15 AM	0	2	17	0	0	0	33	2	0	0	0	0	0	1	0	9	64	929
7:20 AM	0	1	34	0	0	0	38	0	0	0	0	0	0	3	0	10	86	925
7:25 AM	0	5	42	0	0	0	46	2	0	0	0	0	0	6	0	15	116	902
7:30 AM	0	1	25	0	0	0	39	4	0	0	0	0	0	3	0	12	84	852
7:35 AM	0	2	33	0	0	0	48	4	0	0	0	0	0	4	0	13	104	859
7:40 AM	0	3	27	0	0	0	45	3	0	0	0	0	0	4	0	15	97	833
7:45 AM	0	2	13	0	0	0	51	5	0	0	0	0	0	1	0	12	84	830
7:50 AM	0	8	11	0	0	0	27	2	0	0	0	0	0	2	0	13	63	818
7:55 AM	0	6	15	0	0	0	25	1	0	0	0	0	0	1	0	9	57	823
8:00 AM	0	2	18	0	0	0	19	0	0	0	0	0	0	2	0	11	52	819
8:05 AM	0	5	20	0	0	0	26	0	0	0	0	0	0	1	0	7	59	
8:10 AM	0	5	22	0	0	0	26	1	0	0	0	0	0	2	0	7	63	
8:15 AM	0	10	21	0	0	0	20	1	0	0	0	0	0	2	0	6	60	
8:20 AM	0	2	27	0	0	0	20	1	0	0	0	0	0	1	0	12	63	
8:25 AM	0	6	23	0	0	0	24	4	0	0	0	0	0	4	0	5	66	
8:30 AM	0	7	38	0	0	0	30	1	0	0	0	0	0	7	0	8	91	
8:35 AM	0	4	18	0	0	0	45	3	0	0	0	0	0	2	0	6	78	
8:40 AM	0	12	24	0	0	0	41	4	0	0	0	0	0	3	0	10	94	
8:45 AM	0	3	14	0	0	0	36	2	0	0	0	0	0	2	0	15	72	
8:50 AM	0	3	17	0	0	0	33	2	0	0	0	0	0	2	0	11	68	
8:55 AM	0	6	19	0	0	0	17	4	0	0	0	0	0	0	0	7	53	
Count Total	0	107	532	0	0	0	758	47	0	0	0	0	0	56	0	245	1,745	
Peak Hour	0	45	279	0	0	0	419	24	0	0	0	0	0	28	0	143	938	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	1	0	0	0	1	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	4	0	0	0	4	7:05 AM	0	0	0	0	0	7:05 AM	0	1	0	0	1
7:10 AM	1	0	1	1	3	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	2	0	2	0	4	7:15 AM	0	0	0	0	0	7:15 AM	0	1	0	0	1
7:20 AM	1	0	0	1	2	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	3	0	1	2	6	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	3	0	1	0	4	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	2	0	2	0	4	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	1	1
7:40 AM	1	0	2	0	3	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	1	0	2	0	3	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	2	0	1	0	3	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	2	0	0	1	3	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	0	3	1	4	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	2	0	0	0	2	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	1	0	0	1	2	8:15 AM	0	0	0	0	0	8:15 AM	1	1	0	0	2
8:20 AM	2	0	0	1	3	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	3	0	2	1	6	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	1	0	0	0	1	8:30 AM	0	0	0	0	0	8:30 AM	1	0	0	0	1
8:35 AM	0	0	3	0	3	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	1	0	13	0	14	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	1	1
8:45 AM	1	0	0	1	2	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	1	0	0	1
8:55 AM	0	0	2	0	2	8:55 AM	0	0	0	0	0	8:55 AM	0	2	0	0	2
Count Total	34	0	36	10	80	Count Total	0	0	0	0	0	Count Total	2	6	0	2	10
Peak Hour	18	0	16	6	40	Peak Hour	0	0	0	0	0	Peak Hour	0	1	0	1	2



ALL TRAFFIC DATA SERVICES

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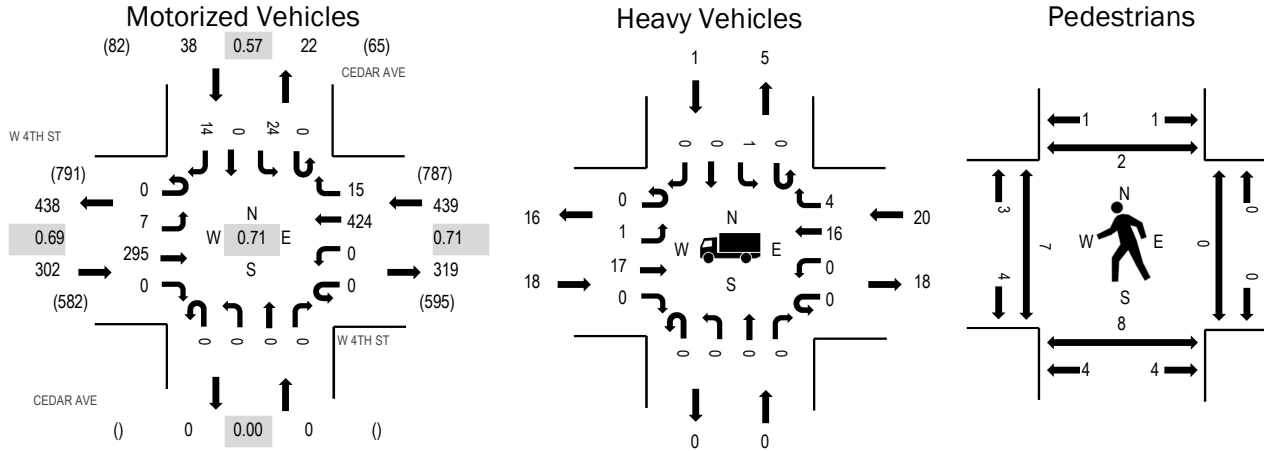
www.alltrafficdata.net

Location: 5 CEDAR AVE & W 4TH ST AM

Date: Thursday, May 1, 2025

Peak Hour: 07:10 AM - 08:10 AM

Peak 15-Minutes: 07:25 AM - 07:40 AM

Peak Hour

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	6.0%	0.69
WB	4.6%	0.71
NB	0.0%	0.00
SB	2.6%	0.57
All	5.0%	0.71

Traffic Counts - Motorized Vehicles

Interval Start Time	W 4TH ST Eastbound				W 4TH ST Westbound				CEDAR AVE Northbound				CEDAR AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	13	0	0	0	23	0	0	0	0	0	0	1	0	1	38	769
7:05 AM	0	1	17	0	0	0	21	0	0	0	0	0	0	2	0	2	43	773
7:10 AM	0	0	24	0	0	0	26	0	0	0	0	0	0	2	0	0	52	779
7:15 AM	0	1	14	0	0	0	33	1	0	0	0	0	0	1	0	1	51	777
7:20 AM	0	0	40	0	0	0	34	2	0	0	0	0	0	1	0	2	79	772
7:25 AM	0	0	41	0	0	0	44	1	0	0	0	0	0	4	0	1	91	742
7:30 AM	0	0	32	0	0	0	44	3	0	0	0	0	0	4	0	2	85	710
7:35 AM	0	0	37	0	0	0	50	3	0	0	0	0	0	4	0	3	97	708
7:40 AM	0	0	31	0	0	0	44	2	0	0	0	0	0	2	0	1	80	687
7:45 AM	0	0	12	0	0	0	54	1	0	0	0	0	0	1	0	2	70	683
7:50 AM	0	1	14	0	0	0	24	0	0	0	0	0	0	1	0	1	41	666
7:55 AM	0	1	14	0	0	0	24	1	0	0	0	0	0	2	0	0	42	686
8:00 AM	0	0	20	0	0	0	21	0	0	0	0	0	0	1	0	0	42	682
8:05 AM	0	4	16	0	0	0	26	1	0	0	0	0	0	1	0	1	49	
8:10 AM	0	1	25	0	0	0	22	0	0	0	0	0	0	1	0	1	50	
8:15 AM	0	2	20	0	0	0	22	1	0	0	0	0	0	0	0	1	46	
8:20 AM	0	1	25	0	0	0	21	1	0	0	0	0	0	1	0	0	49	
8:25 AM	0	1	25	0	0	0	29	0	0	0	0	0	0	2	0	2	59	
8:30 AM	0	1	49	0	0	0	28	0	0	0	0	0	0	5	0	0	83	
8:35 AM	0	0	22	0	0	0	47	1	0	0	0	0	0	3	0	3	76	
8:40 AM	0	4	23	0	0	0	41	4	0	0	0	0	0	3	0	1	76	
8:45 AM	0	6	8	0	0	0	32	4	0	0	0	0	0	1	0	2	53	
8:50 AM	0	3	14	0	0	0	31	6	0	0	0	0	0	1	0	6	61	
8:55 AM	0	5	14	0	0	0	13	1	0	0	0	0	0	1	0	4	38	
Count Total	0	32	550	0	0	0	754	33	0	0	0	0	0	45	0	37	1,451	
Peak Hour	0	7	295	0	0	0	424	15	0	0	0	0	0	24	0	14	779	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	1	0	0	0	1	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	3	0	0	1	4	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	1	0	1	7:10 AM	0	0	0	0	0	7:10 AM	0	2	0	0	2
7:15 AM	2	0	3	0	5	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	2	0	0	0	2	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	5	0	1	0	6	7:25 AM	0	0	0	0	0	7:25 AM	1	0	0	0	1
7:30 AM	3	0	3	1	7	7:30 AM	0	0	0	0	0	7:30 AM	0	1	0	0	1
7:35 AM	2	0	4	0	6	7:35 AM	0	0	0	0	0	7:35 AM	0	1	0	0	1
7:40 AM	1	0	1	0	2	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	0	2	0	2	7:45 AM	0	0	0	0	0	7:45 AM	1	0	0	0	1
7:50 AM	1	0	1	0	2	7:50 AM	0	0	0	0	0	7:50 AM	0	2	0	0	2
7:55 AM	2	0	0	0	2	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	1	1
8:00 AM	0	0	2	0	2	8:00 AM	0	0	0	0	0	8:00 AM	2	2	0	1	5
8:05 AM	0	0	2	0	2	8:05 AM	0	0	0	0	0	8:05 AM	3	0	0	0	3
8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	1	0	0	0	1	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	3	0	1	0	4	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	1	1
8:25 AM	2	0	2	0	4	8:25 AM	0	0	0	0	0	8:25 AM	1	0	0	0	1
8:30 AM	3	0	0	1	4	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	0	3	0	3	8:35 AM	0	0	0	0	0	8:35 AM	1	0	0	0	1
8:40 AM	0	0	14	0	14	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	1	0	0	0	1	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	1	0	1	8:50 AM	0	0	0	0	0	8:50 AM	0	1	0	0	1
8:55 AM	0	0	1	0	1	8:55 AM	0	0	0	0	0	8:55 AM	0	2	0	0	2
Count Total	32	0	42	3	77	Count Total	0	0	0	0	0	Count Total	9	11	0	3	23
Peak Hour	18	0	20	1	39	Peak Hour	0	0	0	0	0	Peak Hour	7	8	0	2	17



ALL TRAFFIC DATA SERVICES

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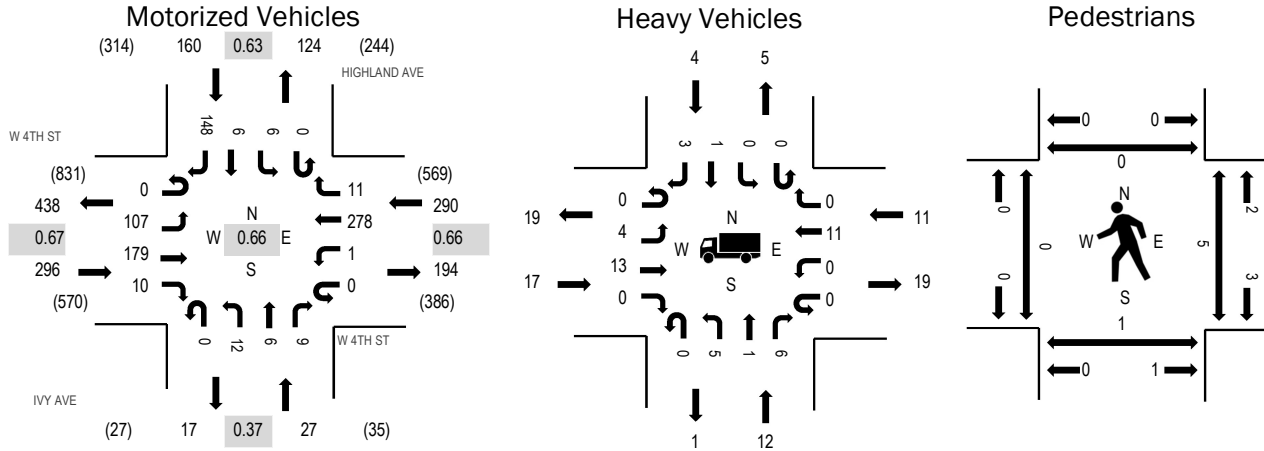
www.alltrafficdata.net

Location: 6 IVY AVE & W 4TH ST AM

Date: Thursday, May 1, 2025

Peak Hour: 07:20 AM - 08:20 AM

Peak 15-Minutes: 07:25 AM - 07:40 AM

Peak Hour

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	5.7%	0.67
WB	3.8%	0.66
NB	44.4%	0.37
SB	2.5%	0.63
All	5.7%	0.66

Traffic Counts - Motorized Vehicles

Interval Start Time	W 4TH ST Eastbound				W 4TH ST Westbound				IVY AVE Northbound				HIGHLAND AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	2	12	0	0	0	13	0	0	0	1	0	0	0	0	8	36	750
7:05 AM	0	5	10	0	0	0	17	1	0	0	0	0	0	0	0	8	41	763
7:10 AM	0	2	8	0	0	0	23	1	0	1	0	0	0	0	0	9	44	767
7:15 AM	0	2	6	0	0	0	26	0	0	1	0	0	0	0	1	9	45	762
7:20 AM	0	7	12	2	0	0	30	0	0	0	0	0	0	0	0	14	65	773
7:25 AM	0	5	24	1	0	0	33	2	0	2	1	2	0	1	3	19	93	763
7:30 AM	0	15	20	1	0	0	41	1	0	2	1	4	0	0	3	12	100	733
7:35 AM	0	9	16	4	0	1	39	0	0	4	1	2	0	0	0	23	99	736
7:40 AM	0	20	21	0	0	0	30	0	0	2	1	0	0	0	0	13	87	738
7:45 AM	0	7	18	0	0	0	21	2	0	0	1	0	0	0	0	12	61	725
7:50 AM	0	5	9	0	0	0	11	1	0	1	0	0	0	1	0	11	39	730
7:55 AM	0	6	12	0	0	0	11	2	0	0	0	0	0	2	0	7	40	737
8:00 AM	0	10	16	0	0	0	14	1	0	1	0	0	0	0	0	7	49	738
8:05 AM	0	4	6	0	0	0	19	1	0	0	0	1	0	1	0	13	45	
8:10 AM	0	11	8	1	0	0	11	0	0	0	1	0	0	0	0	7	39	
8:15 AM	0	8	17	1	0	0	18	1	0	0	0	0	0	1	0	10	56	
8:20 AM	0	7	17	2	0	1	14	2	0	0	0	0	0	1	0	11	55	
8:25 AM	0	14	17	0	0	0	10	5	0	0	0	1	0	3	0	13	63	
8:30 AM	0	22	33	1	0	0	20	7	0	0	0	0	0	2	0	18	103	
8:35 AM	0	14	20	1	0	0	30	7	0	1	0	0	0	7	0	21	101	
8:40 AM	0	8	18	0	0	0	33	1	0	0	0	1	0	1	1	11	74	
8:45 AM	0	8	11	1	0	1	36	0	0	1	0	0	0	0	0	8	66	
8:50 AM	0	6	8	0	0	0	19	0	0	0	0	0	0	1	1	11	46	
8:55 AM	0	4	15	0	0	0	12	0	0	0	1	0	0	0	0	9	41	
Count Total	0	201	354	15	0	3	531	35	0	16	8	11	0	21	9	284	1,488	
Peak Hour	0	107	179	10	0	1	278	11	0	12	6	9	0	6	6	148	773	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	2	1	0	0	3	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	1	0	0	0	1	7:05 AM	0	0	0	0	0	7:05 AM	0	1	0	0	1
7:10 AM	1	0	1	0	2	7:10 AM	0	0	0	0	0	7:10 AM	0	1	0	0	1
7:15 AM	1	0	1	1	3	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	1	1	2	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	4	3	0	2	9	7:25 AM	0	0	0	0	0	7:25 AM	0	0	3	0	3
7:30 AM	2	5	3	0	10	7:30 AM	0	0	0	0	0	7:30 AM	0	0	2	0	2
7:35 AM	1	2	1	0	4	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	3	0	1	0	4	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	1	0	1	1	3	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	2	1	1	0	4	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	2	0	0	0	2	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	2	1	2	0	5	8:00 AM	0	0	0	0	0	8:00 AM	0	1	0	0	1
8:05 AM	0	0	1	0	1	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	4	0	1	1	6	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	2	1	1	3	7	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	5	0	0	2	7	8:30 AM	0	0	0	0	0	8:30 AM	0	2	0	0	2
8:35 AM	0	1	8	4	13	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	0	8	1	9	8:40 AM	0	0	0	0	0	8:40 AM	1	0	0	1	2
8:45 AM	1	0	0	0	1	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	1	0	1	8:50 AM	0	0	0	0	0	8:50 AM	0	3	0	0	3
8:55 AM	0	1	1	0	2	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	34	16	33	16	99	Count Total	0	0	0	0	0	Count Total	1	8	5	1	15
Peak Hour	17	12	11	4	44	Peak Hour	0	0	0	0	0	Peak Hour	0	1	5	0	6



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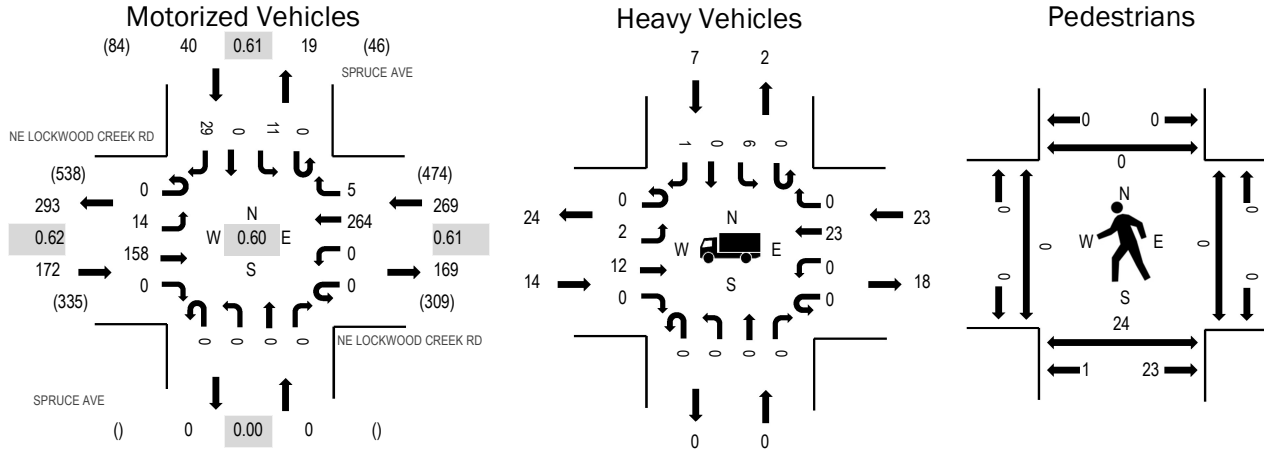
Location: 7 SPRUCE AVE & NE LOCKWOOD CREEK RD AM

Date: Thursday, May 1, 2025

Peak Hour: 07:55 AM - 08:55 AM

Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	8.1%	0.62
WB	8.6%	0.61
NB	0.0%	0.00
SB	17.5%	0.61
All	9.1%	0.60

Traffic Counts - Motorized Vehicles

Interval Start Time	NE LOCKWOOD CREEK RD Eastbound				NE LOCKWOOD CREEK RD Westbound				SPRUCE AVE Northbound				SPRUCE AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	3	7	0	0	0	5	1	0	0	0	0	0	0	0	1	17	414
7:05 AM	0	2	3	0	0	0	12	0	0	0	0	0	0	0	0	3	20	423
7:10 AM	0	2	3	0	0	0	18	0	0	0	0	0	0	0	0	5	28	427
7:15 AM	0	0	10	0	0	0	21	0	0	0	0	0	0	0	0	3	34	424
7:20 AM	0	0	10	0	0	0	17	0	0	0	0	0	0	0	0	5	32	418
7:25 AM	0	2	22	0	0	0	35	0	0	0	0	0	0	0	0	2	61	420
7:30 AM	0	3	20	0	0	0	31	0	0	0	0	0	0	2	0	5	61	410
7:35 AM	0	6	13	0	0	0	20	0	0	0	0	0	0	0	0	6	45	418
7:40 AM	0	4	15	0	0	0	19	0	0	0	0	0	0	0	0	5	43	446
7:45 AM	0	1	20	0	0	0	9	1	0	0	0	0	0	0	0	3	34	461
7:50 AM	0	1	5	0	0	0	5	0	0	0	0	0	0	0	0	3	14	468
7:55 AM	0	1	10	0	0	0	13	0	0	0	0	0	0	1	0	0	25	481
8:00 AM	0	1	10	0	0	0	14	0	0	0	0	0	0	1	0	0	26	479
8:05 AM	0	0	8	0	0	0	14	0	0	0	0	0	0	0	0	2	24	
8:10 AM	0	0	6	0	0	0	18	0	0	0	0	0	0	0	0	1	25	
8:15 AM	0	1	12	0	0	0	14	0	0	0	0	0	0	0	0	1	28	
8:20 AM	0	3	12	0	0	0	16	0	0	0	0	0	0	0	0	3	34	
8:25 AM	0	1	14	0	0	0	31	0	0	0	0	0	0	0	0	5	51	
8:30 AM	0	3	23	0	0	0	32	1	0	0	0	0	0	3	0	7	69	
8:35 AM	0	0	23	0	0	0	43	1	0	0	0	0	0	3	0	3	73	
8:40 AM	0	2	21	0	0	0	32	1	0	0	0	0	0	1	0	1	58	
8:45 AM	0	0	9	0	0	0	26	2	0	0	0	0	0	2	0	2	41	
8:50 AM	0	2	10	0	0	0	11	0	0	0	0	0	0	0	0	4	27	
8:55 AM	0	1	10	0	0	0	11	0	0	0	0	0	0	0	0	1	23	
Count Total	0	39	296	0	0	0	467	7	0	0	0	0	0	13	0	71	893	
Peak Hour	0	14	158	0	0	0	264	5	0	0	0	0	0	11	0	29	481	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	2	0	0	0	2	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	1	0	1	1	3	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0	7:15 AM	0	1	0	0	1
7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	4	0	2	0	6	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	5	0	1	0	6	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	3	0	2	0	5	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	1	0	0	1	2	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	1	0	1	0	2	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	2	0	0	1	3	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	1	0	0	1	2	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	2	0	3	1	6	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	0	1	0	1	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0	8:10 AM	0	1	0	0	1
8:15 AM	0	0	1	0	1	8:15 AM	0	0	0	0	0	8:15 AM	0	1	0	0	1
8:20 AM	1	0	0	0	1	8:20 AM	0	0	0	0	0	8:20 AM	0	5	0	0	5
8:25 AM	3	0	1	0	4	8:25 AM	0	0	0	0	0	8:25 AM	0	4	0	0	4
8:30 AM	2	0	0	2	4	8:30 AM	0	0	0	0	0	8:30 AM	0	5	0	0	5
8:35 AM	4	0	14	1	19	8:35 AM	0	0	0	0	0	8:35 AM	0	7	0	0	7
8:40 AM	0	0	2	0	2	8:40 AM	0	0	0	0	0	8:40 AM	0	4	0	0	4
8:45 AM	0	0	0	1	1	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	1	0	1	1	3	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	33	0	30	10	73	Count Total	0	0	0	0	0	Count Total	0	28	0	0	28
Peak Hour	14	0	23	7	44	Peak Hour	0	0	0	0	0	Peak Hour	0	27	0	0	27



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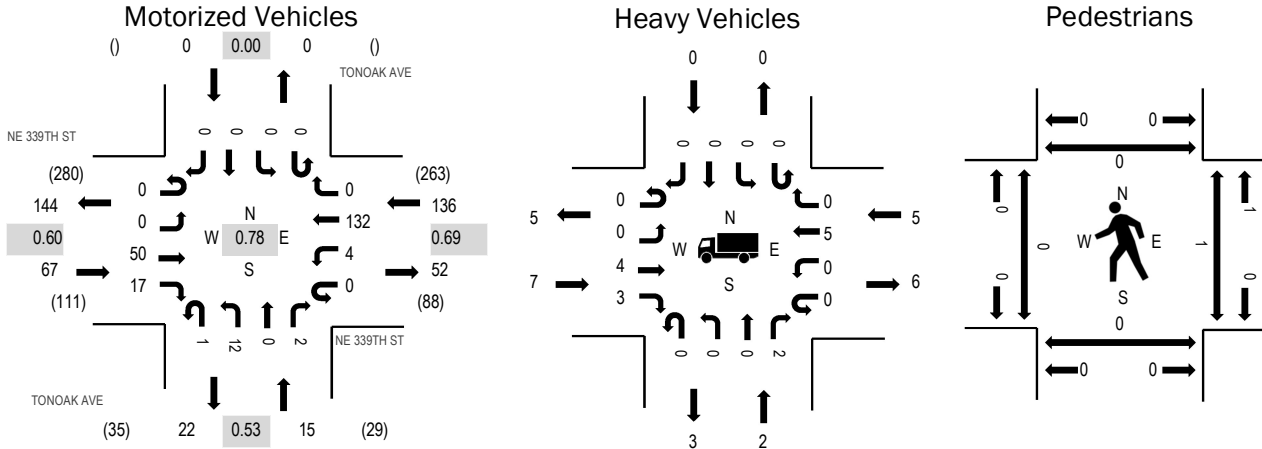
www.alltrafficdata.net

Location: 8 TONOAQ AVE & NE 339TH ST AM

Date: Thursday, May 1, 2025

Peak Hour: 07:35 AM - 08:35 AM

Peak 15-Minutes: 08:20 AM - 08:35 AM

Peak Hour

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	10.4%	0.60
WB	3.7%	0.69
NB	13.3%	0.53
SB	0.0%	0.00
All	6.4%	0.78

Traffic Counts - Motorized Vehicles

Interval Start Time	NE 339TH ST Eastbound				NE 339TH ST Westbound				TONOAQ AVE Northbound				TONOAQ AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	1	0	0	1	6	0	0	0	0	0	0	0	0	0	8	200
7:05 AM	0	0	1	0	0	0	6	0	0	0	0	0	0	0	0	0	7	205
7:10 AM	0	0	3	0	0	1	11	0	0	0	0	0	0	0	0	0	15	214
7:15 AM	0	0	0	0	0	0	9	0	0	2	0	1	0	0	0	0	12	210
7:20 AM	0	0	0	1	0	1	12	0	0	2	0	0	0	0	0	0	16	210
7:25 AM	0	0	3	0	0	0	20	0	0	1	0	0	0	0	0	0	24	210
7:30 AM	0	0	8	1	0	0	12	0	0	1	0	0	0	0	0	0	22	209
7:35 AM	0	0	8	1	0	0	17	0	0	1	0	0	0	0	0	0	27	218
7:40 AM	0	0	9	1	0	0	12	0	0	1	0	0	0	0	0	0	23	217
7:45 AM	0	0	6	3	0	0	5	0	0	1	0	1	0	0	0	0	16	215
7:50 AM	0	0	3	1	0	0	10	0	1	2	0	0	0	0	0	0	17	213
7:55 AM	0	0	1	3	0	0	9	0	0	0	0	0	0	0	0	0	13	211
8:00 AM	0	0	3	0	0	0	9	0	0	1	0	0	0	0	0	0	13	203
8:05 AM	0	0	4	0	0	0	12	0	0	0	0	0	0	0	0	0	16	
8:10 AM	0	0	2	0	0	2	7	0	0	0	0	0	0	0	0	0	11	
8:15 AM	0	0	1	2	0	0	8	0	0	1	0	0	0	0	0	0	12	
8:20 AM	0	0	2	0	0	0	12	0	0	1	0	1	0	0	0	0	16	
8:25 AM	0	0	4	1	0	0	18	0	0	0	0	0	0	0	0	0	23	
8:30 AM	0	0	7	5	0	2	13	0	0	4	0	0	0	0	0	0	31	
8:35 AM	0	0	4	3	0	0	18	0	0	1	0	0	0	0	0	0	26	
8:40 AM	0	0	5	1	0	0	12	0	0	3	0	0	0	0	0	0	21	
8:45 AM	0	0	5	1	0	1	7	0	0	0	0	0	0	0	0	0	14	
8:50 AM	0	0	5	0	0	0	8	0	0	2	0	0	0	0	0	0	15	
8:55 AM	0	0	0	2	0	0	2	0	0	1	0	0	0	0	0	0	5	
Count Total	0	0	85	26	0	8	255	0	1	25	0	3	0	0	0	0	403	
Peak Hour	0	0	50	17	0	4	132	0	1	12	0	2	0	0	0	0	218	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	1	0	0	0	1	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	1	0	0	1	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	1	0	2	0	3	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	0	1	0	1	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	1	0	0	0	1	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	1	0	0	0	1	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	1	0	0	0	1	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	1	0	0	1	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	1	0	0	0	1	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	1	2	0	3	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	3	0	3	8:25 AM	0	0	0	0	0	8:25 AM	0	0	1	0	1
8:30 AM	4	0	0	0	4	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0	8:55 AM	0	1	0	0	1
Count Total	10	3	8	0	21	Count Total	0	0	0	0	0	Count Total	0	1	1	0	2
Peak Hour	7	2	5	0	14	Peak Hour	0	0	0	0	0	Peak Hour	0	0	1	0	1



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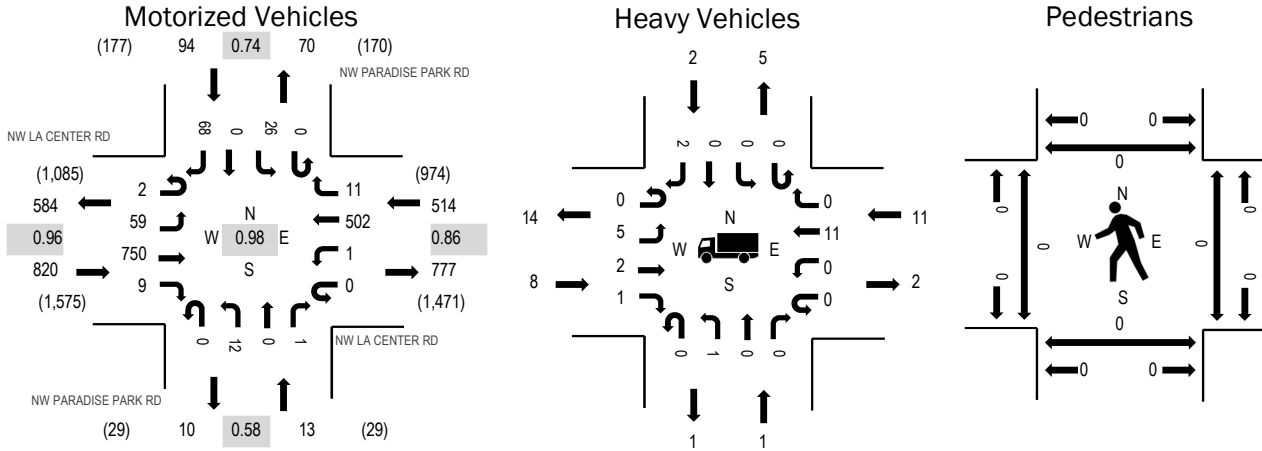
Location: 1 NW PARADISE PARK RD & NW LA CENTER RD PM

Date: Thursday, May 1, 2025

Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:25 PM - 05:40 PM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.0%	0.96
WB	2.1%	0.86
NB	7.7%	0.58
SB	2.1%	0.74
All	1.5%	0.98

Traffic Counts - Motorized Vehicles

Interval Start Time	NW LA CENTER RD Eastbound				NW LA CENTER RD Westbound				NW PARADISE PARK RD Northbound				NW PARADISE PARK RD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	5	63	1	0	0	35	3	0	0	0	0	0	2	1	5	115	1,394
4:05 PM	0	5	58	0	0	0	11	2	0	1	1	0	0	2	0	4	84	1,395
4:10 PM	0	5	66	0	0	0	57	8	0	0	0	0	0	2	0	3	141	1,439
4:15 PM	0	11	51	1	0	0	26	7	0	0	0	0	0	2	0	3	101	1,412
4:20 PM	0	10	54	0	0	0	43	0	0	1	0	0	0	2	0	11	121	1,428
4:25 PM	0	9	62	1	0	1	54	3	0	2	1	1	0	5	0	12	151	1,420
4:30 PM	0	4	63	0	0	2	35	0	0	1	0	0	0	2	0	5	112	1,397
4:35 PM	0	7	47	1	0	1	32	3	0	1	0	0	0	0	0	6	98	1,389
4:40 PM	0	8	60	3	0	0	29	2	0	1	0	0	0	1	0	7	111	1,425
4:45 PM	0	5	66	1	0	0	32	2	0	1	0	0	0	2	0	8	117	1,441
4:50 PM	0	2	69	2	0	0	38	1	0	3	0	0	0	3	0	10	128	1,412
4:55 PM	1	4	64	1	0	0	33	1	0	2	0	0	0	5	0	4	115	1,381
5:00 PM	0	5	60	0	0	0	43	0	0	4	0	0	0	1	0	3	116	1,361
5:05 PM	0	5	61	2	0	0	46	1	0	1	0	1	0	4	0	7	128	
5:10 PM	0	3	54	0	0	0	51	0	0	0	0	0	0	2	0	4	114	
5:15 PM	0	6	56	0	0	1	50	1	0	1	0	0	0	0	0	2	117	
5:20 PM	0	6	66	0	0	0	33	2	0	0	0	0	0	1	0	5	113	
5:25 PM	0	8	68	0	0	0	42	1	0	0	0	0	0	1	0	8	128	
5:30 PM	0	3	61	1	0	0	34	2	0	0	0	0	0	1	0	2	104	
5:35 PM	0	8	65	2	0	0	46	0	0	0	0	0	0	3	0	10	134	
5:40 PM	1	4	60	0	0	0	54	0	0	0	0	0	0	3	0	5	127	
5:45 PM	0	0	43	1	0	0	38	0	0	3	0	0	0	1	0	2	88	
5:50 PM	0	4	56	3	0	0	30	0	0	1	0	1	0	0	0	2	97	
5:55 PM	1	2	49	1	0	1	37	0	0	1	0	0	0	1	1	1	95	
Count Total	3	129	1,422	21	0	6	929	39	0	24	2	3	0	46	2	129	2,755	
Peak Hour	2	59	750	9	0	1	502	11	0	12	0	1	0	26	0	68	1,441	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	2	0	2	1	5	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	2	0	3	1	6	4:05 PM	0	0	0	1	1	4:05 PM	0	0	0	0	0
4:10 PM	3	0	7	0	10	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	6	0	3	0	9	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	3	0	1	1	5	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	6	2	0	1	9	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	2	0	0	0	2	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	7	0	2	0	9	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	5	0	0	0	5	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	3	1	1	0	5	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	2	2	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	3	0	3	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	1	0	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	1	0	1	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	1	0	1	0	2	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	1	0	1	0	2	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	1	0	2	0	3	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	1	0	1	0	2	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	1	0	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	1	0	0	0	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	1	0	1	0	2	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	1	0	1	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	46	3	31	6	86	Count Total	0	0	0	1	1	Count Total	0	0	0	0	0
Peak Hour	8	1	11	2	22	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0



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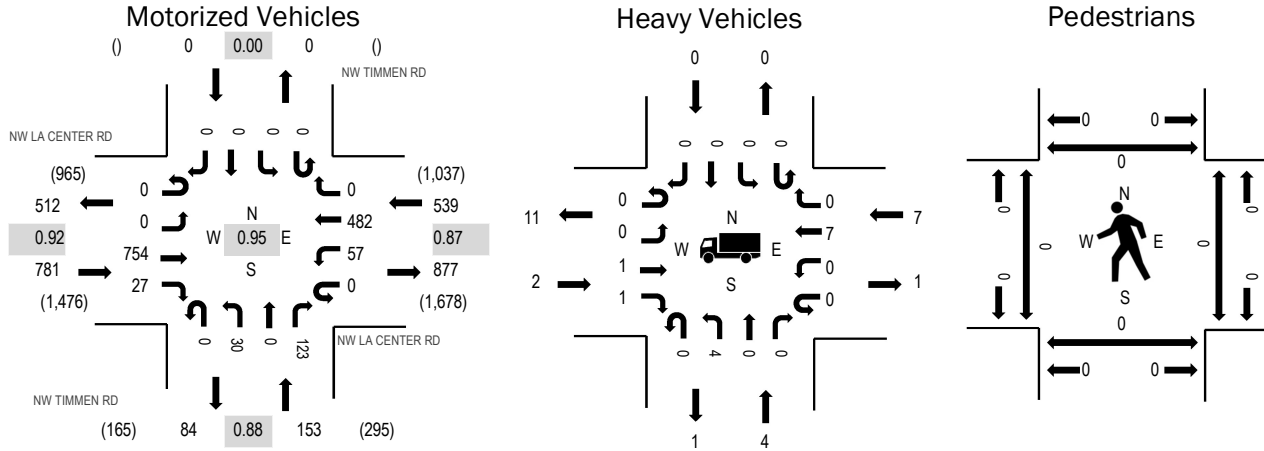
www.alltrafficdata.net

Location: 2 NW TIMMEN RD & NW LA CENTER RD PM

Date: Thursday, May 1, 2025

Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.3%	0.92
WB	1.3%	0.87
NB	2.6%	0.88
SB	0.0%	0.00
All	0.9%	0.95

Traffic Counts - Motorized Vehicles

Interval Start Time	NW LA CENTER RD Eastbound				NW LA CENTER RD Westbound				NW TIMMEN RD Northbound				NW TIMMEN RD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	46	0	0	0	42	0	0	2	0	14	0	0	0	0	104	1,393
4:05 PM	0	0	56	4	0	8	36	0	0	1	0	7	0	0	0	0	112	1,420
4:10 PM	0	0	83	1	0	3	35	0	0	1	0	12	0	0	0	0	135	1,431
4:15 PM	0	0	58	1	0	7	33	0	0	2	0	14	0	0	0	0	115	1,429
4:20 PM	0	0	51	2	0	4	46	0	0	1	0	12	0	0	0	0	116	1,429
4:25 PM	0	0	62	0	0	6	53	0	0	1	0	14	0	0	0	0	136	1,424
4:30 PM	0	0	67	1	0	8	34	0	0	2	0	7	0	0	0	0	119	1,425
4:35 PM	0	0	52	0	0	5	32	0	0	0	0	6	0	0	0	0	95	1,415
4:40 PM	0	0	53	3	0	9	29	0	0	0	0	9	0	0	0	0	103	1,444
4:45 PM	0	0	58	3	0	1	33	0	0	0	0	8	0	0	0	0	103	1,473
4:50 PM	0	0	70	1	0	4	37	0	0	6	0	11	0	0	0	0	129	1,473
4:55 PM	0	0	71	3	0	4	38	0	0	3	0	7	0	0	0	0	126	1,438
5:00 PM	0	0	66	2	0	13	36	0	0	1	0	13	0	0	0	0	131	1,415
5:05 PM	0	0	59	0	0	6	45	0	0	2	0	11	0	0	0	0	123	
5:10 PM	0	0	60	1	0	4	52	0	0	6	0	10	0	0	0	0	133	
5:15 PM	0	0	57	1	0	3	38	0	0	4	0	12	0	0	0	0	115	
5:20 PM	0	0	64	4	0	3	30	0	0	2	0	8	0	0	0	0	111	
5:25 PM	0	0	70	5	0	4	46	0	0	3	0	9	0	0	0	0	137	
5:30 PM	0	0	50	2	0	4	36	0	0	1	0	16	0	0	0	0	109	
5:35 PM	0	0	62	1	0	4	47	0	0	1	0	9	0	0	0	0	124	
5:40 PM	0	0	67	4	0	7	44	0	0	1	0	9	0	0	0	0	132	
5:45 PM	0	0	49	1	0	4	36	0	0	3	0	10	0	0	0	0	103	
5:50 PM	0	0	46	2	0	5	28	0	0	2	0	11	0	0	0	0	94	
5:55 PM	0	0	55	2	0	5	30	0	0	4	0	7	0	0	0	0	103	
Count Total	0	0	1,432	44	0	121	916	0	0	49	0	246	0	0	0	0	2,808	
Peak Hour	0	0	754	27	0	57	482	0	0	30	0	123	0	0	0	0	1,473	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	1	6	0	7	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	3	0	3	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	2	0	2	0	4	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	1	2	0	3	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	2	0	0	2	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	1	0	0	0	1	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	1	0	1	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	1	0	2	0	3	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	2	0	0	0	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	1	0	1	0	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	1	0	0	1	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	2	0	2	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	1	0	1	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	1	1	0	2	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	1	0	0	1	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	1	0	0	1	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	1	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	1	0	1	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	1	0	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	1	0	0	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	1	0	0	1	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	8	10	23	0	41	Count Total	0	0	0	0	0	Count Total	0	0	0	0	0
Peak Hour	2	4	7	0	13	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0



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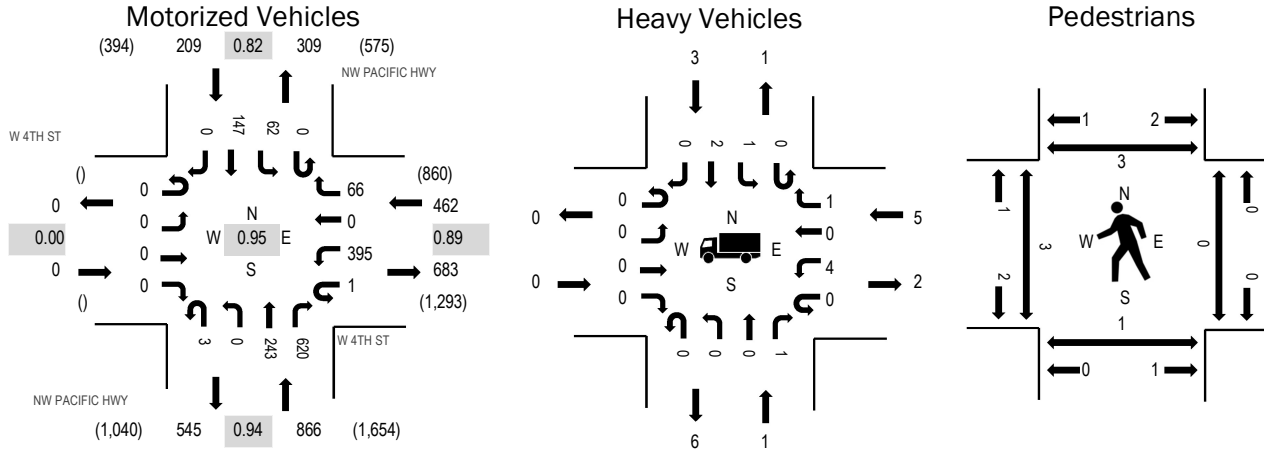
www.alltrafficdata.net

Location: 3 NW PACIFIC HWY & W 4TH ST PM

Date: Thursday, May 1, 2025

Peak Hour: 04:50 PM - 05:50 PM

Peak 15-Minutes: 04:55 PM - 05:10 PM

Peak Hour**Traffic Counts - Motorized Vehicles**

Interval Start Time	W 4TH ST Eastbound				W 4TH ST Westbound				NW PACIFIC HWY Northbound				NW PACIFIC HWY Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	0	0	0	34	0	5	1	0	12	44	0	1	14	0	111	1,422
4:05 PM	0	0	0	0	0	26	0	5	0	0	15	37	0	3	9	0	95	1,441
4:10 PM	0	0	0	0	0	30	0	4	0	0	24	65	0	3	9	0	135	1,492
4:15 PM	0	0	0	0	0	27	0	2	1	0	21	55	0	7	17	0	130	1,483
4:20 PM	0	0	0	0	0	35	0	1	1	0	16	44	0	3	12	0	112	1,476
4:25 PM	0	0	0	0	1	41	0	5	0	0	23	53	0	3	13	0	139	1,482
4:30 PM	0	0	0	0	0	32	0	2	0	0	26	52	0	6	11	0	129	1,470
4:35 PM	0	0	0	0	0	25	0	7	0	0	11	47	0	6	10	0	106	1,464
4:40 PM	0	0	0	0	0	24	0	4	0	0	21	37	0	3	14	0	103	1,501
4:45 PM	0	0	0	0	0	24	0	5	1	0	11	51	0	0	11	0	103	1,528
4:50 PM	0	0	0	0	0	27	0	2	0	0	21	60	0	7	13	0	130	1,537
4:55 PM	0	0	0	0	0	30	0	3	0	0	25	52	0	4	15	0	129	1,505
5:00 PM	0	0	0	0	0	36	0	6	1	0	25	47	0	3	12	0	130	1,486
5:05 PM	0	0	0	0	0	39	0	7	0	0	17	61	0	6	16	0	146	
5:10 PM	0	0	0	0	0	40	0	2	0	0	16	50	0	6	12	0	126	
5:15 PM	0	0	0	0	0	35	0	4	0	0	15	55	0	7	7	0	123	
5:20 PM	0	0	0	0	0	33	0	4	0	0	18	50	0	7	6	0	118	
5:25 PM	0	0	0	0	1	35	0	2	0	0	16	56	0	3	14	0	127	
5:30 PM	0	0	0	0	0	23	0	7	0	0	21	50	0	6	16	0	123	
5:35 PM	0	0	0	0	0	31	0	12	0	0	27	47	0	7	19	0	143	
5:40 PM	0	0	0	0	0	39	0	9	0	0	23	45	0	2	12	0	130	
5:45 PM	0	0	0	0	0	27	0	8	2	0	19	47	0	4	5	0	112	
5:50 PM	0	0	0	0	0	27	0	4	0	0	17	37	0	6	7	0	98	
5:55 PM	0	0	0	0	0	27	0	1	1	0	24	40	0	6	11	0	110	
Count Total	0	0	0	0	2	747	0	111	8	0	464	1,182	0	109	285	0	2,908	
Peak Hour	0	0	0	0	1	395	0	66	3	0	243	620	0	62	147	0	1,537	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	2	4	6	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	3	0	3	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	1	1
4:10 PM	0	1	2	0	3	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	1	1
4:15 PM	0	1	2	0	3	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	1	0	0	1	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	1	0	1	2	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	3	0	3	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	1	1
4:40 PM	0	2	0	0	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	1	1	0	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	1	1
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	1	1
4:55 PM	0	0	3	0	3	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	1	0	1	5:00 PM	0	0	0	0	0	5:00 PM	1	1	0	0	2
5:05 PM	0	0	0	1	1	5:05 PM	0	0	0	0	0	5:05 PM	1	0	0	0	1
5:10 PM	0	0	0	1	1	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	1	1
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	1	0	1	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	1	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	1	0	0	1	2
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	1	1
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	1	1
Count Total	0	8	18	8	34	Count Total	0	0	0	0	0	Count Total	3	1	0	9	13
Peak Hour	0	1	5	3	9	Peak Hour	0	0	0	0	0	Peak Hour	3	1	0	3	7

Location: 4 ASPEN AVE & W 4TH ST PM

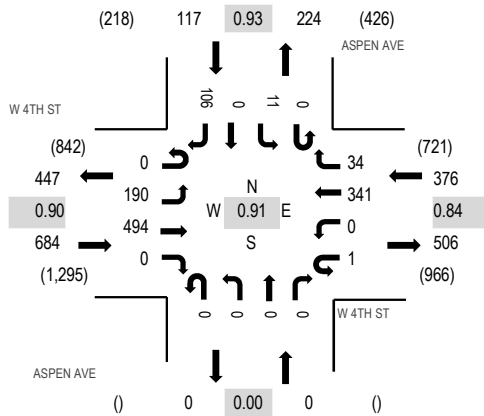
Date: Thursday, May 1, 2025

Peak Hour: 04:45 PM - 05:45 PM

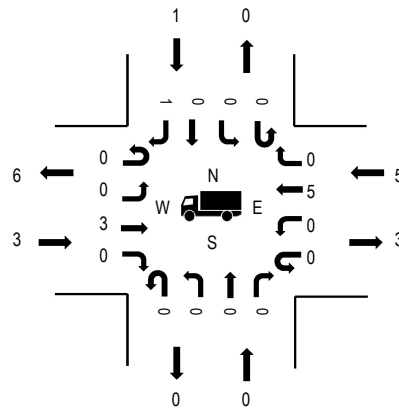
Peak 15-Minutes: 05:05 PM - 05:20 PM

Peak Hour

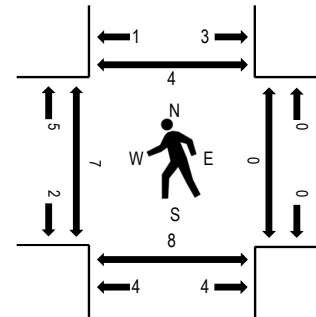
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.4%	0.90
WB	1.3%	0.84
NB	0.0%	0.00
SB	0.9%	0.93
All	0.8%	0.91

Traffic Counts - Motorized Vehicles

Interval Start Time	W 4TH ST				W 4TH ST				ASPEN AVE				ASPEN AVE				Total	Rolling Hour
	Eastbound				Westbound				Northbound				Southbound					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	11	29	0	0	0	34	4	0	0	0	0	0	0	0	7	85	1,093
4:05 PM	0	14	31	0	0	0	26	0	0	0	0	0	0	0	0	4	75	1,092
4:10 PM	0	17	49	0	0	0	24	4	0	0	0	0	0	0	0	5	99	1,133
4:15 PM	0	18	42	0	0	0	26	5	0	0	0	0	0	1	0	5	97	1,135
4:20 PM	0	11	37	0	0	0	23	0	0	0	0	0	0	1	0	12	84	1,144
4:25 PM	0	17	40	0	0	0	37	5	0	0	0	0	0	3	0	9	111	1,154
4:30 PM	0	17	43	0	0	0	33	2	0	0	0	0	0	2	0	4	101	1,141
4:35 PM	0	19	34	0	0	0	22	2	0	0	0	0	0	2	0	8	87	1,133
4:40 PM	0	8	33	0	0	0	21	3	0	0	0	0	0	3	0	6	74	1,153
4:45 PM	0	17	37	0	0	0	24	3	0	0	0	0	0	0	0	7	88	1,177
4:50 PM	0	14	53	0	1	0	18	4	0	0	0	0	0	2	0	6	98	1,175
4:55 PM	0	15	39	0	0	0	28	2	0	0	0	0	0	0	0	10	94	1,156
5:00 PM	0	16	32	0	0	0	26	0	0	0	0	0	0	0	0	10	84	1,141
5:05 PM	0	22	48	0	0	0	33	0	0	0	0	0	0	2	0	11	116	
5:10 PM	0	12	45	0	0	0	34	2	0	0	0	0	0	1	0	7	101	
5:15 PM	0	21	41	0	0	0	31	4	0	0	0	0	0	2	0	7	106	
5:20 PM	0	12	42	0	0	0	24	3	0	0	0	0	0	1	0	12	94	
5:25 PM	0	13	48	0	0	0	27	0	0	0	0	0	0	1	0	9	98	
5:30 PM	0	15	41	0	0	0	25	5	0	0	0	0	0	1	0	6	93	
5:35 PM	0	13	42	0	0	0	31	10	0	0	0	0	0	0	0	11	107	
5:40 PM	0	20	26	0	0	0	40	1	0	0	0	0	0	1	0	10	98	
5:45 PM	0	13	37	0	0	0	24	3	0	0	0	0	0	1	0	8	86	
5:50 PM	0	12	30	0	0	0	21	4	0	0	0	0	0	1	0	11	79	
5:55 PM	0	9	40	0	0	0	18	4	0	0	0	0	0	1	0	7	79	
Count Total	0	356	939	0	1	0	650	70	0	0	0	0	0	26	0	192	2,234	
Peak Hour	0	190	494	0	1	0	341	34	0	0	0	0	0	11	0	106	1,177	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	3	1	4	4:00 PM	0	0	0	0	0	4:00 PM	2	0	1	0	3
4:05 PM	0	0	2	0	2	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	1	0	1	0	2	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	1	0	2	0	3	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	10	0	0	10
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	1	0	2	0	3	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	1	1	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	2	0	0	0	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	1	0	0	1	2	4:45 PM	0	0	0	0	0	4:45 PM	2	0	0	2	4
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	2	0	0	1	3
4:55 PM	0	0	3	0	3	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	1	1
5:00 PM	0	0	1	0	1	5:00 PM	0	0	1	0	1	5:00 PM	2	3	0	0	5
5:05 PM	1	0	0	0	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	4	0	0	4
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	1	1	0	0	2
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	1	0	1	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	1	0	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	1	4	0	0	5
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	1	0	0	0	1
Count Total	8	0	15	3	26	Count Total	0	0	1	0	1	Count Total	11	22	1	4	38
Peak Hour	3	0	5	1	9	Peak Hour	0	0	1	0	1	Peak Hour	7	8	0	4	19



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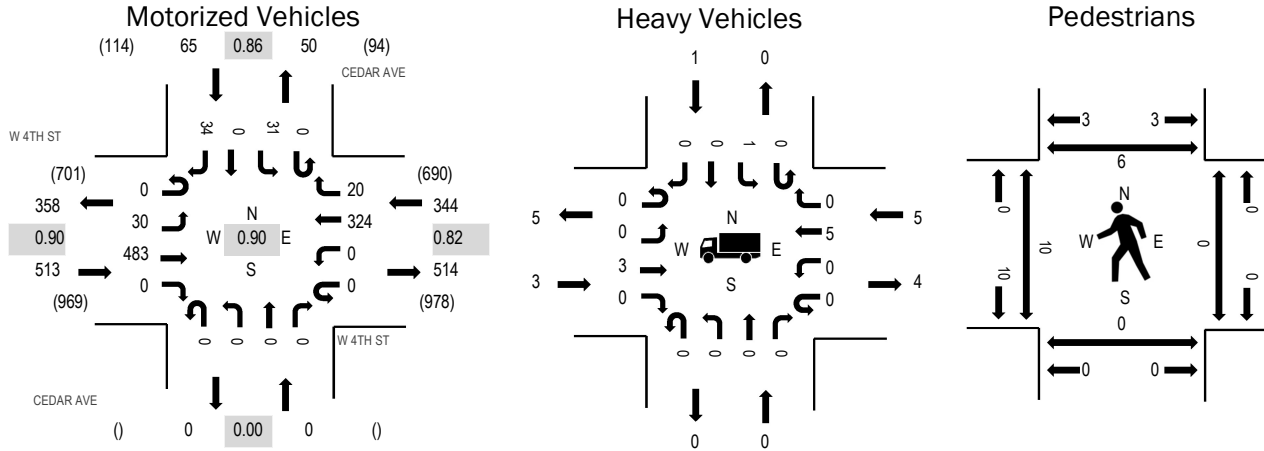
www.alltrafficdata.net

Location: 5 CEDAR AVE & W 4TH ST PM

Date: Thursday, May 1, 2025

Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:05 PM - 05:20 PM

Peak Hour

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.6%	0.90
WB	1.5%	0.82
NB	0.0%	0.00
SB	1.5%	0.86
All	1.0%	0.90

Traffic Counts - Motorized Vehicles

Interval Start Time	W 4TH ST Eastbound				W 4TH ST Westbound				CEDAR AVE Northbound				CEDAR AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	2	28	0	0	0	33	2	0	0	0	0	0	2	0	3	70	872
4:05 PM	0	1	30	0	0	0	25	1	0	0	0	0	0	4	0	1	62	861
4:10 PM	0	1	45	0	0	0	25	1	0	0	0	0	0	0	0	0	72	891
4:15 PM	0	2	44	0	0	0	27	1	0	0	0	0	0	3	0	1	78	901
4:20 PM	0	4	36	0	0	0	26	3	0	0	0	0	0	2	0	2	73	904
4:25 PM	0	3	39	0	0	0	42	0	0	0	0	0	0	3	0	0	87	904
4:30 PM	0	3	37	0	0	0	32	1	0	0	0	0	0	2	0	1	76	891
4:35 PM	0	1	39	0	0	0	22	3	0	0	0	0	0	5	0	1	71	892
4:40 PM	0	2	31	0	0	0	23	3	0	0	0	0	0	4	0	1	64	909
4:45 PM	0	1	37	0	0	0	26	3	0	0	0	0	0	2	0	3	72	922
4:50 PM	0	2	48	0	0	0	14	1	0	0	0	0	0	3	0	4	72	917
4:55 PM	0	1	37	0	0	0	28	3	0	0	0	0	0	2	0	4	75	909
5:00 PM	0	5	32	0	0	0	18	0	0	0	0	0	0	1	0	3	59	901
5:05 PM	0	0	56	0	0	0	26	1	0	0	0	0	0	5	0	4	92	
5:10 PM	0	7	35	0	0	0	32	3	0	0	0	0	0	3	0	2	82	
5:15 PM	0	4	40	0	0	0	32	0	0	0	0	0	0	3	0	2	81	
5:20 PM	0	3	44	0	0	0	23	1	0	0	0	0	0	0	0	2	73	
5:25 PM	0	1	45	0	0	0	25	0	0	0	0	0	0	3	0	0	74	
5:30 PM	0	0	40	0	0	0	33	2	0	0	0	0	0	2	0	0	77	
5:35 PM	0	5	38	0	0	0	33	5	0	0	0	0	0	3	0	4	88	
5:40 PM	0	1	31	0	0	0	34	1	0	0	0	0	0	4	0	6	77	
5:45 PM	0	3	31	0	0	0	28	1	0	0	0	0	0	4	0	0	67	
5:50 PM	0	1	33	0	0	0	26	1	0	0	0	0	0	1	0	2	64	
5:55 PM	0	2	38	0	0	0	18	2	0	0	0	0	0	3	0	4	67	
Count Total	0	55	914	0	0	0	651	39	0	0	0	0	0	64	0	50	1,773	
Peak Hour	0	30	483	0	0	0	324	20	0	0	0	0	0	31	0	34	922	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	3	0	3	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	2	0	2	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	1	0	2	0	3	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	1	1
4:15 PM	1	0	1	0	2	4:15 PM	0	0	0	0	0	4:15 PM	0	1	0	0	1
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	3	3
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	11	0	0	0	11
4:30 PM	0	0	2	0	2	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	1	0	0	1	2
4:40 PM	2	0	0	0	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1	4:45 PM	0	0	0	1	1	4:45 PM	9	0	0	0	9
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	2	2
4:55 PM	0	0	3	0	3	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	2	2
5:00 PM	0	0	1	0	1	5:00 PM	0	0	1	0	1	5:00 PM	1	0	0	2	3
5:05 PM	1	0	0	0	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	1	0	1	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	1	0	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	1	0	0	0	1
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	1	0	1
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	7	0	15	1	23	Count Total	0	0	1	1	2	Count Total	23	1	1	11	36
Peak Hour	3	0	5	1	9	Peak Hour	0	0	1	1	2	Peak Hour	10	0	0	6	16



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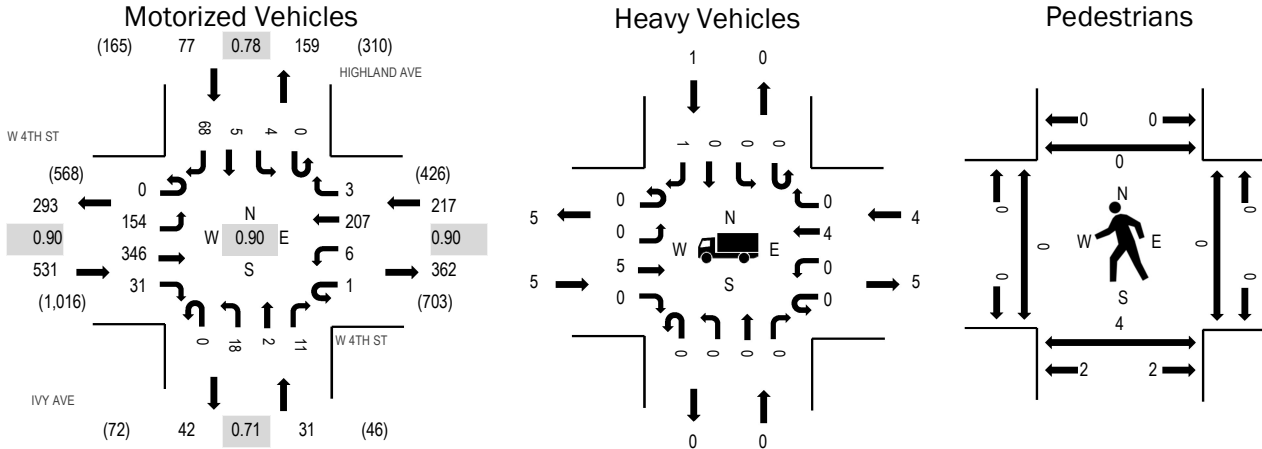
www.alltrafficdata.net

Location: 6 IVY AVE & W 4TH ST PM

Date: Thursday, May 1, 2025

Peak Hour: 04:40 PM - 05:40 PM

Peak 15-Minutes: 04:50 PM - 05:05 PM

Peak Hour

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.9%	0.90
WB	1.8%	0.90
NB	0.0%	0.71
SB	1.3%	0.78
All	1.2%	0.90

Traffic Counts - Motorized Vehicles

Interval Start Time	W 4TH ST Eastbound				W 4TH ST Westbound				IVY AVE Northbound				HIGHLAND AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	9	34	4	0	0	16	2	0	0	0	0	0	0	0	10	75	815
4:05 PM	0	9	18	0	0	0	19	2	0	0	0	0	0	1	0	3	52	818
4:10 PM	0	12	29	0	0	0	22	2	0	0	1	0	0	2	0	8	76	845
4:15 PM	0	11	31	0	0	0	16	1	0	1	0	0	0	0	0	3	63	837
4:20 PM	0	11	27	1	0	0	11	1	0	0	0	0	0	0	0	5	56	834
4:25 PM	0	8	24	1	0	0	21	1	0	0	0	1	0	3	1	11	71	845
4:30 PM	0	15	26	0	0	1	20	1	0	1	0	0	0	1	0	6	71	853
4:35 PM	0	11	21	0	0	0	19	1	0	1	0	0	0	0	1	6	60	852
4:40 PM	0	7	24	1	0	1	23	0	0	1	0	0	0	0	0	7	64	856
4:45 PM	0	10	29	0	0	1	13	0	0	0	0	0	0	0	1	12	66	853
4:50 PM	0	14	40	6	0	0	20	0	0	1	2	0	0	1	0	2	86	852
4:55 PM	0	16	28	2	0	0	19	1	0	3	0	0	0	0	1	5	75	839
5:00 PM	0	13	32	1	1	2	18	1	0	5	0	0	0	0	1	4	78	838
5:05 PM	0	16	34	4	0	0	13	0	0	3	0	1	0	1	0	7	79	
5:10 PM	0	12	23	0	0	0	21	0	0	1	0	2	0	0	0	9	68	
5:15 PM	0	10	28	3	0	0	13	0	0	0	0	0	0	0	0	6	60	
5:20 PM	0	10	25	4	0	2	19	1	0	1	0	1	0	0	0	4	67	
5:25 PM	0	22	27	3	0	0	17	0	0	0	0	1	0	2	1	6	79	
5:30 PM	0	17	25	3	0	0	14	0	0	3	0	3	0	0	1	4	70	
5:35 PM	0	7	31	4	0	0	17	0	0	0	0	3	0	0	0	2	64	
5:40 PM	0	13	26	1	0	1	13	0	0	0	0	2	0	0	0	5	61	
5:45 PM	0	13	30	4	0	1	5	1	0	0	0	2	0	1	0	8	65	
5:50 PM	0	11	33	5	0	1	14	1	0	0	2	1	0	0	0	5	73	
5:55 PM	0	12	28	7	0	1	15	0	0	3	0	0	0	0	0	8	74	
Count Total	0	289	673	54	1	11	398	16	0	24	5	17	0	12	7	146	1,653	
Peak Hour	0	154	346	31	1	6	207	3	0	18	2	11	0	4	5	68	856	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	1	1	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	1	0	1	1	3	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	2	0	2	4:10 PM	0	0	0	0	0	4:10 PM	0	1	0	0	1
4:15 PM	1	0	0	0	1	4:15 PM	0	0	0	0	0	4:15 PM	0	1	0	0	1
4:20 PM	0	0	1	1	2	4:20 PM	0	0	0	0	0	4:20 PM	0	2	0	0	2
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	1	0	1	4:40 PM	0	0	0	0	0	4:40 PM	0	2	0	0	2
4:45 PM	0	0	0	1	1	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	2	0	1	0	3	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	1	0	0	0	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	1	0	1	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	2	0	0	0	2	5:15 PM	0	0	0	0	0	5:15 PM	0	2	0	0	2
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	1	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	1	0	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	1	0	0	1
5:45 PM	1	0	0	0	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	1	0	0	1
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	1	0	0	1
Count Total	9	0	8	4	21	Count Total	0	0	0	0	0	Count Total	0	11	0	0	11
Peak Hour	5	0	4	1	10	Peak Hour	0	0	0	0	0	Peak Hour	0	4	0	0	4



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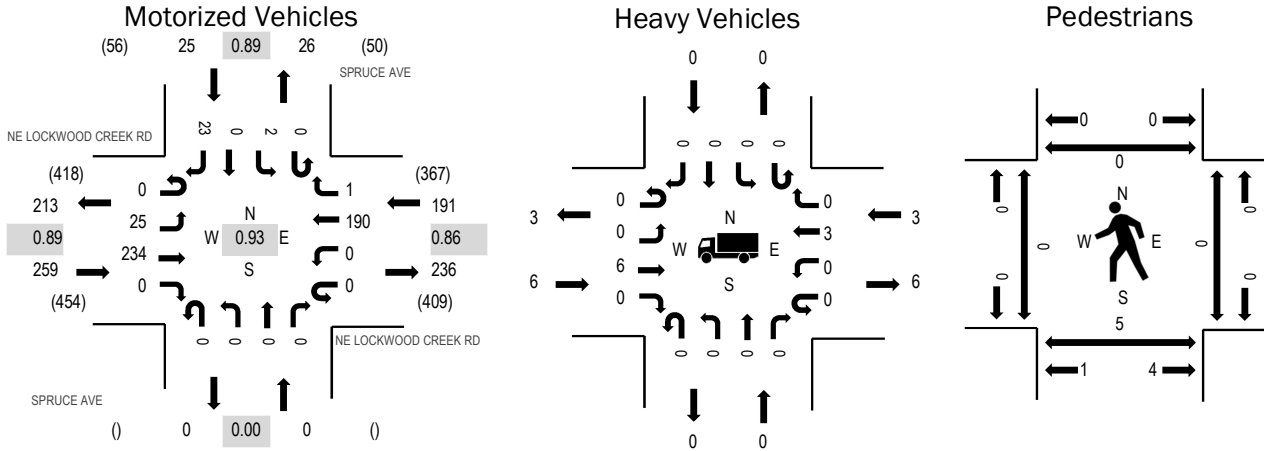
www.alltrafficdata.net

Location: 7 SPRUCE AVE & NE LOCKWOOD CREEK RD PM

Date: Thursday, May 1, 2025

Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.3%	0.89
WB	1.6%	0.86
NB	0.0%	0.00
SB	0.0%	0.89
All	1.9%	0.93

Traffic Counts - Motorized Vehicles

Interval Start Time	NE LOCKWOOD CREEK RD Eastbound				NE LOCKWOOD CREEK RD Westbound				SPRUCE AVE Northbound				SPRUCE AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	8	0	0	0	13	0	0	0	0	0	0	0	0	1	22	436
4:05 PM	0	3	15	0	0	0	12	0	0	0	0	0	0	0	0	2	32	450
4:10 PM	0	3	15	0	0	0	16	0	0	0	0	0	0	0	0	4	38	463
4:15 PM	0	2	16	0	0	0	18	1	0	0	0	0	0	0	0	0	37	472
4:20 PM	0	2	18	0	0	0	28	0	0	0	0	0	0	0	0	3	51	471
4:25 PM	0	1	21	0	0	0	13	0	0	0	0	0	0	0	0	6	41	464
4:30 PM	0	2	16	0	0	0	17	0	0	0	0	0	0	0	0	3	38	454
4:35 PM	0	1	15	0	0	0	10	0	0	0	0	0	0	0	0	3	29	464
4:40 PM	0	2	12	0	0	0	12	0	0	0	0	0	0	0	0	1	27	461
4:45 PM	0	3	12	0	0	0	23	0	0	0	0	0	0	0	0	0	38	475
4:50 PM	0	3	22	0	0	0	19	0	0	0	0	0	0	0	0	0	44	468
4:55 PM	0	4	15	0	0	0	17	0	0	0	0	0	0	0	0	3	39	459
5:00 PM	0	2	19	0	0	0	13	0	0	0	0	0	0	0	0	2	36	441
5:05 PM	0	2	24	0	0	0	17	0	0	0	0	0	0	0	0	2	45	
5:10 PM	0	1	24	0	0	0	18	1	0	0	0	0	0	1	0	2	47	
5:15 PM	0	1	21	0	0	0	12	0	0	0	0	0	0	0	0	2	36	
5:20 PM	0	2	16	0	0	0	23	0	0	0	0	0	0	1	0	2	44	
5:25 PM	0	1	20	0	0	0	9	0	0	0	0	0	0	0	0	1	31	
5:30 PM	0	3	24	0	0	0	17	0	0	0	0	0	0	0	0	4	48	
5:35 PM	0	1	15	0	0	0	7	0	0	0	0	0	0	0	0	3	26	
5:40 PM	0	2	22	0	0	0	15	0	0	0	0	0	0	0	0	2	41	
5:45 PM	0	2	13	0	0	0	14	0	0	0	0	0	0	0	0	2	31	
5:50 PM	0	3	15	0	0	0	11	1	0	0	0	0	0	0	0	5	35	
5:55 PM	0	1	9	0	0	0	10	0	0	0	0	0	0	0	0	1	21	
Count Total	0	47	407	0	0	0	364	3	0	0	0	0	0	2	0	54	877	
Peak Hour	0	25	234	0	0	0	190	1	0	0	0	0	0	2	0	23	475	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	1	0	1	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	1	0	0	1
4:10 PM	0	0	2	0	2	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	1	0	1	0	2	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	1	0	0	1
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	1	0	1	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	1	0	1	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	1	0	0	0	1	4:55 PM	0	2	0	0	2
5:00 PM	2	0	1	0	3	5:00 PM	0	0	0	0	0	5:00 PM	0	4	0	0	4
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	1	0	0	1
5:10 PM	1	0	0	0	1	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	2	0	0	0	2	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	1	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	2	0	0	2
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	1	0	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	1	0	0	0	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	8	0	8	0	16	Count Total	1	0	0	0	1	Count Total	0	11	0	0	11
Peak Hour	6	0	3	0	9	Peak Hour	1	0	0	0	1	Peak Hour	0	9	0	0	9



ALL TRAFFIC DATA SERVICES

(303) 216-2439

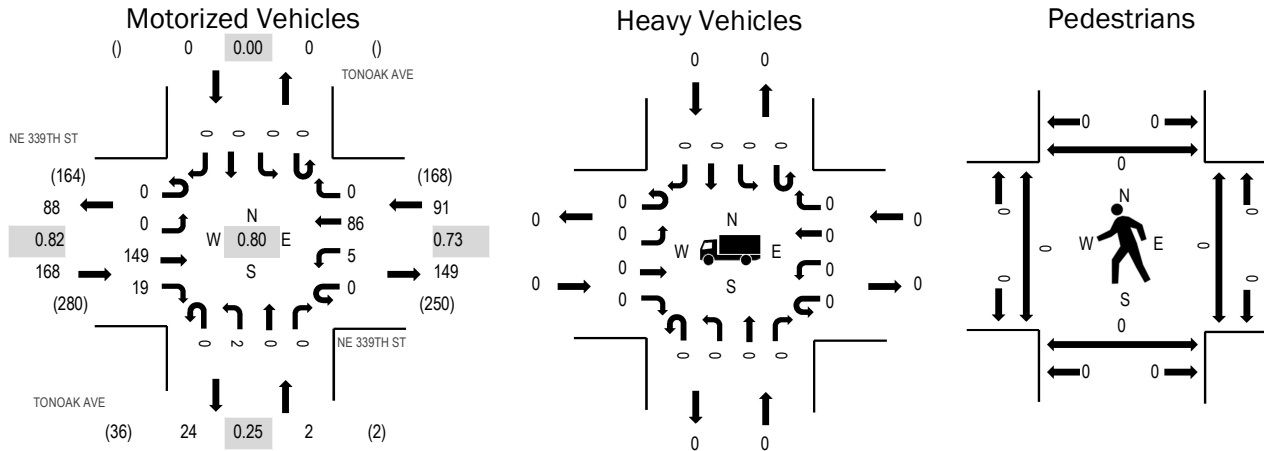
www.alltrafficdata.net

Location: 8 TONOAQ AVE & NE 339TH ST PM

Date: Thursday, May 1, 2025

Peak Hour: 04:55 PM - 05:55 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.82
WB	0.0%	0.73
NB	0.0%	0.25
SB	0.0%	0.00
All	0.0%	0.80

Traffic Counts - Motorized Vehicles

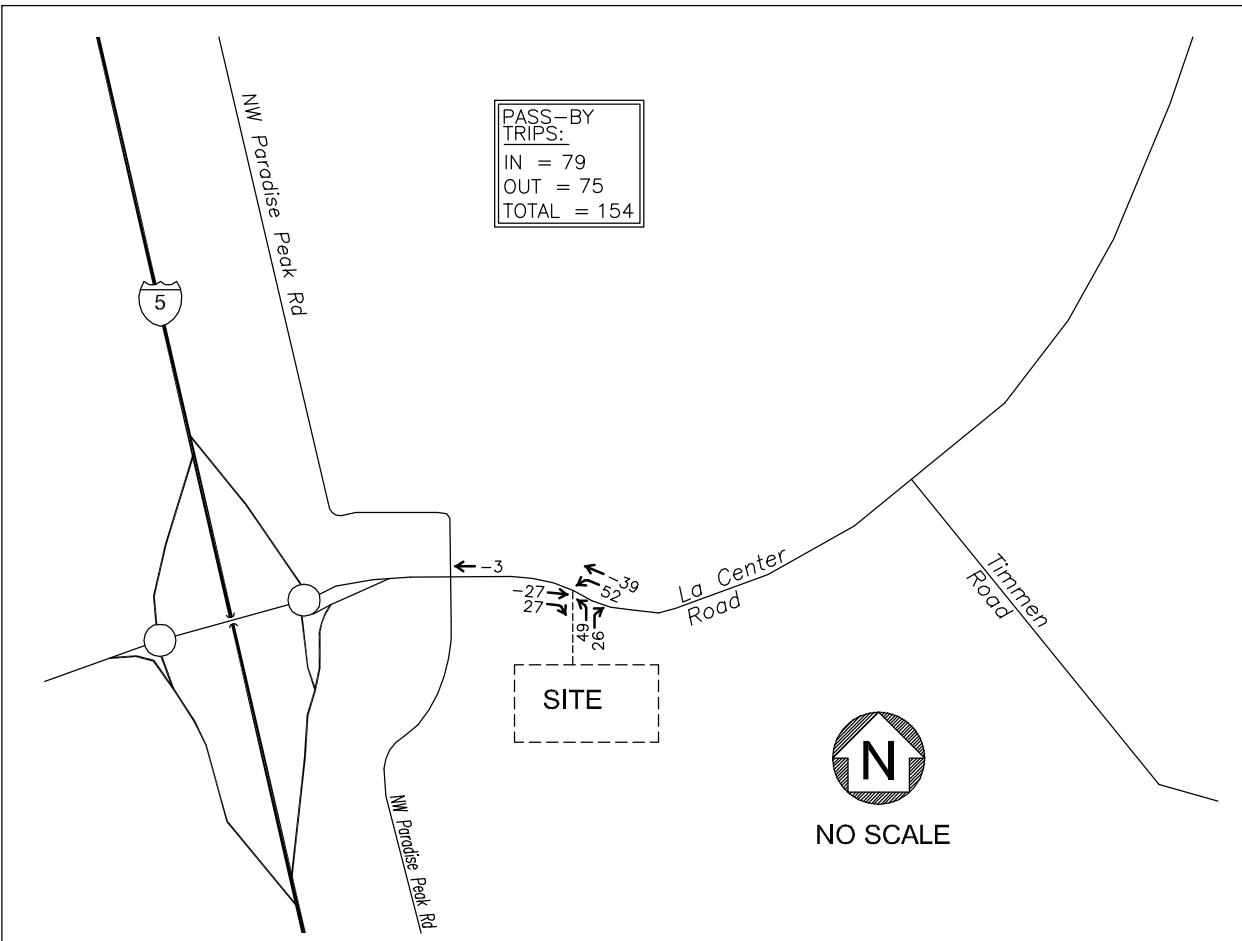
Interval Start Time	NE 339TH ST Eastbound				NE 339TH ST Westbound				TONOAQ AVE Northbound				TONOAQ AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	6	1	0	0	6	0	0	0	0	0	0	0	0	0	13	198
4:05 PM	0	0	11	0	0	0	11	0	0	0	0	0	0	0	0	0	22	207
4:10 PM	0	0	9	1	0	0	4	0	0	0	0	0	0	0	0	0	14	211
4:15 PM	0	0	10	2	0	0	7	0	0	0	0	0	0	0	0	0	19	231
4:20 PM	0	0	5	3	0	0	9	0	0	0	0	0	0	0	0	0	17	230
4:25 PM	0	0	8	1	0	1	11	0	0	0	0	0	0	0	0	0	21	230
4:30 PM	0	0	13	1	0	0	5	0	0	0	0	0	0	0	0	0	19	229
4:35 PM	0	0	7	0	0	0	9	0	0	0	0	0	0	0	0	0	16	234
4:40 PM	0	0	11	0	0	0	5	0	0	0	0	0	0	0	0	0	16	242
4:45 PM	0	0	5	1	0	0	2	0	0	0	0	0	0	0	0	0	8	249
4:50 PM	0	0	11	1	0	0	6	0	0	0	0	0	0	0	0	0	18	260
4:55 PM	0	0	11	0	0	0	4	0	0	0	0	0	0	0	0	0	15	261
5:00 PM	0	0	11	1	0	1	7	0	0	2	0	0	0	0	0	0	22	252
5:05 PM	0	0	15	1	0	0	10	0	0	0	0	0	0	0	0	0	26	
5:10 PM	0	0	18	3	0	0	13	0	0	0	0	0	0	0	0	0	34	
5:15 PM	0	0	12	0	0	1	5	0	0	0	0	0	0	0	0	0	18	
5:20 PM	0	0	10	0	0	0	7	0	0	0	0	0	0	0	0	0	17	
5:25 PM	0	0	10	1	0	0	9	0	0	0	0	0	0	0	0	0	20	
5:30 PM	0	0	16	3	0	0	5	0	0	0	0	0	0	0	0	0	24	
5:35 PM	0	0	16	3	0	0	5	0	0	0	0	0	0	0	0	0	24	
5:40 PM	0	0	12	2	0	1	8	0	0	0	0	0	0	0	0	0	23	
5:45 PM	0	0	9	4	0	0	6	0	0	0	0	0	0	0	0	0	19	
5:50 PM	0	0	9	1	0	2	7	0	0	0	0	0	0	0	0	0	19	
5:55 PM	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6	
Count Total	0	0	250	30	0	6	162	0	0	2	0	0	0	0	0	0	450	
Peak Hour	0	0	149	19	0	5	86	0	0	2	0	0	0	0	0	0	261	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

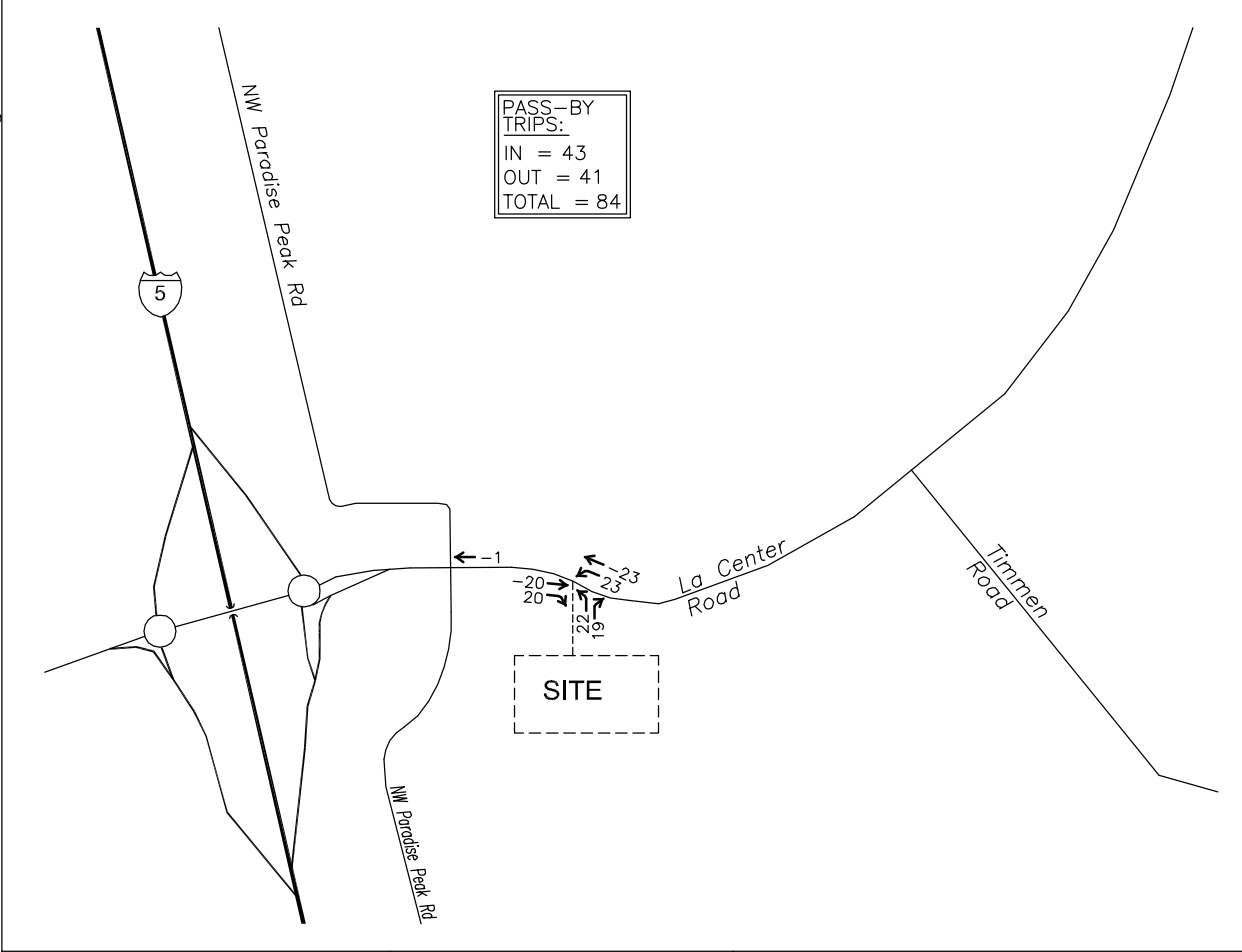
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	2	0	2	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	1	0	1	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	1	0	0	1	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	1	0	3	0	4	Count Total	0	1	0	0	1	Count Total	0	0	0	0	0
Peak Hour	0	0	0	0	0	Peak Hour	0	1	0	0	1	Peak Hour	0	0	0	0	0

FILE NAME: 2339flow2.dwg

PLOT DATE: 11.08.24

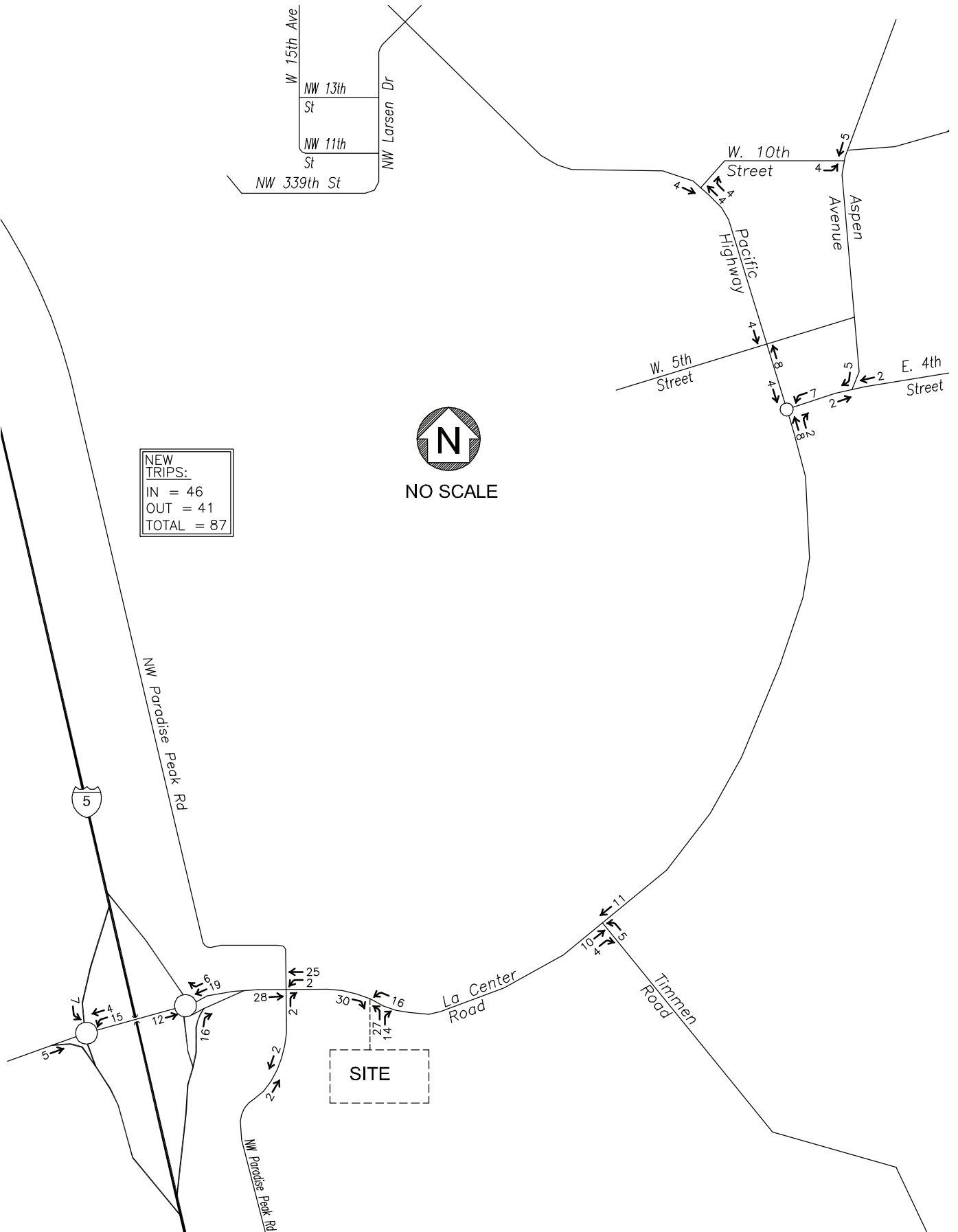


AM
PEAK
HOUR

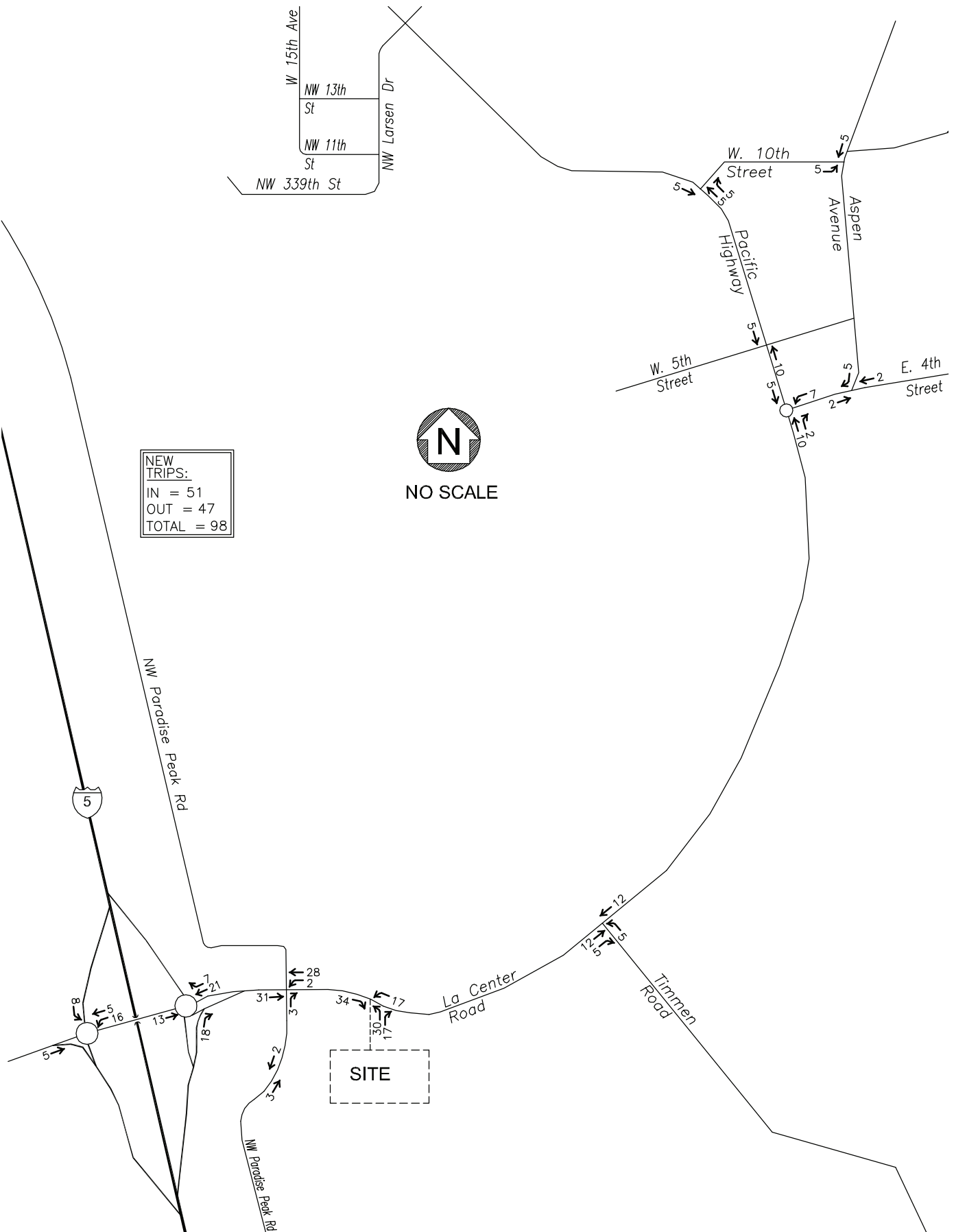


PM
PEAK
HOUR

NEW
TRIPS:
IN = 46
OUT = 41
TOTAL = 87

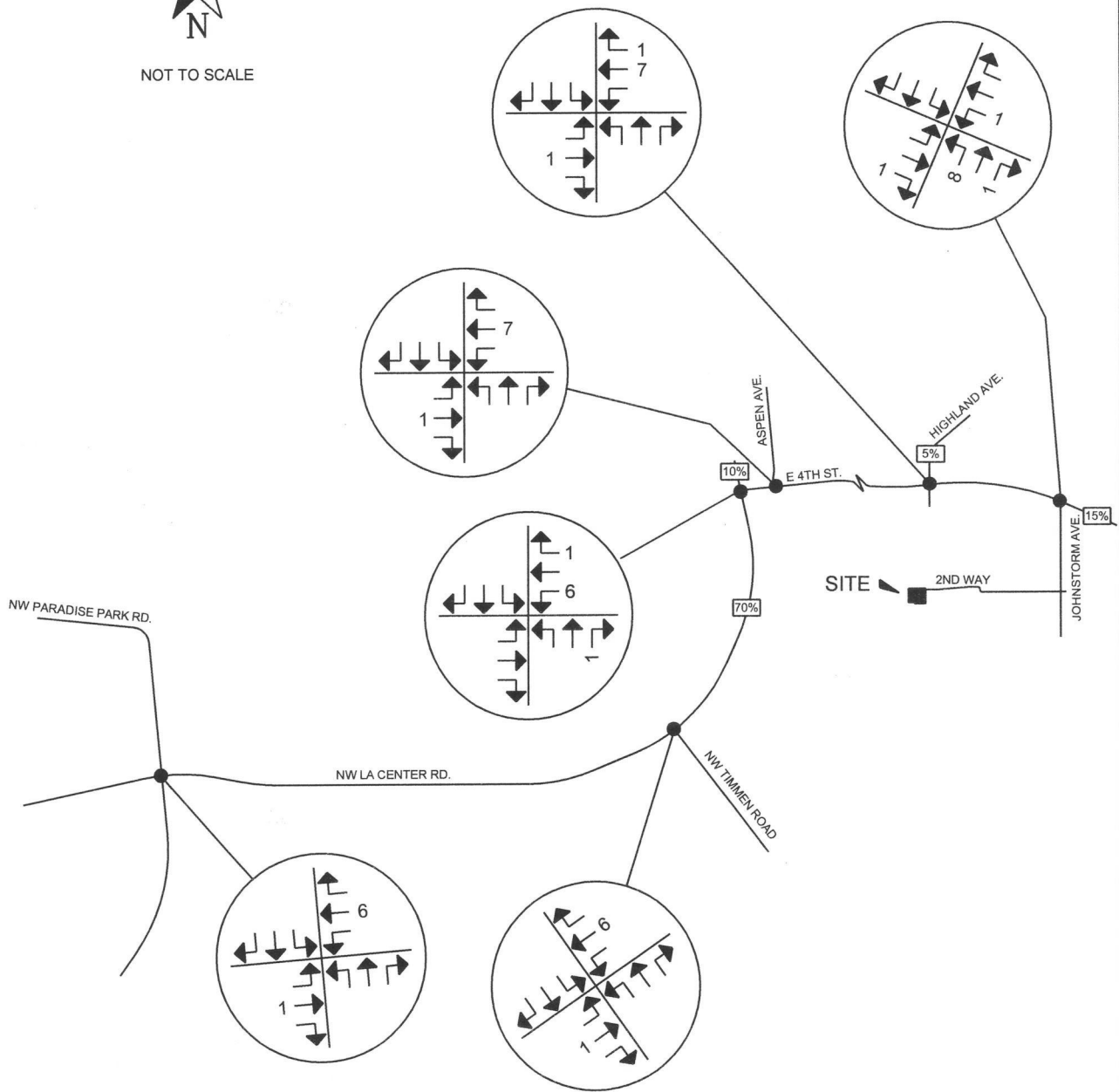


NEW
TRIPS:
IN = 51
OUT = 47
TOTAL = 98





NOT TO SCALE



AM PEAK HOUR SITE TRIPS:
IN-2, OUT-9

BREEZE CREEK TRAILS SUBDIVISION

FIGURE 6a
**SITE TRAFFIC DISTRIBUTION/
ASSIGNMENT, AM PEAK HOUR**

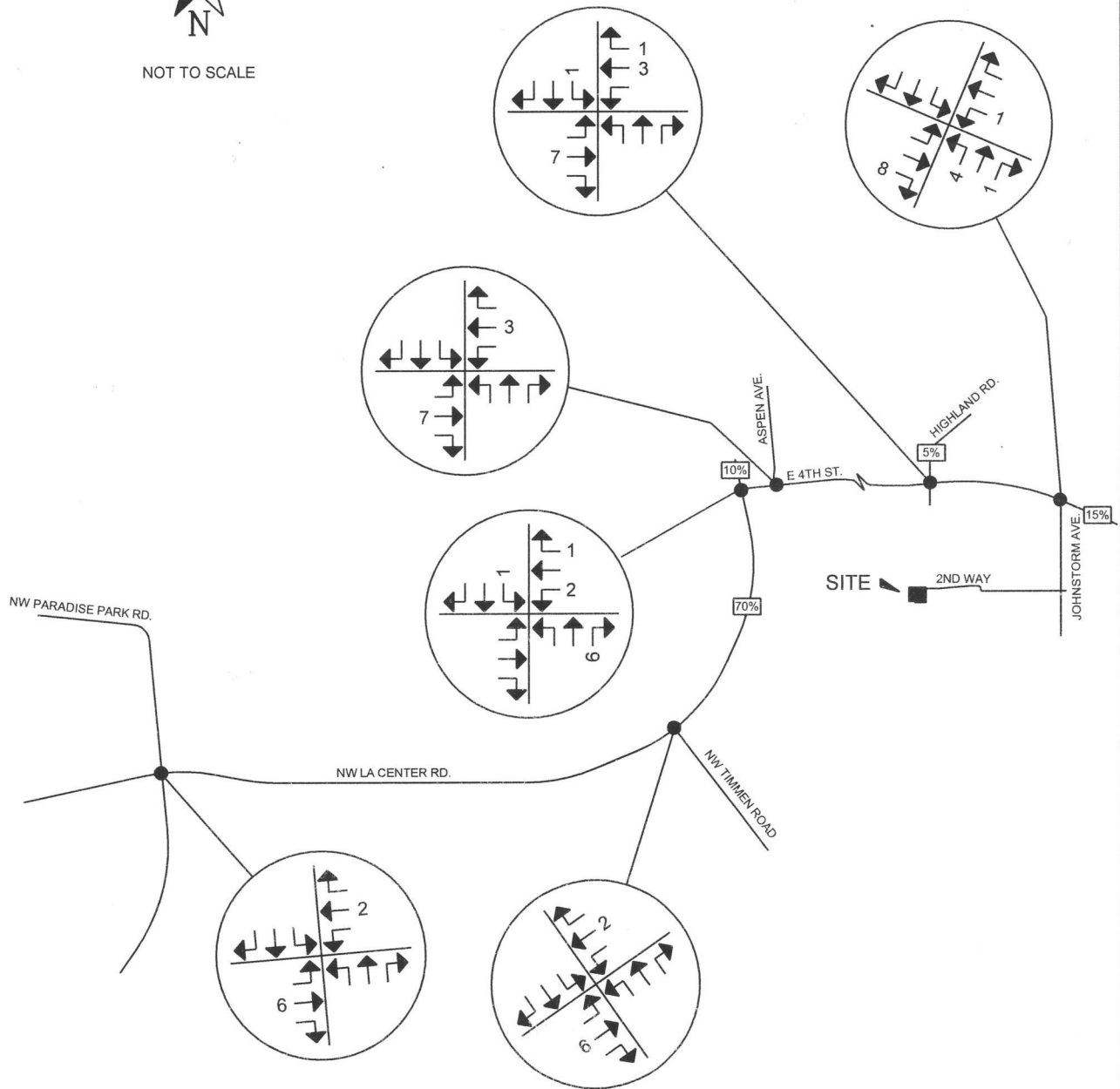
KELLY ENGINEERING

1805 NE 94th St. No. 19, Vancouver, WA 98665

Phone: 360-433-7530



NOT TO SCALE



PM PEAK HOUR SITE TRIPS:
IN-9, OUT-5

BREEZE CREEK TRAIL SUBDIVISION

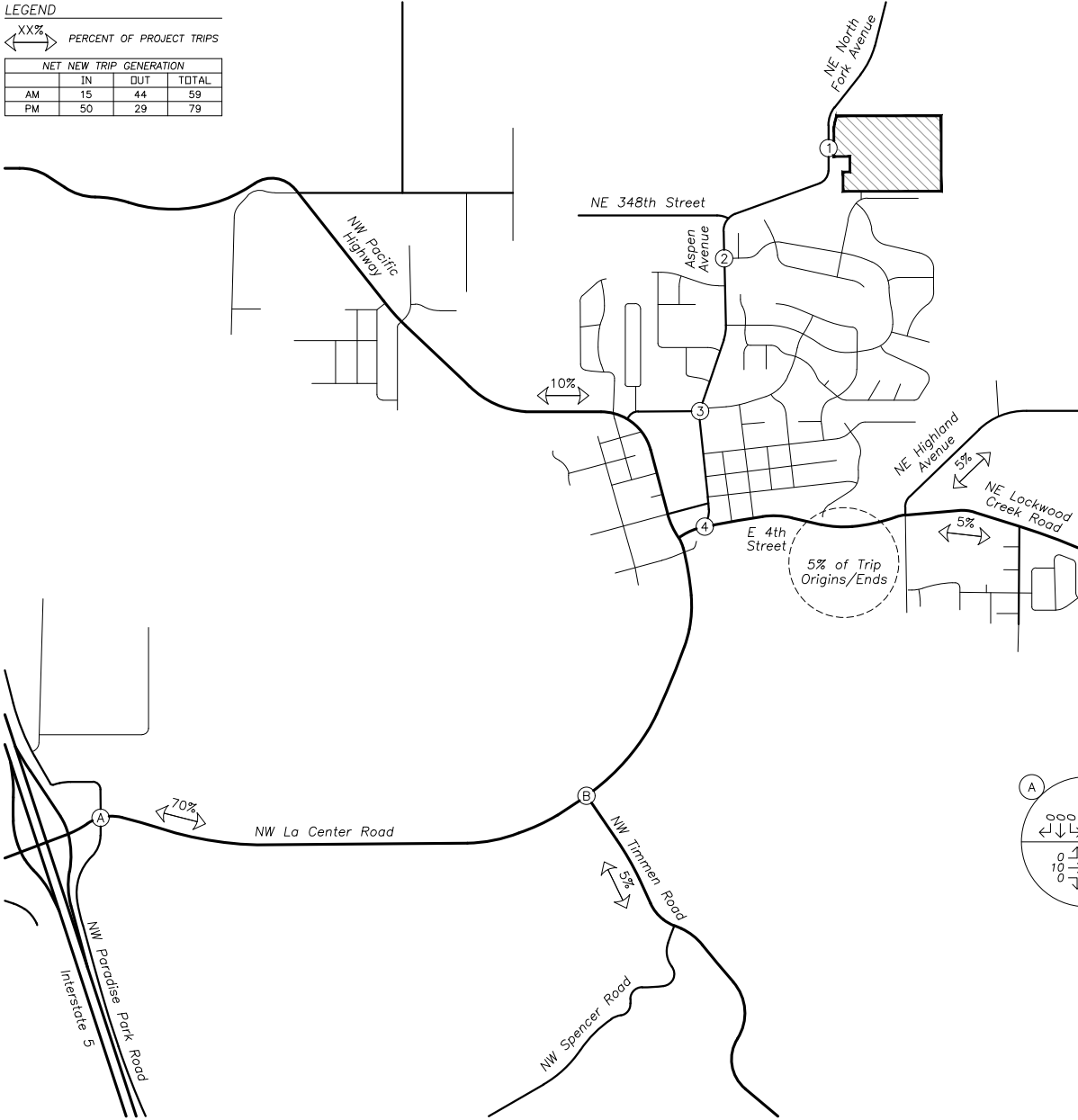
FIGURE 6b
**SITE TRAFFIC DISTRIBUTION/
ASSIGNMENT, PM PEAK HOUR**

KELLY ENGINEERING
1805 NE 94th St. No. 19, Vancouver, WA 98665
Phone: 360-433-7530

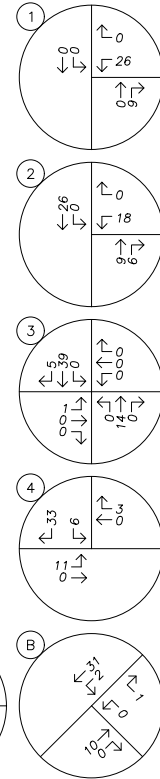
LEGEND

XX% PERCENT OF PROJECT TRIPS

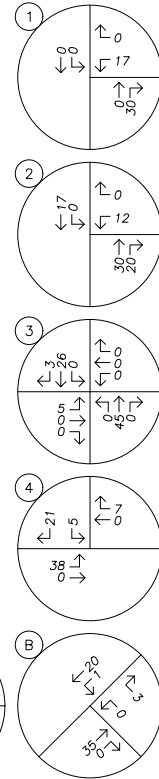
NET NEW TRIP GENERATION			
	IN	OUT	TOTAL
AM	15	44	59
PM	50	29	79



AM PEAK HOUR



PM PEAK HOUR

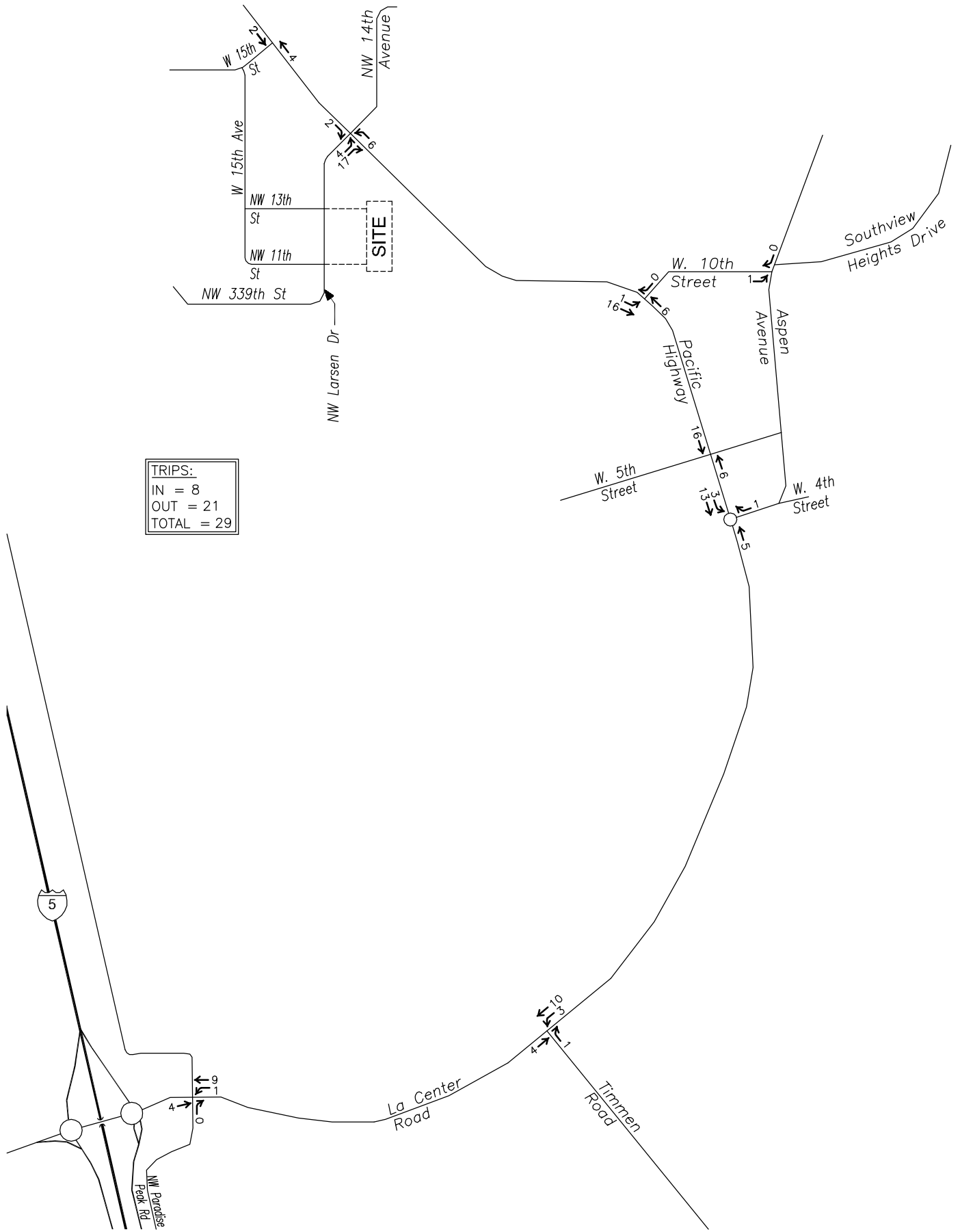


SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips

AM & PM Peak Hours





**CHARBONNEAU
ENGINEERING LLC**

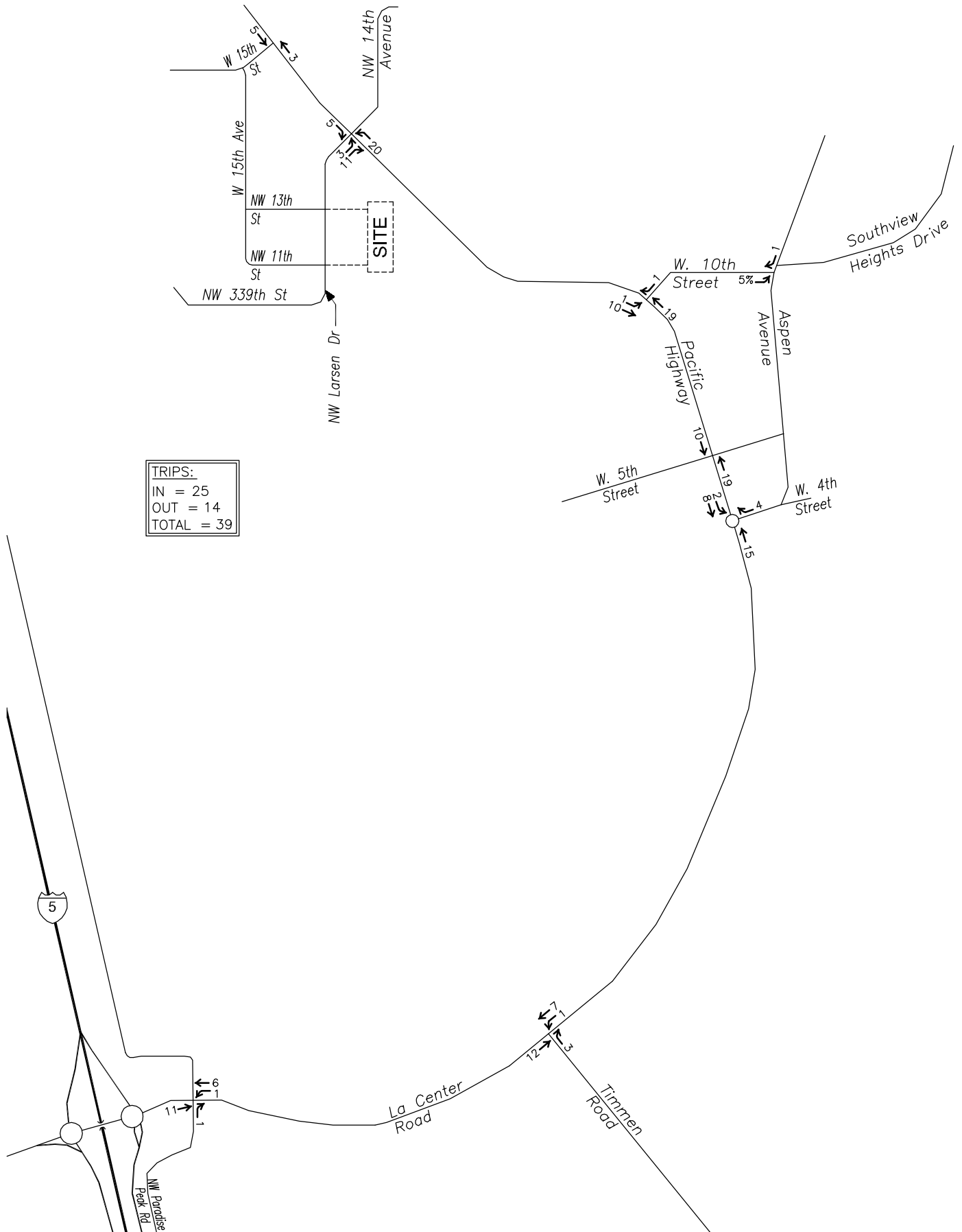
PROJECT: 23-27

NOTES: The site's trip generation is based on Single-Family Detached Housing (ITE 210) trip rates.

**TRIP ASSIGNMENT
AM PEAK HOUR
LARSEN DRIVE SUBDIVISION**

FIGURE

5a



**CHARBONNEAU
ENGINEERING LLC**

PROJECT: 23-27

NOTES: The site's trip generation is based on Single-Family Detached Housing (ITE 210) trip rates.

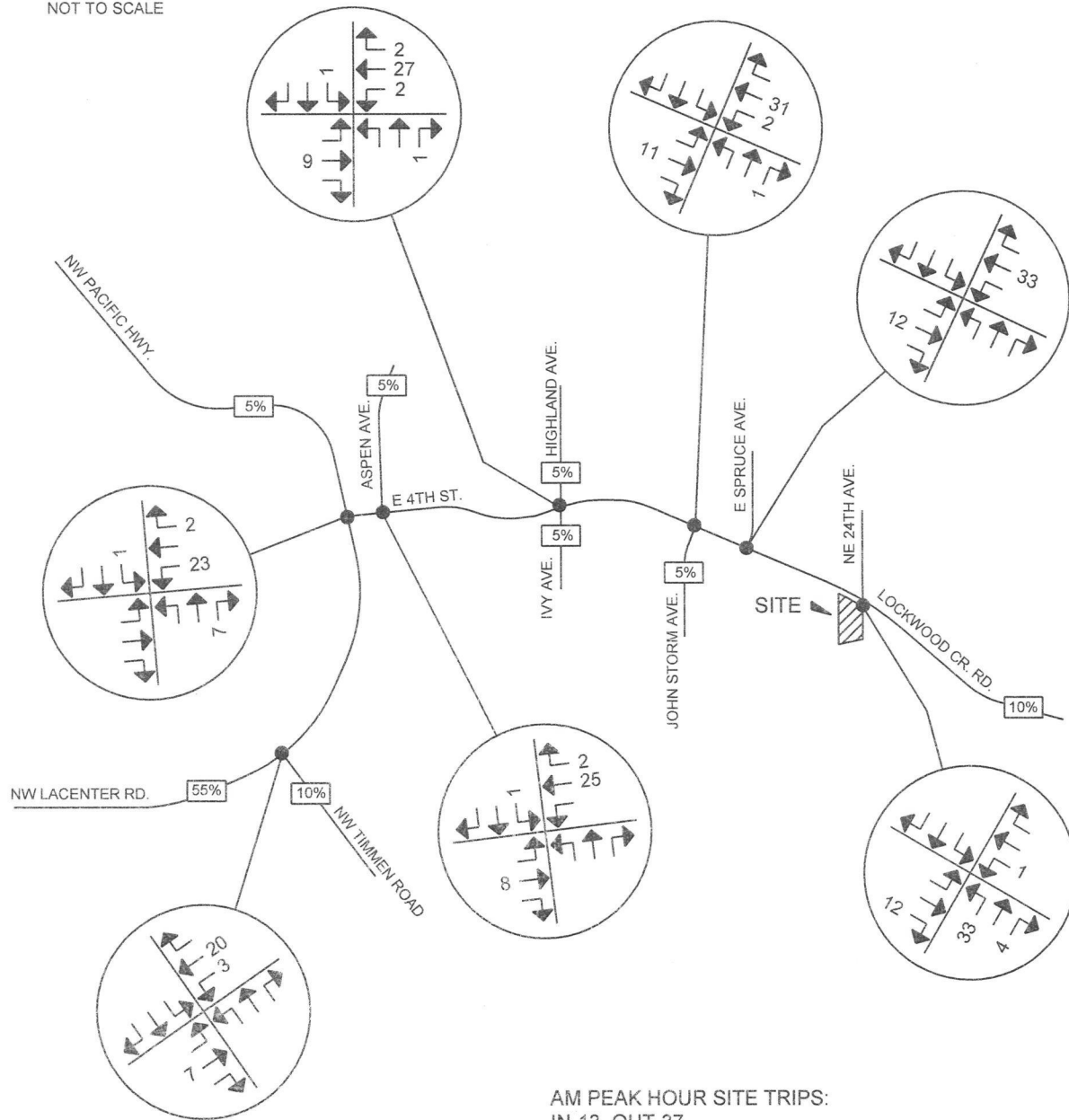
**TRIP ASSIGNMENT
PM PEAK HOUR
LARSEN DRIVE SUBDIVISION**

FIGURE

5b



NOT TO SCALE



ASA'S VIEW SUBDIVISION

FIGURE 7a
SITE TRAFFIC DISTRIBUTION/ASSIGNMENT
AM PEAK HOUR

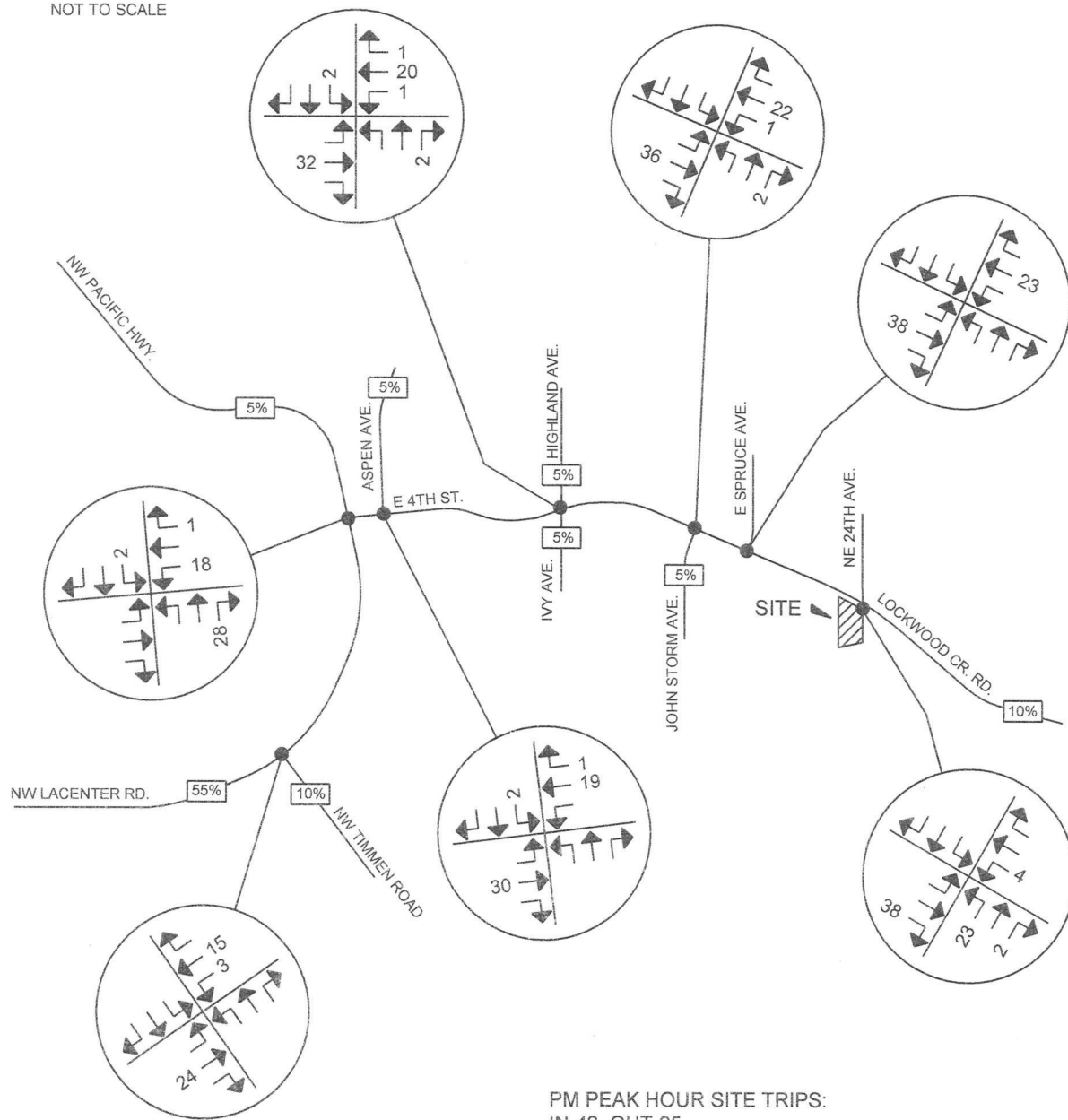
KELLY ENGINEERING

1805 NE 94th St. No. 19, Vancouver, WA 98665

Phone: 360-433-7530



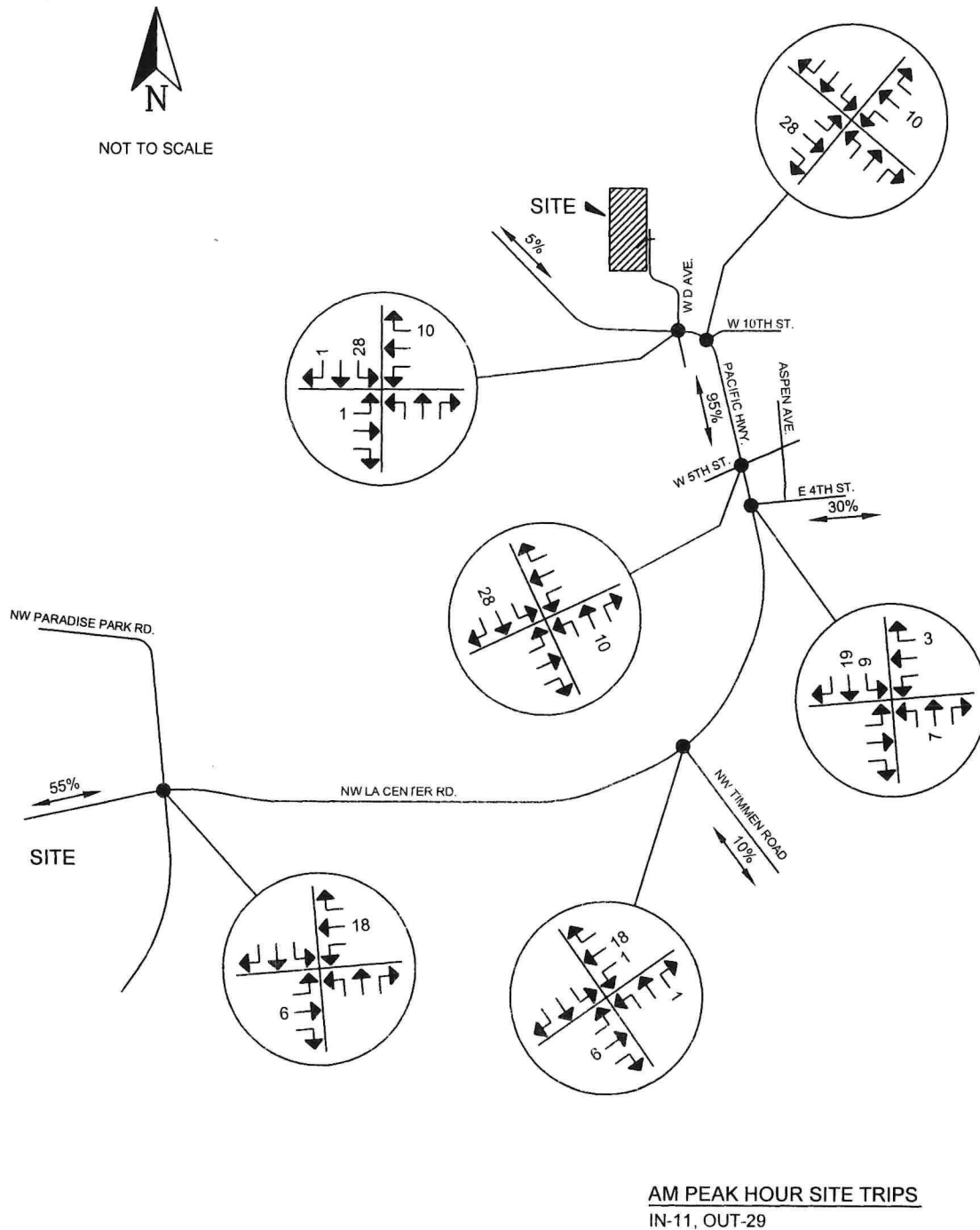
NOT TO SCALE



ASA'S VIEW SUBDIVISION

FIGURE 7b
SITE TRAFFIC DISTRIBUTION/ASSIGNMENT
PM PEAK HOUR

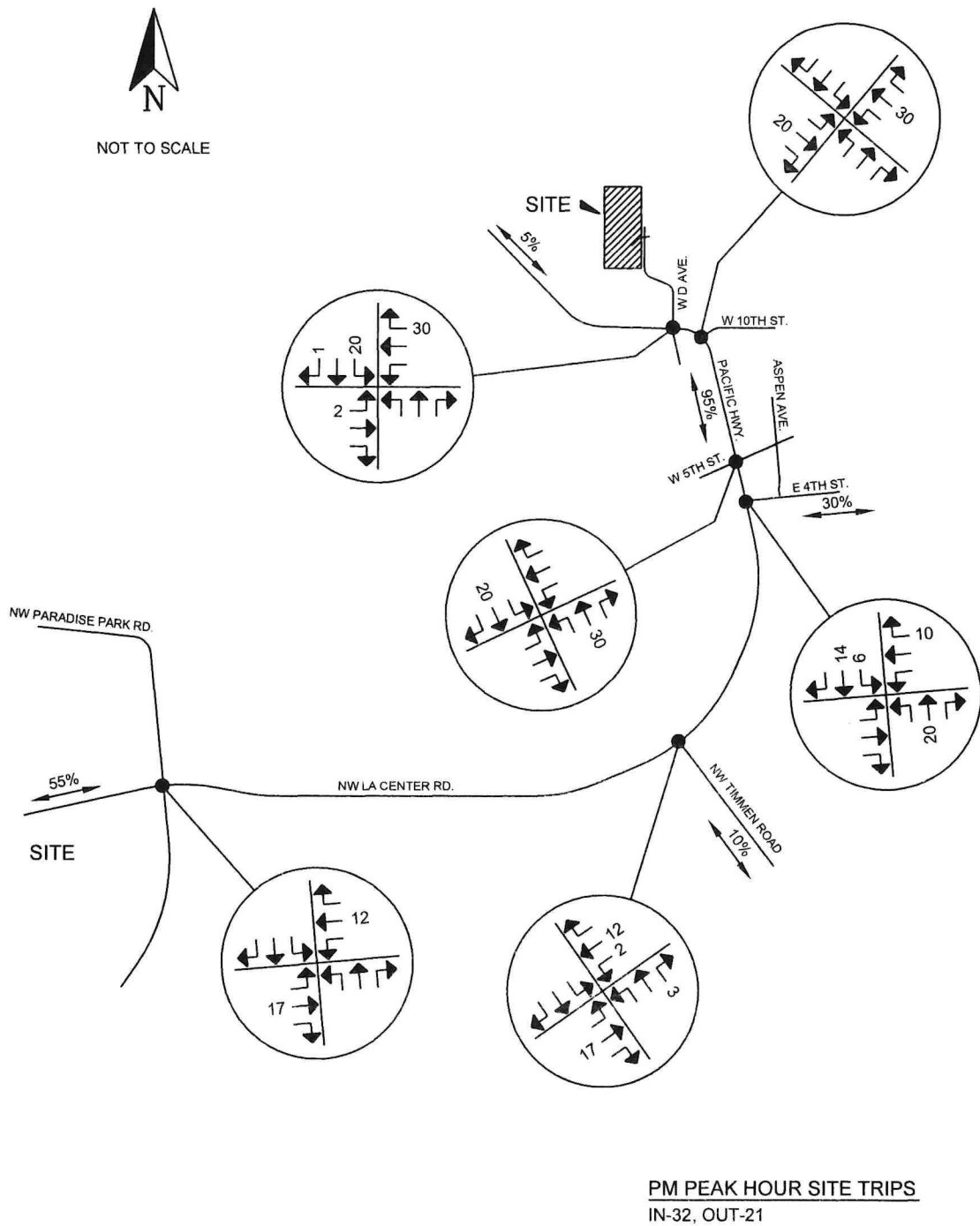
KELLY ENGINEERING
1805 NE 94th St. No. 19, Vancouver, WA 98665
Phone: 360-433-7530



JUNIPER RIDGE SUBDIVISION

FIGURE 6a
**SITE TRAFFIC DISTRIBUTION/
ASSIGNMENT, AM PEAK HOUR**

KELLY ENGINEERING
1805 NE 94th St. No. 19, Vancouver, WA 98665
Phone: 360-433-7530



JUNIPER RIDGE SUBDIVISION

FIGURE 6b
**SITE TRAFFIC DISTRIBUTION/
ASSIGNMENT, PM PEAK HOUR**

KELLY ENGINEERING
1805 NE 94th St. No. 19, Vancouver, WA 98665
Phone: 360-433-7530


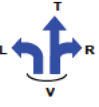
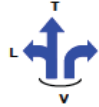
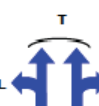

Minor Street Right Turn Volume Adjustment

Pagones Theorem, a two-step right-turn adjustment methodology, uses a minor street equivalent factor and a mainline congestion factor to estimate the portion of right turn volumes that should be considered when evaluating traffic signal warrants. The adjusted right-turn volume is calculated with the equation below.

$$R_{adj} = R \times [1 - (f_{minor} - f_{main})] \quad (2.1)$$

where R_{adj} = adjusted right turn volume; R = original right turn volume; f_{minor} = minor street adjustment factor; f_{main} = mainline congestion factor. Note: if $f_{minor} - f_{main} < 0$, then $R_{adj} = R$.

The minor street adjustment factor reflects whether minor street geometry and traffic volumes permit the free movement of right turns and reduce right-turn volumes accordingly. The mainline congestion factors adjust to account for the amount of congestion on the mainline. In essence, f_{minor} considers what portion of vehicles could get to the intersection to make a right-turn without delay while f_{main} determines whether there are enough gaps in the mainline traffic to permit them to actually make that right-turn. The suggested values for f_{minor} and f_{main} are listed in Tables 2.1 and 2.2 according to lane configuration and volume condition. For the mainline right-turn reduction, if there is no mainline right turn lane, mainline right turn volumes are added to the through volumes for the lane volume calculations; if a right-turn lane is present, mainline right-turn volumes are excluded from the calculation.

Minor Street Adjustment Factor (f_{minor})			
Case	Lane Configuration	Volume Condition	f_{minor}
1		$R > 0.7V$	0.60
		$0.7V \geq R > 0.35V$	0.40
		$R \leq 0.35V$	0.20
2		$R > 3T$	0.60
		$3T \geq R > T/3$	0.40
		$R \leq T/3$	0.20
3		Any configuration with an exclusive right turn lane ≥ 500 ft. long (See note for shorter right turn lanes)	0.75
4		$R > (T+L)$	0.65
		$L > (T+R)$	Use Case 2
		$L \approx T \approx R (\pm 10 \text{ veh})$	0.40
		$L \approx T > 3R$	0.20
		$R \approx T > 3L$	0.50
		all other conditions	0.30
5		$R > T$	0.75
		$T \geq R > T/2$	0.50
		$T/2 \geq R > T/4$	0.30
		$R < T/4$	0.15

Mainline Congestion Factor (f_{main})	
Mainline volume per lane (veh/hr/lane)	f_{main}
0 - 399	0.0
400 - 499	0.05
500 - 599	0.10
600 - 699	0.15
700 - 799	0.20
800 - 899	0.25
900 - 999	0.30
1000 - 1099	0.35
1100 - 1199	0.40
1200 - 1299	0.45
1300 - 1399	0.50
1400 - 1499	0.55
1500 - 1599	0.60
1600 - 1699	0.65
1700 - 1799	0.70
1800 - 1899	0.75

Table x. Peak Hour Signal Warrant Right Turn Volume Adjustment Summary.

Intersection	Minor Street Case	Scenario & Peak Hour	Minor Street Traffic			Minor St. App. Vol.	f_{minor}	Mainline Traffic		Mainline Lanes (#)	Mainline Traffic per lane (veh/hr/lane)	f_{main}	R_{adj}
			LT	TH	RT			TH	RT				
NW Timmen Rd & NW La Center Rd	1	2028 Bkgd PM	37	0	139	176	0.60	905	34	1	939	0.30	97
		2025 Extg PM	30	0	123	153	0.60	754	27		781	0.20	74
						0							
						0							
						0							
						0							

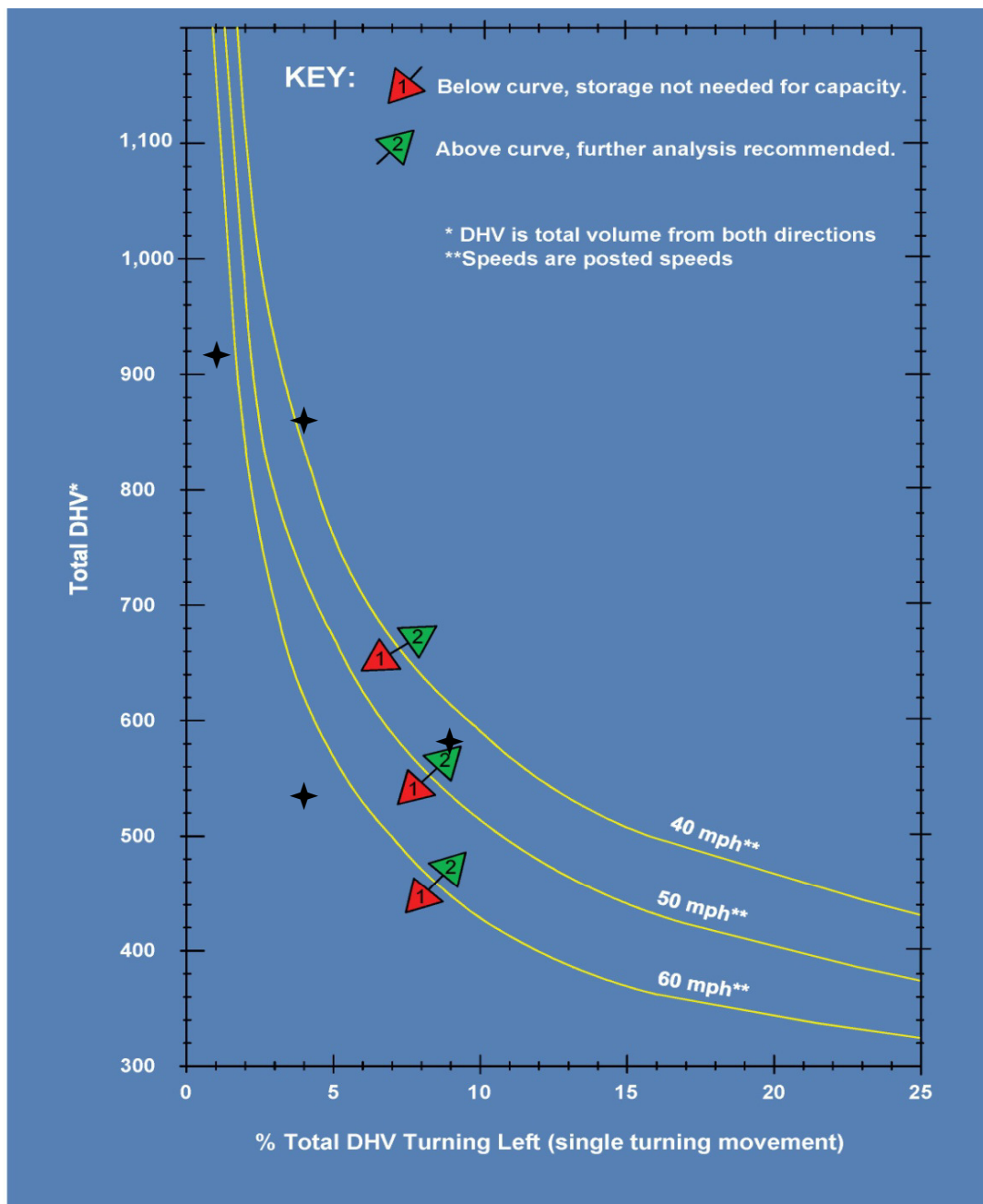


Exhibit 1310-7a. Left-turn Storage Guidelines-: Two-Lane, Unsignalized.

Storage requirements for critical left-turn movements at unsignalized intersections on 2-lane highways.

Intersection	Mov't	Analysis Period	Speed V (mph)	Left Turns in Advancing Volume (vph)	Advancing Volume V _A (vph)	Opposing Volume V _O (vph)	Total DHV	% Left Turns in DHV L	Storage Req'd (ft)
E Cedar Ave and E 4th St	EB LT	2028 Total Traffic-AM Peak	25	7	365	553	918	1%	No
		2025 Extg Traffic-PM Peak		30	513	344	857	4%	Yes
E Spruce Ave & Lockwood Cr Rd	EB LT	2028 Total Traffic-AM Peak	35	23	211	324	535	4%	No
		2028 Total Traffic-PM Peak		52	345	234	579	9%	No

Source: WSDOT Design Guide, February 2019.

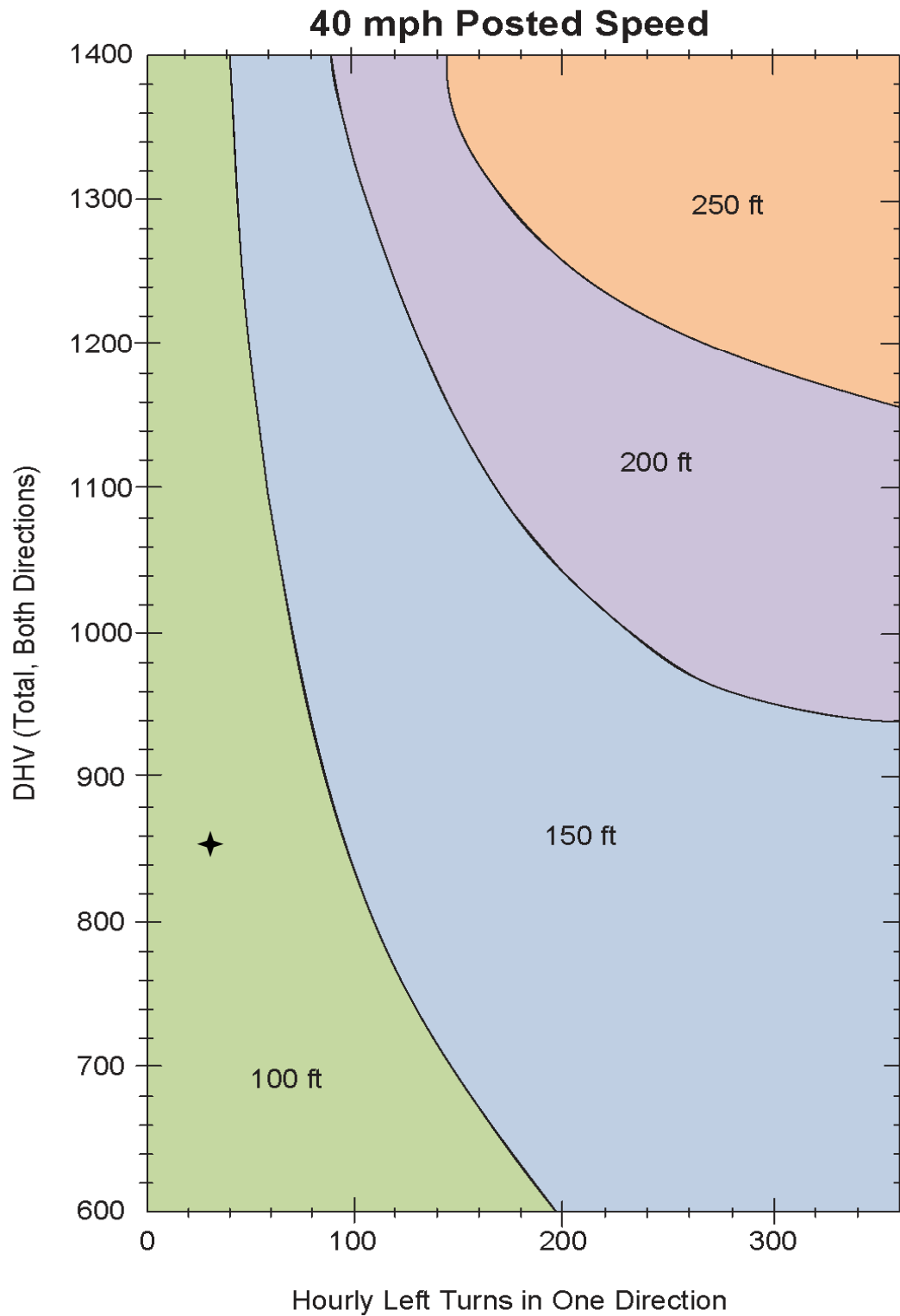
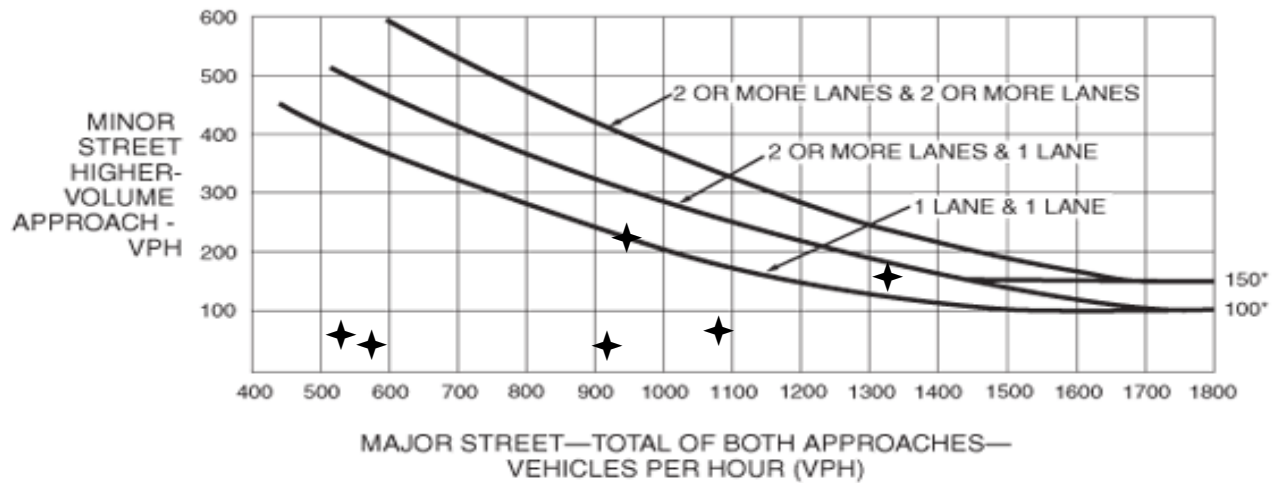


Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Table for Figure 4C-3

One lane and one lane		Two or more lanes and one lane		Two or more lanes and two or more lanes	
VPH on the major street (Total of both approaches)	VPH on the minor street (Higher volume approach)	VPH on the major street (Total of both approaches)	VPH on the minor street (Higher volume approach)	VPH on the major street (Total of both approaches)	VPH on the minor street (Higher volume approach)
1800	100	1800	100 or 150*	1800	150
1700	100	1700	100 or 150*	1700	150
1600	100	1600	120 or 150*	1600	170
1500	100	1500	145 or 150*	1500	180
1400	120	1400	155	1400	220
1300	130	1300	190	1300	250
1200	150	1200	220	1200	285
1100	175	1100	250	1100	340
1000	200	1000	285	1000	370
900	245	900	325	900	425
800	285	800	360	800	475
700	325	700	420	700	540
600	360	600	460	600	590
500	420	500	Not available	500	Not available

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Peak hour volume warrant for signalization data.

Intersection	Analysis Period	Major Street Speed (mph)	Major Street		Minor Street High Volume Approach		Signal Warranted?
			Volume (vph)	Lanes (#)	Volume (vph)	Lanes (#)	
Paradise Park Rd & LaCenter Rd	2028 Total Traffic - AM Peak Hour ¹	50	1,313	1	56	1	No
	2028 Bkgd Traffic - PM Peak Hour ¹		1,624		100		Yes
	2025 Extg Traffic - PM Peak Hour ¹		1,334		94		No
NW Timmen Rd & La Center Rd	2028 Total Traffic - AM Peak Hour ¹	50	1,328	1	77	1	No
	2028 Bkgd Traffic - PM Peak Hour ^{1,2}		1,585		134		Yes
	2025 Extg Traffic - PM Peak Hour ^{1,2}		1,320		104		No
Aspen Ave & E 4th St	2028 Total Traffic - AM Peak Hour	25	950	2	227	1	No
	2028 Total Traffic - PM Peak Hour		1,334		157		No
Cedar Ave & E 4th St	2028 Total Traffic - AM Peak Hour	25	918	1	40	1	No
	2028 Total Traffic - PM Peak Hour		1,088		69		No
E Spruce Ave & NE Lockwood Cr Rd	2028 Total Traffic - AM Peak Hour	35	535	1	65	1	No
	2028 Total Traffic - PM Peak Hour		579		41		No
Tanoak Ave & NE 339th St	2028 Total Traffic - AM Peak Hour	25	216	1	18	1	No
	2028 Total Traffic - PM Peak Hour		279		4		No

Source: Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition.

* Data point not plotted; warrant not met.

** Minor Street Volume calculated with right-turn adjusted volume.

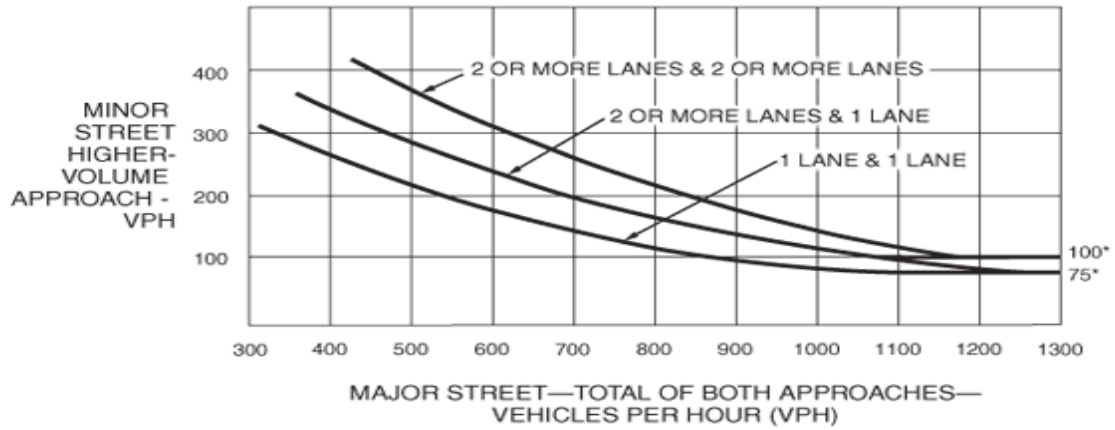


Charbonneau
Engineering LLC

PROJECT: #25-14 Manning Meadows Subdivision

DATE: 05.08.25

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Table for Figure 4C-4

One lane and one lane		Two or more lanes and one lane		Two or more lanes and two or more lanes	
VPH on the major street (Total of both approaches)	VPH on the minor street (Higher volume approach)	VPH on the major street (Total of both approaches)	VPH on the minor street (Higher volume approach)	VPH on the major street (Total of both approaches)	VPH on the minor street (Higher volume approach)
1300	75	1300	75 or 100*	1300	100
1200	75	1200	80 or 100*	1200	100
1100	75	1100	100	1100	120
1000	80	1000	120	1000	150
900	100	900	140	900	175
800	120	800	160	800	225
700	145	700	200	700	260
600	170	600	245	600	315
500	220	500	280	500	370
400	260	400	340	400	Not available

* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

OFFICER REPORTED CRASHES THAT OCCURRED *at* OR *in the vicinity of* MULTIPLE INTERSECTIONS IN THE CITY OF LA CENTER

01/01/2020 - 12/31/2024 See 2nd tab below for road info

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.

* 4th St @ Aspen Ave - No Reported Crashes

* 4th st @ Cedar Ave - No Reported Crashes

* 4th St @ Highland Ave / Ivy Ave - No Reported Crashes

* 339th St @ Tanoak Ave - No Reported Crashes

* La Center Rd / 319th St @ Paradise Park Rd

* La Center Rd @ Timmen Rd

* Lockwood Creek Rd @ Spruce Ave





















* Pacific Hwy / La Center Rd @ 4th St









PRIMARY TRAFFICWAY	BLOCK NUMBER	INTERSECTING TRAFFICWAY	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME	REPORT NUMBER	DATE	# I N J	# F A T	# V E H	# P E S	# B I K S	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO
NE LOCKWOOD CREEK RD	1800	E SPRUCE AVE					EB67457	08/02/2021	0	0	1	0	0	West	East		
NE LOCKWOOD CREEK RD	1900		70	F	SE	E SPRUCE AVE	EE07805	02/04/2023	1	0	1	0	0	East	West		
NW 319TH ST (LA CTR RD)	2800		109	F	W	NW PARADISE PARK RD	EC58162	06/18/2022	0	0	2	0	0	Stopped	Stopped	East	West
NW 319TH ST (LA CTR RD)	2700		51	F	W	NW PARADISE PARK RD	EB81369	10/20/2021	0	0	2	0	0	NW	SE	East	West
NW LA CENTER RD	2798	NW PARADISE PARK RD					EB57965	08/14/2021	0	0	2	0	0	West	East	East	South
NW LA CENTER RD	32088	NW TIMMEN RD					EB98726	12/09/2021	0	0	1	0	0	SW	NE		
NW LA CENTER RD	32088	NW TIMMEN RD					ED04764	10/21/2022	1	0	2	0	0	West	East	West	East
NW LA CENTER RD	32088	NW TIMMEN RD					EE06989	10/07/2023	1	0	2	0	0	South	West	West	East
NW LA CENTER RD	32088	NW TIMMEN RD					EB92925	11/20/2021	0	0	2	0	0	SW	NE	NW	SW
NW TIMMEN RD	31986	NW LA CENTER RD					EC15297	12/18/2021	1	0	1	0	0	SE	NW		
W 4TH ST		NW PACIFIC HWY					ED06718	11/19/2022	0	0	1	0	0	South	West		

Lanes, Volumes, Timings
1: Paradise Park Rd & NW La Center Rd

2025 Existing Traffic, AM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	270	12	1	704	21	15	1	3	15	1	37
Future Volume (vph)	30	270	12	1	704	21	15	1	3	15	1	37
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	6%	6%	3%	3%	3%	47%	47%	47%	25%	25%	25%
Shared Lane Traffic (%)												
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 52.5% ICU Level of Service A												
Analysis Period (min) 15												

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	270	12	1	704	21	15	1	3	15	1	37
Future Vol, veh/h	30	270	12	1	704	21	15	1	3	15	1	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	275	-	-	175	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	6	6	6	3	3	3	47	47	47	25	25	25
Mvmt Flow	33	300	13	1	782	23	17	1	3	17	1	41












Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	805	0	0	313	0	0	1190	1180	307	1171	1175	794
Stage 1	-	-	-	-	-	-	373	373	-	796	796	-
Stage 2	-	-	-	-	-	-	817	807	-	375	379	-
Critical Hdwy	4.16	-	-	4.13	-	-	7.57	6.97	6.67	7.35	6.75	6.45
Critical Hdwy Stg 1	-	-	-	-	-	-	6.57	5.97	-	6.35	5.75	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.57	5.97	-	6.35	5.75	-
Follow-up Hdwy	2.254	-	-	2.227	-	-	3.923	4.423	3.723	3.725	4.225	3.525
Pot Cap-1 Maneuver	802	-	-	1242	-	-	134	157	639	153	173	354
Stage 1	-	-	-	-	-	-	565	547	-	348	368	-
Stage 2	-	-	-	-	-	-	312	337	-	602	576	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	802	-	-	1242	-	-	114	150	639	147	166	354
Mov Cap-2 Maneuver	-	-	-	-	-	-	114	150	-	147	166	-
Stage 1	-	-	-	-	-	-	542	525	-	334	368	-
Stage 2	-	-	-	-	-	-	275	337	-	573	552	-






Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	36.3	21.3
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	114	352	802	-	-	1242	-	-	147	344
HCM Lane V/C Ratio	0.146	0.013	0.042	-	-	0.001	-	-	0.113	0.123
HCM Control Delay (s)	41.9	15.4	9.7	-	-	7.9	-	-	32.6	16.9
HCM Lane LOS	E	C	A	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	0.5	0	0.1	-	-	0	-	-	0.4	0.4

Lanes, Volumes, Timings
2: NW Timmen Rd & NW La Center Rd











2025 Existing Traffic, AM Peak Hour
05/10/2025

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	288	12	72	693	20	44
Future Volume (vph)	288	12	72	693	20	44
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	7%	7%	14%	14%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 46.5%			ICU Level of Service A			
Analysis Period (min) 15						

Intersection								
Int Delay, s/veh	1.5							
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Vol, veh/h	288	12	72	693	20	44		
Future Vol, veh/h	288	12	72	693	20	44		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	165	-	0	125		
Veh in Median Storage, #	0	-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	88	88	88	88	88	88		
Heavy Vehicles, %	7	7	14	14	2	2		
Mvmt Flow	327	14	82	788	23	50		
Major/Minor	Major1		Major2		Minor1			
Conflicting Flow All	0	0	341	0	1286	334		
Stage 1	-	-	-	-	334	-		
Stage 2	-	-	-	-	952	-		
Critical Hdwy	-	-	4.24	-	6.42	6.22		
Critical Hdwy Stg 1	-	-	-	-	5.42	-		
Critical Hdwy Stg 2	-	-	-	-	5.42	-		
Follow-up Hdwy	-	-	2.326	-	3.518	3.318		
Pot Cap-1 Maneuver	-	-	1154	-	181	708		
Stage 1	-	-	-	-	725	-		
Stage 2	-	-	-	-	375	-		
Platoon blocked, %	-	-		-				
Mov Cap-1 Maneuver	-	-	1154	-	168	708		
Mov Cap-2 Maneuver	-	-	-	-	168	-		
Stage 1	-	-	-	-	725	-		
Stage 2	-	-	-	-	348	-		
Approach	EB		WB		NB			
HCM Control Delay, s	0		0.8		16.5			
HCM LOS	C							
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	EBR	WBL	WBT
Capacity (veh/h)	168		708		-	-	1154	-
HCM Lane V/C Ratio	0.135		0.071		-	-	0.071	-
HCM Control Delay (s)	29.8		10.5		-	-	8.4	-
HCM Lane LOS	D		B		-	-	A	-
HCM 95th %tile Q(veh)	0.5		0.2		-	-	0.2	-

Lanes, Volumes, Timings
3: NW Pacific Hwy & E 4th Street

2025 Existing Traffic, AM Peak Hour
05/10/2025






						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	525	45	65	231	77	251
Future Volume (vph)	525	45	65	231	77	251
Confl. Peds. (#/hr)		1			1	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	2%	2%	9%	9%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield
Intersection Summary						
Control Type: Roundabout						
Intersection Capacity Utilization 62.6%			ICU Level of Service B			
Analysis Period (min) 15						






Intersection				
Intersection Delay, s/veh	9.7			
Intersection LOS	A			
Approach	WB	NB		SB
Entry Lanes	1	2		1
Conflicting Circle Lanes	1	1		1
Adj Approach Flow, veh/h	695	361		400
Demand Flow Rate, veh/h	709	393		408
Vehicles Circulating, veh/h	86	96		653
Vehicles Exiting, veh/h	403	965		142
Ped Vol Crossing Leg, #/h	1	0		1
Ped Cap Adj	1.000	1.000		1.000
Approach Delay, s/veh	9.4	4.8		14.8
Approach LOS	A	A		B
Lane	Left	Left	Right	Left
Designated Moves	LR	LT	R	LT
Assumed Moves	LR	LT	R	LT
RT Channelized				
Lane Util	1.000	0.219	0.781	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
Entry Flow, veh/h	709	86	307	408
Cap Entry Lane, veh/h	1264	1301	1301	709
Entry HV Adj Factor	0.980	0.917	0.919	0.980
Flow Entry, veh/h	695	79	282	400
Cap Entry, veh/h	1239	1194	1195	695
V/C Ratio	0.561	0.066	0.236	0.576
Control Delay, s/veh	9.4	3.6	5.1	14.8
LOS	A	A	A	B
95th %tile Queue, veh	4	0	1	4

Lanes, Volumes, Timings
4: E 4th Street & Aspen Avenue

2025 Existing Traffic, AM Peak Hour
05/10/2025



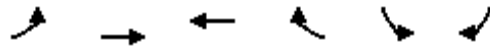
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	45	279	419	24	28	143
Future Volume (vph)	45	279	419	24	28	143
Confl. Peds. (#/hr)	1			1	1	1
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	6%	6%	4%	4%	4%	4%
Shared Lane Traffic (%)						
Sign Control		Free	Free	Stop		
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 40.5%				ICU Level of Service A		
Analysis Period (min) 15						




Intersection						
Int Delay, s/veh	3.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	45	279	419	24	28	143
Future Vol, veh/h	45	279	419	24	28	143
Conflicting Peds, #/hr	1	0	0	1	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	65	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	6	6	4	4	4	4
Mvmt Flow	58	362	544	31	36	186
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	576	0	-	0	1040	562
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	479	-
Critical Hdwy	4.16	-	-	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.254	-	-	-	3.536	3.336
Pot Cap-1 Maneuver	978	-	-	-	253	523
Stage 1	-	-	-	-	567	-
Stage 2	-	-	-	-	619	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	977	-	-	-	238	522
Mov Cap-2 Maneuver	-	-	-	-	238	-
Stage 1	-	-	-	-	533	-
Stage 2	-	-	-	-	618	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.2	0		16.9		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	977	-	-	-	238	522
HCM Lane V/C Ratio	0.06	-	-	-	0.153	0.356
HCM Control Delay (s)	8.9	-	-	-	22.8	15.7
HCM Lane LOS	A	-	-	-	C	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5	1.6




Lanes, Volumes, Timings
5: E 4th Street & Cedar Avenue





















2025 Existing Traffic, AM Peak Hour









05/10/2025



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	295	424	15	24	14
Future Volume (vph)	7	295	424	15	24	14
Confl. Peds. (#/hr)	9			2	2	9
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	6%	6%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 35.8%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	295	424	15	24	14
Future Vol, veh/h	7	295	424	15	24	14
Conflicting Peds, #/hr	9	0	0	2	2	9
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	6	6	5	5	3	3
Mvmt Flow	10	415	597	21	34	20
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	627	0	-	0	1054	626
Stage 1	-	-	-	-	617	-
Stage 2	-	-	-	-	437	-
Critical Hdwy	4.16	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.254	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	936	-	-	-	249	482
Stage 1	-	-	-	-	536	-
Stage 2	-	-	-	-	649	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	928	-	-	-	241	474
Mov Cap-2 Maneuver	-	-	-	-	241	-
Stage 1	-	-	-	-	524	-
Stage 2	-	-	-	-	643	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		20		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	928	-	-	-	294	
HCM Lane V/C Ratio	0.011	-	-	-	0.182	
HCM Control Delay (s)	8.9	0	-	-	20	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0	-	-	-	0.7	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	179	10	1	278	11	12	6	9	6	6	148
Future Volume (vph)	107	179	10	1	278	11	12	6	9	6	6	148
Confl. Peds. (#/hr)			1	6		5	1		6	5		
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	44%	44%	44%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 41.8%												
ICU Level of Service A												
Analysis Period (min) 15												

Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	107	179	10	1	278	11	12	6	9	6	6	148
Future Vol, veh/h	107	179	10	1	278	11	12	6	9	6	6	148
Conflicting Peds, #/hr	0	0	1	6	0	5	1	0	6	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	145	-	-	125	-	-	65	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	6	6	6	4	4	4	44	44	44	3	3	3
Mvmt Flow	162	271	15	2	421	17	18	9	14	9	9	224

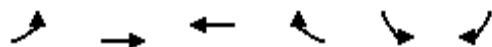
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	443	0	0	292	0	0	1160	1056	291	1059	1055	436
Stage 1	-	-	-	-	-	-	609	609	-	439	439	-
Stage 2	-	-	-	-	-	-	551	447	-	620	616	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.94	6.64	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.94	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.94	-	6.13	5.53	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.896	4.396	3.696	3.527	4.027	3.327
Pot Cap-1 Maneuver	1096	-	-	1258	-	-	143	190	659	201	225	618
Stage 1	-	-	-	-	-	-	417	425	-	595	576	-
Stage 2	-	-	-	-	-	-	451	508	-	474	480	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1091	-	-	1251	-	-	77	160	651	165	189	614
Mov Cap-2 Maneuver	-	-	-	-	-	-	77	160	-	165	189	-
Stage 1	-	-	-	-	-	-	353	360	-	504	572	-
Stage 2	-	-	-	-	-	-	281	504	-	383	407	-




Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	0	39.4	16.3
HCM LOS			E	C




Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	77	292	1091	-	-	1251	-	-	165	565
HCM Lane V/C Ratio	0.236	0.078	0.149	-	-	0.001	-	-	0.055	0.413
HCM Control Delay (s)	65.6	18.4	8.9	-	-	7.9	-	-	28.1	15.8
HCM Lane LOS	F	C	A	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	0.8	0.3	0.5	-	-	0	-	-	0.2	2

Lanes, Volumes, Timings
7: NE Lockwood Creek Road & E Spruce Avenue

2025 Existing Traffic, AM Peak Hour
05/10/2025



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	14	158	264	5	11	29
Future Volume (vph)	14	158	264	5	11	29
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles (%)	8%	8%	9%	9%	18%	18%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 29.9% ICU Level of Service A						
Analysis Period (min) 15						




Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	158	264	5	11	29
Future Vol, veh/h	14	158	264	5	11	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	8	8	9	9	18	18
Mvmt Flow	23	263	440	8	18	48
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	448	0	-	0	753	444
Stage 1	-	-	-	-	444	-
Stage 2	-	-	-	-	309	-
Critical Hdwy	4.18	-	-	-	6.58	6.38
Critical Hdwy Stg 1	-	-	-	-	5.58	-
Critical Hdwy Stg 2	-	-	-	-	5.58	-
Follow-up Hdwy	2.272	-	-	-	3.662	3.462
Pot Cap-1 Maneuver	1081	-	-	-	355	582
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	710	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1081	-	-	-	346	582
Mov Cap-2 Maneuver	-	-	-	-	346	-
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	710	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		13.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1081	-	-	-	490	
HCM Lane V/C Ratio	0.022	-	-	-	0.136	
HCM Control Delay (s)	8.4	0	-	-	13.5	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	

Lanes, Volumes, Timings
8: Tanoak Avenue & NE 339th Street

2025 Existing Traffic, AM Peak Hour

05/10/2025





















	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Traffic Volume (vph)	50	17	4	132	13	2
Future Volume (vph)	50	17	4	132	13	2
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	10%	10%	4%	4%	13%	13%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 20.5%				ICU Level of Service A		
Analysis Period (min) 15						









Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	50	17	4	132	13	2
Future Vol, veh/h	50	17	4	132	13	2
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	10	10	4	4	13	13
Mvmt Flow	64	22	5	169	17	3
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	87	0	255	77
Stage 1	-	-	-	-	76	-
Stage 2	-	-	-	-	179	-
Critical Hdwy	-	-	4.14	-	6.53	6.33
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	-	-	2.236	-	3.617	3.417
Pot Cap-1 Maneuver	-	-	1496	-	710	954
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	826	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1495	-	706	952
Mov Cap-2 Maneuver	-	-	-	-	706	-
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	823	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.2		10.1	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	731	-	-	1495	-	
HCM Lane V/C Ratio	0.026	-	-	0.003	-	
HCM Control Delay (s)	10.1	-	-	7.4	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

Lanes, Volumes, Timings
1: Paradise Park Rd & NW La Center Rd

2025 Existing Traffic, PM Peak Hour

05/10/2025






												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	750	9	1	502	11	12	0	1	26	0	68
Future Volume (vph)	61	750	9	1	502	11	12	0	1	26	0	68
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	8%	8%	8%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 61.5%												

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	750	9	1	502	11	12	0	1	26	0	68
Future Vol, veh/h	61	750	9	1	502	11	12	0	1	26	0	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	275	-	-	175	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	2	2	2	8	8	8	2	2	2
Mvmt Flow	62	765	9	1	512	11	12	0	1	27	0	69
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	523	0	0	774	0	0	1448	1419	770	1414	1418	518
Stage 1	-	-	-	-	-	-	894	894	-	520	520	-
Stage 2	-	-	-	-	-	-	554	525	-	894	898	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.18	6.58	6.28	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.18	5.58	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.18	5.58	-	6.12	5.52	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.572	4.072	3.372	3.518	4.018	3.318
Pot Cap-1 Maneuver	1049	-	-	842	-	-	106	133	391	115	137	558
Stage 1	-	-	-	-	-	-	328	352	-	539	532	-
Stage 2	-	-	-	-	-	-	506	520	-	336	358	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1049	-	-	842	-	-	89	125	391	109	129	558
Mov Cap-2 Maneuver	-	-	-	-	-	-	89	125	-	109	129	-
Stage 1	-	-	-	-	-	-	309	331	-	507	531	-
Stage 2	-	-	-	-	-	-	443	519	-	315	337	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0			48.9			22.3		
HCM LOS							E			C		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	89	391	1049	-	-	842	-	-	109	558		
HCM Lane V/C Ratio	0.138	0.003	0.059	-	-	0.001	-	-	0.243	0.124		
HCM Control Delay (s)	51.8	14.2	8.6	-	-	9.3	-	-	48.3	12.4		
HCM Lane LOS	F	B	A	-	-	A	-	-	E	B		
HCM 95th %tile Q(veh)	0.5	0	0.2	-	-	0	-	-	0.9	0.4		

Lanes, Volumes, Timings
2: NW Timmen Rd & NW La Center Rd











2025 Existing Traffic, PM Peak Hour
05/10/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕		↘	↕	↘	↗
Traffic Volume (vph)	754	27	57	482	30	123
Future Volume (vph)	754	27	57	482	30	123
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 57.4%				ICU Level of Service B		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	2.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	754	27	57	482	30	123
Future Vol, veh/h	754	27	57	482	30	123
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	165	-	0	125
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	794	28	60	507	32	129
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	822	0	1435	808
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	627	-
Critical Hdwy	-	-	4.11	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.209	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	812	-	147	379
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	531	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	812	-	136	379
Mov Cap-2 Maneuver	-	-	-	-	136	-
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	492	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	1		23.2		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	136	379	-	-	812	-
HCM Lane V/C Ratio	0.232	0.342	-	-	0.074	-
HCM Control Delay (s)	39.3	19.3	-	-	9.8	-
HCM Lane LOS	E	C	-	-	A	-
HCM 95th %tile Q(veh)	0.9	1.5	-	-	0.2	-

Lanes, Volumes, Timings
3: NW Pacific Hwy & E 4th Street

2025 Existing Traffic, PM Peak Hour
05/10/2025

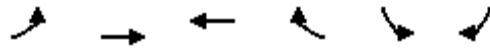
						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	396	66	246	620	62	147
Future Volume (vph)	396	66	246	620	62	147
Confl. Peds. (#/hr)	1	3		1	3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield
Intersection Summary						
Control Type: Roundabout						
Intersection Capacity Utilization 60.1%			ICU Level of Service B			
Analysis Period (min) 15						






Intersection				
Intersection Delay, s/veh	10.5			
Intersection LOS	B			
Approach	WB	NB		SB
Entry Lanes	1	2		1
Conflicting Circle Lanes	1	1		1
Adj Approach Flow, veh/h	486	912		220
Demand Flow Rate, veh/h	491	912		223
Vehicles Circulating, veh/h	259	66		421
Vehicles Exiting, veh/h	719	578		329
Follow-Up Headway, s	3.186	3.186		3.186
Ped Vol Crossing Leg, #/h	3	1		3
Ped Cap Adj	1.000	0.999		1.000
Approach Delay, s/veh	12.2	10.1		8.5
Approach LOS	B	B		A
Lane	Left	Left	Right	Left
Designated Moves	LR	LT	R	LT
Assumed Moves	LR	LT	R	LT
RT Channelized				
Lane Util	1.000	0.284	0.716	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	491	259	653	223
Cap Entry Lane, veh/h	872	1058	1058	742
Entry HV Adj Factor	0.990	1.000	1.000	0.989
Flow Entry, veh/h	486	259	653	220
Cap Entry, veh/h	863	1057	1057	733
V/C Ratio	0.563	0.245	0.618	0.301
Control Delay, s/veh	12.2	5.7	11.8	8.5
LOS	B	A	B	A
95th %tile Queue, veh	4	1	4	1






Lanes, Volumes, Timings
4: E 4th Street & Aspen Avenue

2025 Existing Traffic, PM Peak Hour

05/10/2025

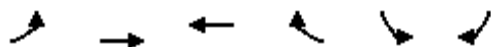





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	190	494	342	34	11	106
Future Volume (vph)	190	494	342	34	11	106
Confl. Peds. (#/hr)	11			4	4	11
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 47.0%				ICU Level of Service A		
Analysis Period (min) 15						




Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	190	494	342	34	11	106
Future Vol, veh/h	190	494	342	34	11	106
Conflicting Peds, #/hr	11	0	0	4	4	11
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	65	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	209	543	376	37	12	116
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	424	0	-	0	1371	417
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	965	-
Critical Hdwy	4.1	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.2	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1146	-	-	-	162	638
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	371	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1134	-	-	-	130	625
Mov Cap-2 Maneuver	-	-	-	-	130	-
Stage 1	-	-	-	-	545	-
Stage 2	-	-	-	-	367	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.5	0		14.3		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1134	-	-	-	130	625
HCM Lane V/C Ratio	0.184	-	-	-	0.093	0.186
HCM Control Delay (s)	8.9	-	-	-	35.5	12.1
HCM Lane LOS	A	-	-	-	E	B
HCM 95th %tile Q(veh)	0.7	-	-	-	0.3	0.7





















Lanes, Volumes, Timings
5: E 4th Street & Cedar Avenue









2025 Existing Traffic, PM Peak Hour
05/10/2025



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	483	324	20	31	34
Future Volume (vph)	30	483	324	20	31	34
Confl. Peds. (#/hr)	16			6	6	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 63.6%				ICU Level of Service B		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	483	324	20	31	34
Future Vol, veh/h	30	483	324	20	31	34
Conflicting Peds, #/hr	16	0	0	6	6	16
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	33	537	360	22	34	38
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	398	0	-	0	996	403
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	609	-
Critical Hdwy	4.11	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.209	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1166	-	-	-	271	647
Stage 1	-	-	-	-	686	-
Stage 2	-	-	-	-	543	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1148	-	-	-	252	627
Mov Cap-2 Maneuver	-	-	-	-	252	-
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	535	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.5	0		17.2		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1148	-	-	-	367	
HCM Lane V/C Ratio	0.029	-	-	-	0.197	
HCM Control Delay (s)	8.2	0	-	-	17.2	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	346	31	7	207	3	18	2	11	4	5	68
Future Volume (vph)	154	346	31	7	207	3	18	2	11	4	5	68
Confl. Peds. (#/hr)			4	4			4		4			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 41.8%												
ICU Level of Service A												
Analysis Period (min) 15												

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	154	346	31	7	207	3	18	2	11	4	5	68
Future Vol, veh/h	154	346	31	7	207	3	18	2	11	4	5	68
Conflicting Peds, #/hr	0	0	4	4	0	0	4	0	4	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	145	-	-	125	-	-	65	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	1	1	1	2	2	2	0	0	0	1	1	1
Mvmt Flow	171	384	34	8	230	3	20	2	12	4	6	76

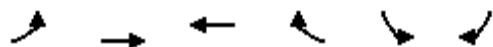
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	233	0	0	422	0	0	1040	996	409	1002	1012	236
Stage 1	-	-	-	-	-	-	747	747	-	248	248	-
Stage 2	-	-	-	-	-	-	293	249	-	754	764	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.1	6.5	6.2	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.5	4	3.3	3.509	4.009	3.309
Pot Cap-1 Maneuver	1340	-	-	1137	-	-	210	246	647	222	240	805
Stage 1	-	-	-	-	-	-	408	423	-	758	703	-
Stage 2	-	-	-	-	-	-	719	704	-	403	414	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1340	-	-	1133	-	-	166	212	642	193	207	802
Mov Cap-2 Maneuver	-	-	-	-	-	-	166	212	-	193	207	-
Stage 1	-	-	-	-	-	-	355	368	-	661	698	-
Stage 2	-	-	-	-	-	-	639	699	-	341	360	-




Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.3			0.3			22.5			11.8		
HCM LOS							C			B		




Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	166	489	1340	-	-	1133	-	-	193	670
HCM Lane V/C Ratio	0.12	0.03	0.128	-	-	0.007	-	-	0.023	0.121
HCM Control Delay (s)	29.6	12.6	8.1	-	-	8.2	-	-	24.1	11.1
HCM Lane LOS	D	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.4	0.1	0.4	-	-	0	-	-	0.1	0.4

Lanes, Volumes, Timings
7: NE Lockwood Creek Road & E Spruce Avenue

2025 Existing Traffic, PM Peak Hour
05/10/2025






Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	25	234	190	1	2	23
Future Volume (vph)	25	234	190	1	2	23
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 37.1%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	234	190	1	2	23
Future Vol, veh/h	25	234	190	1	2	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	27	252	204	1	2	25
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	205	0	-	0	511	205
Stage 1	-	-	-	-	205	-
Stage 2	-	-	-	-	306	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1366	-	-	-	526	841
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	751	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1366	-	-	-	514	841
Mov Cap-2 Maneuver	-	-	-	-	514	-
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	751	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		9.7		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1366	-	-	-	800	
HCM Lane V/C Ratio	0.02	-	-	-	0.034	
HCM Control Delay (s)	7.7	0	-	-	9.7	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	

Lanes, Volumes, Timings
8: Tanoak Avenue & NE 339th Street

2025 Existing Traffic, PM Peak Hour
05/10/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Volume (vph)	149	19	5	86	2	0
Future Volume (vph)	149	19	5	86	2	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 19.0%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	149	19	5	86	2	0
Future Vol, veh/h	149	19	5	86	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	186	24	6	108	3	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	210	0	318
Stage 1	-	-	-	-	198
Stage 2	-	-	-	-	120
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1373	-	679
Stage 1	-	-	-	-	840
Stage 2	-	-	-	-	910
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1373	-	676
Mov Cap-2 Maneuver	-	-	-	-	676
Stage 1	-	-	-	-	840
Stage 2	-	-	-	-	905





















Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	10.3
HCM LOS			B









Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	676	-	-	1373	-
HCM Lane V/C Ratio	0.004	-	-	0.005	-
HCM Control Delay (s)	10.3	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lanes, Volumes, Timings
1: Paradise Park Rd & NW La Center Rd

2028 Background Traffic, AM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	342	13	4	852	22	16	1	5	16	1	39
Future Volume (vph)	32	342	13	4	852	22	16	1	5	16	1	39
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	6%	6%	3%	3%	3%	47%	47%	47%	25%	25%	25%
Shared Lane Traffic (%)												
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 60.4% ICU Level of Service B												
Analysis Period (min) 15												

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	342	13	4	852	22	16	1	5	16	1	39
Future Vol, veh/h	32	342	13	4	852	22	16	1	5	16	1	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	275	-	-	175	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	6	6	6	3	3	3	47	47	47	25	25	25
Mvmt Flow	36	380	14	4	947	24	18	1	6	18	1	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	971	0	0	394	0	0	1448	1438	387	1430	1433	959
Stage 1	-	-	-	-	-	-	459	459	-	967	967	-
Stage 2	-	-	-	-	-	-	989	979	-	463	466	-
Critical Hdwy	4.16	-	-	4.13	-	-	7.57	6.97	6.67	7.35	6.75	6.45
Critical Hdwy Stg 1	-	-	-	-	-	-	6.57	5.97	-	6.35	5.75	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.57	5.97	-	6.35	5.75	-
Follow-up Hdwy	2.254	-	-	2.227	-	-	3.923	4.423	3.723	3.725	4.225	3.525
Pot Cap-1 Maneuver	694	-	-	1159	-	-	87	107	573	100	120	282
Stage 1	-	-	-	-	-	-	505	497	-	278	304	-
Stage 2	-	-	-	-	-	-	247	276	-	538	526	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	694	-	-	1159	-	-	70	101	573	94	113	282
Mov Cap-2 Maneuver	-	-	-	-	-	-	70	101	-	94	113	-
Stage 1	-	-	-	-	-	-	479	471	-	264	303	-
Stage 2	-	-	-	-	-	-	208	275	-	504	499	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	57.6	29.7
HCM LOS			F	D






Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	70	322	694	-	-	1159	-	-	94	272
HCM Lane V/C Ratio	0.254	0.021	0.051	-	-	0.004	-	-	0.189	0.163
HCM Control Delay (s)	73.1	16.4	10.5	-	-	8.1	-	-	52	20.8
HCM Lane LOS	F	C	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	0.9	0.1	0.2	-	-	0	-	-	0.7	0.6

Lanes, Volumes, Timings
2: NW Timmen Rd & NW La Center Rd

2028 Background Traffic, AM Peak Hour

05/10/2025











	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕		↙	↕	↙	↗
Traffic Volume (vph)	343	17	85	831	26	50
Future Volume (vph)	343	17	85	831	26	50
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	7%	7%	14%	14%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 53.7%			ICU Level of Service A			
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	1.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	343	17	85	831	26	50
Future Vol, veh/h	343	17	85	831	26	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	165	-	0	125
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	7	7	14	14	2	2
Mvmt Flow	390	19	97	944	30	57
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	409	0	1538	400
Stage 1	-	-	-	-	400	-
Stage 2	-	-	-	-	1138	-
Critical Hdwy	-	-	4.24	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.326	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1088	-	127	650
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	306	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1088	-	116	650
Mov Cap-2 Maneuver	-	-	-	-	116	-
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	279	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.8		23.1		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	116	650	-	-	1088	-
HCM Lane V/C Ratio	0.255	0.087	-	-	0.089	-
HCM Control Delay (s)	46.3	11.1	-	-	8.6	-
HCM Lane LOS	E	B	-	-	A	-
HCM 95th %tile Q(veh)	0.9	0.3	-	-	0.3	-

Lanes, Volumes, Timings
3: NW Pacific Hwy & E 4th Street

2028 Background Traffic, AM Peak Hour

05/10/2025

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	625	55	89	266	95	302
Future Volume (vph)	625	55	89	266	95	302
Confl. Peds. (#/hr)		1			1	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	2%	2%	9%	9%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield
Intersection Summary						
Control Type: Roundabout						
Intersection Capacity Utilization 72.5%			ICU Level of Service C			
Analysis Period (min) 15						






Intersection				
Intersection Delay, s/veh	15.2			
Intersection LOS	C			
Approach	WB	NB		SB
Entry Lanes	1	2		1
Conflicting Circle Lanes	1	1		1
Adj Approach Flow, veh/h	829	433		484
Demand Flow Rate, veh/h	845	472		493
Vehicles Circulating, veh/h	119	118		777
Vehicles Exiting, veh/h	471	1152		187
Ped Vol Crossing Leg, #/h	1	0		1
Ped Cap Adj	1.000	1.000		1.000
Approach Delay, s/veh	12.9	5.2		28.2
Approach LOS	B	A		D
Lane	Left	Left	Right	Left
Designated Moves	LR	LT	R	LT
Assumed Moves	LR	LT	R	LT
RT Channelized				
Lane Util	1.000	0.252	0.748	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
Entry Flow, veh/h	845	119	353	493
Cap Entry Lane, veh/h	1222	1276	1276	625
Entry HV Adj Factor	0.981	0.917	0.918	0.981
Flow Entry, veh/h	829	109	324	484
Cap Entry, veh/h	1199	1170	1171	613
V/C Ratio	0.692	0.093	0.277	0.789
Control Delay, s/veh	12.9	3.9	5.6	28.2
LOS	B	A	A	D
95th %tile Queue, veh	6	0	1	8






Lanes, Volumes, Timings
4: E 4th Street & Aspen Avenue

2028 Background Traffic, AM Peak Hour

05/10/2025



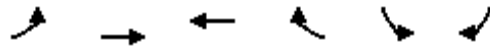
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	59	319	482	30	37	190
Future Volume (vph)	59	319	482	30	37	190
Confl. Peds. (#/hr)	1			1	1	1
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	6%	6%	4%	4%	4%	4%
Shared Lane Traffic (%)						
Sign Control		Free	Free	Stop		
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 45.8%				ICU Level of Service A		
Analysis Period (min) 15						




Intersection						
Int Delay, s/veh	5.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	59	319	482	30	37	190
Future Vol, veh/h	59	319	482	30	37	190
Conflicting Peds, #/hr	1	0	0	1	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	65	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	6	6	4	4	4	4
Mvmt Flow	77	414	626	39	48	247
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	666	0	-	0	1216	648
Stage 1	-	-	-	-	647	-
Stage 2	-	-	-	-	569	-
Critical Hdwy	4.16	-	-	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.254	-	-	-	3.536	3.336
Pot Cap-1 Maneuver	905	-	-	-	198	467
Stage 1	-	-	-	-	517	-
Stage 2	-	-	-	-	562	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	904	-	-	-	181	466
Mov Cap-2 Maneuver	-	-	-	-	181	-
Stage 1	-	-	-	-	473	-
Stage 2	-	-	-	-	561	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.5	0		22.9		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	904	-	-	-	181	466
HCM Lane V/C Ratio	0.085	-	-	-	0.265	0.53
HCM Control Delay (s)	9.4	-	-	-	31.9	21.1
HCM Lane LOS	A	-	-	-	D	C
HCM 95th %tile Q(veh)	0.3	-	-	-	1	3




Lanes, Volumes, Timings
5: E 4th Street & Cedar Avenue





















2028 Background Traffic, AM Peak Hour

05/10/2025



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	343	492	16	25	15
Future Volume (vph)	7	343	492	16	25	15
Confl. Peds. (#/hr)	9			2	2	9
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	6%	6%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 39.5%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	343	492	16	25	15
Future Vol, veh/h	7	343	492	16	25	15
Conflicting Peds, #/hr	9	0	0	2	2	9
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	6	6	5	5	3	3
Mvmt Flow	10	483	693	23	35	21
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	725	0	-	0	1219	723
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	505	-
Critical Hdwy	4.16	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.254	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	860	-	-	-	198	425
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	604	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	853	-	-	-	191	418
Mov Cap-2 Maneuver	-	-	-	-	191	-
Stage 1	-	-	-	-	471	-
Stage 2	-	-	-	-	599	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		24.5		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	853	-	-	-	240	
HCM Lane V/C Ratio	0.012	-	-	-	0.235	
HCM Control Delay (s)	9.3	0	-	-	24.5	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0	-	-	-	0.9	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	208	11	3	333	15	13	6	11	7	6	160
Future Volume (vph)	120	208	11	3	333	15	13	6	11	7	6	160
Confl. Peds. (#/hr)			1	6		5	1		6	5		
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	44%	44%	44%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	12.0	31.5		9.5	29.0		9.6	24.5		9.5	24.4	
Total Split (%)	16.0%	42.0%		12.7%	38.7%		12.8%	32.7%		12.7%	32.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Max		None	Max	
Act Effect Green (s)	34.4	33.1		27.7	22.7		22.8	21.9		22.0	20.2	
Actuated g/C Ratio	0.51	0.49		0.41	0.34		0.34	0.32		0.33	0.30	
v/c Ratio	0.59	0.38		0.01	0.87		0.08	0.07		0.02	0.39	
Control Delay	19.6	14.2		10.0	38.8		15.3	11.7		14.6	5.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.6	14.2		10.0	38.8		15.3	11.7		14.6	5.8	
LOS	B	B		A	D		B	B		B	A	
Approach Delay		16.1			38.5			13.3			6.2	
Approach LOS		B			D			B			A	

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 67.5

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 22.9

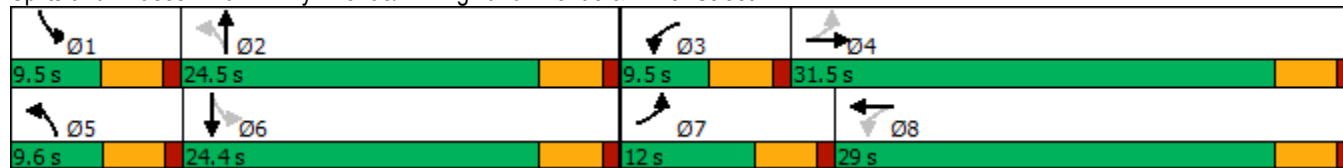
Intersection LOS: C

Intersection Capacity Utilization 51.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street























HCM 6th Signalized Intersection Summary

2028 Background Traffic, AM Peak Hour

6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

05/10/2025




												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	208	11	3	333	15	13	6	11	7	6	160
Future Volume (veh/h)	120	208	11	3	333	15	13	6	11	7	6	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1841	1841	1841	1248	1248	1248	1856	1856	1856
Adj Flow Rate, veh/h	182	315	17	5	505	23	20	9	17	11	9	242
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Percent Heavy Veh, %	6	6	6	4	4	4	44	44	44	3	3	3
Cap, veh/h	307	696	38	401	564	26	254	117	220	522	17	446
Arrive On Green	0.09	0.41	0.41	0.01	0.32	0.32	0.02	0.30	0.30	0.01	0.29	0.29
Sat Flow, veh/h	1725	1703	92	1753	1746	80	1188	384	725	1767	56	1512
Grp Volume(v), veh/h	182	0	332	5	0	528	20	0	26	11	0	251
Grp Sat Flow(s),veh/h/ln	1725	0	1794	1753	0	1826	1188	0	1109	1767	0	1568
Q Serve(g_s), s	4.4	0.0	9.1	0.1	0.0	18.6	0.8	0.0	1.1	0.3	0.0	9.1
Cycle Q Clear(g_c), s	4.4	0.0	9.1	0.1	0.0	18.6	0.8	0.0	1.1	0.3	0.0	9.1
Prop In Lane	1.00		0.05	1.00		0.04	1.00		0.65	1.00		0.96
Lane Grp Cap(c), veh/h	307	0	734	401	0	589	254	0	337	522	0	462
V/C Ratio(X)	0.59	0.00	0.45	0.01	0.00	0.90	0.08	0.00	0.08	0.02	0.00	0.54
Avail Cap(c_a), veh/h	338	0	734	520	0	662	317	0	337	628	0	462
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	14.5	15.3	0.0	21.8	16.6	0.0	16.7	16.2	0.0	20.0
Incr Delay (d2), s/veh	2.3	0.0	0.4	0.0	0.0	13.8	0.1	0.0	0.4	0.0	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	3.3	0.0	0.0	9.4	0.2	0.0	0.3	0.1	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	0.0	14.9	15.3	0.0	35.6	16.7	0.0	17.2	16.3	0.0	24.5
LnGrp LOS	B	A	B	B	A	D	B	A	B	B	A	C
Approach Vol, veh/h	514			533			46			262		
Approach Delay, s/veh	15.9			35.4			17.0			24.2		
Approach LOS	B			D			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.4	25.0	4.9	32.1	6.1	24.4	10.8	26.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	20.0	5.0	27.0	5.1	19.9	7.5	24.5				
Max Q Clear Time (g_c+l1), s	2.3	3.1	2.1	11.1	2.8	11.1	6.4	20.6				
Green Ext Time (p_c), s	0.0	0.1	0.0	1.7	0.0	1.0	0.1	1.2				
Intersection Summary												
HCM 6th Ctrl Delay	25.2											
HCM 6th LOS	C											




Lanes, Volumes, Timings
7: NE Lockwood Creek Road & E Spruce Avenue

2028 Background Traffic, AM Peak Hour

05/10/2025



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	15	188	319	5	12	31
Future Volume (vph)	15	188	319	5	12	31
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles (%)	8%	8%	9%	9%	18%	18%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 32.3%				ICU Level of Service A		
Analysis Period (min) 15						




Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	188	319	5	12	31
Future Vol, veh/h	15	188	319	5	12	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	8	8	9	9	18	18
Mvmt Flow	25	313	532	8	20	52
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	540	0	-	0	899	536
Stage 1	-	-	-	-	536	-
Stage 2	-	-	-	-	363	-
Critical Hdwy	4.18	-	-	-	6.58	6.38
Critical Hdwy Stg 1	-	-	-	-	5.58	-
Critical Hdwy Stg 2	-	-	-	-	5.58	-
Follow-up Hdwy	2.272	-	-	-	3.662	3.462
Pot Cap-1 Maneuver	999	-	-	-	290	515
Stage 1	-	-	-	-	556	-
Stage 2	-	-	-	-	670	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	999	-	-	-	281	515
Mov Cap-2 Maneuver	-	-	-	-	281	-
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	670	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.6	0		15.4		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	999	-	-	-	418	
HCM Lane V/C Ratio	0.025	-	-	-	0.171	
HCM Control Delay (s)	8.7	0	-	-	15.4	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6	

Lanes, Volumes, Timings
8: Tanoak Avenue & NE 339th Street

2028 Background Traffic, AM Peak Hour

05/10/2025





















	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Traffic Volume (vph)	53	18	4	140	14	2
Future Volume (vph)	53	18	4	140	14	2
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	10%	10%	4%	4%	13%	13%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 20.9%				ICU Level of Service A		
Analysis Period (min) 15						









Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	53	18	4	140	14	2
Future Vol, veh/h	53	18	4	140	14	2
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	10	10	4	4	13	13
Mvmt Flow	68	23	5	179	18	3
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	92	0	270	82
Stage 1	-	-	-	-	81	-
Stage 2	-	-	-	-	189	-
Critical Hdwy	-	-	4.14	-	6.53	6.33
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	-	-	2.236	-	3.617	3.417
Pot Cap-1 Maneuver	-	-	1490	-	696	948
Stage 1	-	-	-	-	915	-
Stage 2	-	-	-	-	817	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1489	-	693	946
Mov Cap-2 Maneuver	-	-	-	-	693	-
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	814	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.2		10.2	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	717	-	-	1489	-	
HCM Lane V/C Ratio	0.029	-	-	0.003	-	
HCM Control Delay (s)	10.2	-	-	7.4	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

Lanes, Volumes, Timings
1: Paradise Park Rd & NW La Center Rd

2028 Background Traffic, PM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	919	10	4	614	12	13	0	5	28	0	72
Future Volume (vph)	65	919	10	4	614	12	13	0	5	28	0	72
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	8%	8%	8%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 68.9%												

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	919	10	4	614	12	13	0	5	28	0	72
Future Vol, veh/h	65	919	10	4	614	12	13	0	5	28	0	72
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	275	-	-	175	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	2	2	2	8	8	8	2	2	2
Mvmt Flow	66	938	10	4	627	12	13	0	5	29	0	73

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	639	0	0	948	0	0	1753	1722	943	1719	1721	633
Stage 1	-	-	-	-	-	-	1075	1075	-	641	641	-
Stage 2	-	-	-	-	-	-	678	647	-	1078	1080	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.18	6.58	6.28	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.18	5.58	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.18	5.58	-	6.12	5.52	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.572	4.072	3.372	3.518	4.018	3.318
Pot Cap-1 Maneuver	950	-	-	724	-	-	64	86	310	71	89	480
Stage 1	-	-	-	-	-	-	259	289	-	463	469	-
Stage 2	-	-	-	-	-	-	432	457	-	265	294	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	950	-	-	724	-	-	51	80	310	66	82	480
Mov Cap-2 Maneuver	-	-	-	-	-	-	51	80	-	66	82	-
Stage 1	-	-	-	-	-	-	241	269	-	431	466	-
Stage 2	-	-	-	-	-	-	364	454	-	243	274	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.1			76			36.9		
HCM LOS							F			E		






Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	51	310	950	-	-	724	-	-	66	480
HCM Lane V/C Ratio	0.26	0.016	0.07	-	-	0.006	-	-	0.433	0.153
HCM Control Delay (s)	98.8	16.8	9.1	-	-	10	-	-	96	13.9
HCM Lane LOS	F	C	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	0.9	0.1	0.2	-	-	0	-	-	1.7	0.5

Lanes, Volumes, Timings
2: NW Timmen Rd & NW La Center Rd

2028 Background Traffic, PM Peak Hour

05/10/2025











	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶		↷	↶	↷	↷
Traffic Volume (vph)	905	34	67	579	37	139
Future Volume (vph)	905	34	67	579	37	139
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 65.7%				ICU Level of Service C		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	4.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	905	34	67	579	37	139
Future Vol, veh/h	905	34	67	579	37	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	165	-	0	125
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	953	36	71	609	39	146
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	989	0	1722	971
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	751	-
Critical Hdwy	-	-	4.11	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.209	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	703	-	98	305
Stage 1	-	-	-	-	366	-
Stage 2	-	-	-	-	464	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	703	-	88	305
Mov Cap-2 Maneuver	-	-	-	-	88	-
Stage 1	-	-	-	-	366	-
Stage 2	-	-	-	-	417	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	1.1		37.2		
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	88	305	-	-	703	-
HCM Lane V/C Ratio	0.443	0.48	-	-	0.1	-
HCM Control Delay (s)	75	27.2	-	-	10.7	-
HCM Lane LOS	F	D	-	-	B	-
HCM 95th %tile Q(veh)	1.8	2.5	-	-	0.3	-

Lanes, Volumes, Timings
3: NW Pacific Hwy & E 4th Street

2028 Background Traffic, PM Peak Hour

05/10/2025

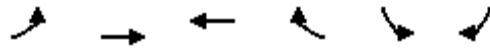
						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	469	85	306	733	75	183
Future Volume (vph)	469	85	306	733	75	183
Confl. Peds. (#/hr)	1	3		1	3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield
Intersection Summary						
Control Type: Roundabout						
Intersection Capacity Utilization 71.1%			ICU Level of Service C			
Analysis Period (min) 15						






Intersection				
Intersection Delay, s/veh	14.6			
Intersection LOS	B			
Approach	WB	NB	SB	
Entry Lanes	1	2	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	583	1094	272	
Demand Flow Rate, veh/h	589	1094	275	
Vehicles Circulating, veh/h	322	80	499	
Vehicles Exiting, veh/h	852	694	412	
Follow-Up Headway, s	3.186	3.186	3.186	
Ped Vol Crossing Leg, #/h	3	1	3	
Ped Cap Adj	1.000	0.999	1.000	
Approach Delay, s/veh	18.6	13.4	10.8	
Approach LOS	C	B	B	
Lane	Left	Left	Right	Left
Designated Moves	LR	LT	R	LT
Assumed Moves	LR	LT	R	LT
RT Channelized				
Lane Util	1.000	0.294	0.706	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	589	322	772	275
Cap Entry Lane, veh/h	819	1043	1043	686
Entry HV Adj Factor	0.990	1.000	1.000	0.989
Flow Entry, veh/h	583	322	772	272
Cap Entry, veh/h	810	1042	1042	678
V/C Ratio	0.720	0.309	0.741	0.401
Control Delay, s/veh	18.6	6.5	16.3	10.8
LOS	C	A	C	B
95th %tile Queue, veh	6	1	7	2






Lanes, Volumes, Timings
4: E 4th Street & Aspen Avenue

2028 Background Traffic, PM Peak Hour

05/10/2025



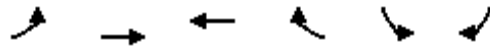
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	239	571	400	44	19	138
Future Volume (vph)	239	571	400	44	19	138
Confl. Peds. (#/hr)	11			4	4	11
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 53.4%				ICU Level of Service A		
Analysis Period (min) 15						




Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	239	571	400	44	19	138
Future Vol, veh/h	239	571	400	44	19	138
Conflicting Peds, #/hr	11	0	0	4	4	11
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	65	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	263	627	440	48	21	152
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	499	0	-	0	1632	486
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	1157	-
Critical Hdwy	4.1	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.2	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1075	-	-	-	112	583
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	301	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1064	-	-	-	83	571
Mov Cap-2 Maneuver	-	-	-	-	83	-
Stage 1	-	-	-	-	468	-
Stage 2	-	-	-	-	298	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.8	0		19.5		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1064	-	-	-	83	571
HCM Lane V/C Ratio	0.247	-	-	-	0.252	0.266
HCM Control Delay (s)	9.5	-	-	-	62.4	13.6
HCM Lane LOS	A	-	-	-	F	B
HCM 95th %tile Q(veh)	1	-	-	-	0.9	1.1




Lanes, Volumes, Timings
5: E 4th Street & Cedar Avenue





















2028 Background Traffic, PM Peak Hour

05/10/2025



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	566	389	21	33	36
Future Volume (vph)	32	566	389	21	33	36
Confl. Peds. (#/hr)	16			6	6	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 71.0%				ICU Level of Service C		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	566	389	21	33	36
Future Vol, veh/h	32	566	389	21	33	36
Conflicting Peds, #/hr	16	0	0	6	6	16
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	36	629	432	23	37	40
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	471	0	-	0	1167	476
Stage 1	-	-	-	-	460	-
Stage 2	-	-	-	-	707	-
Critical Hdwy	4.11	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.209	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1096	-	-	-	214	589
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	489	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1079	-	-	-	197	571
Mov Cap-2 Maneuver	-	-	-	-	197	-
Stage 1	-	-	-	-	595	-
Stage 2	-	-	-	-	482	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.5	0		21.1		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1079	-	-	-	299	
HCM Lane V/C Ratio	0.033	-	-	-	0.256	
HCM Control Delay (s)	8.4	0	-	-	21.1	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	1	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	168	412	33	8	250	5	19	2	14	7	5	80
Future Volume (vph)	168	412	33	8	250	5	19	2	14	7	5	80
Confl. Peds. (#/hr)			4	4			4		4			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	11.2	27.0		9.5	25.3		9.5	24.0		9.5	24.0	
Total Split (%)	16.0%	38.6%		13.6%	36.1%		13.6%	34.3%		13.6%	34.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Max		None	Max	
Act Effect Green (s)	24.8	23.7		18.9	13.8		20.6	19.8		20.6	19.8	
Actuated g/C Ratio	0.45	0.43		0.34	0.25		0.37	0.36		0.37	0.36	
v/c Ratio	0.43	0.62		0.03	0.61		0.04	0.03		0.01	0.15	
Control Delay	13.2	19.1		9.5	24.8		12.4	9.4		12.1	5.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	13.2	19.1		9.5	24.8		12.4	9.4		12.1	5.9	
LOS	B	B		A	C		B	A		B	A	
Approach Delay		17.5			24.4			11.0			6.4	
Approach LOS		B			C			B			A	

Intersection Summary

Cycle Length: 70

Actuated Cycle Length: 55.7

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 18.1

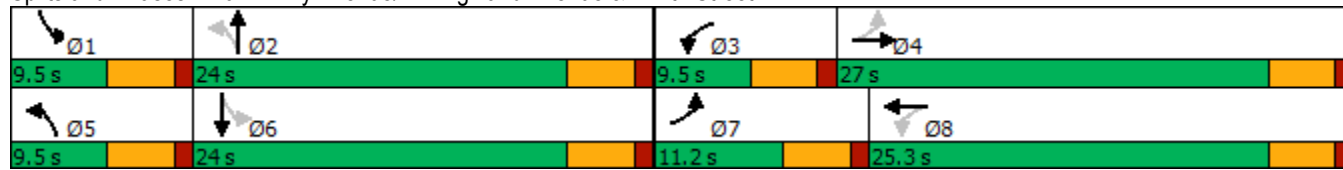
Intersection LOS: B

Intersection Capacity Utilization 54.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street























HCM 6th Signalized Intersection Summary

2028 Background Traffic, PM Peak Hour

6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

05/10/2025




												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	412	33	8	250	5	19	2	14	7	5	80
Future Volume (veh/h)	168	412	33	8	250	5	19	2	14	7	5	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1900	1900	1900	1885	1885	1885
Adj Flow Rate, veh/h	187	458	37	9	278	6	21	2	16	8	6	89
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	2	2	2	0	0	0	1	1	1
Cap, veh/h	399	536	43	202	400	9	563	64	512	618	35	512
Arrive On Green	0.10	0.31	0.31	0.01	0.22	0.22	0.02	0.35	0.35	0.01	0.34	0.34
Sat Flow, veh/h	1795	1720	139	1781	1823	39	1810	181	1448	1795	102	1511
Grp Volume(v), veh/h	187	0	495	9	0	284	21	0	18	8	0	95
Grp Sat Flow(s),veh/h/ln	1795	0	1859	1781	0	1863	1810	0	1630	1795	0	1613
Q Serve(g_s), s	4.3	0.0	14.4	0.2	0.0	8.1	0.4	0.0	0.4	0.2	0.0	2.4
Cycle Q Clear(g_c), s	4.3	0.0	14.4	0.2	0.0	8.1	0.4	0.0	0.4	0.2	0.0	2.4
Prop In Lane	1.00		0.07	1.00		0.02	1.00		0.89	1.00		0.94
Lane Grp Cap(c), veh/h	399	0	580	202	0	408	563	0	576	618	0	547
V/C Ratio(X)	0.47	0.00	0.85	0.04	0.00	0.70	0.04	0.00	0.03	0.01	0.00	0.17
Avail Cap(c_a), veh/h	421	0	727	336	0	673	676	0	576	755	0	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	18.6	17.8	0.0	20.7	11.8	0.0	12.2	12.2	0.0	13.4
Incr Delay (d2), s/veh	0.9	0.0	8.1	0.1	0.0	2.1	0.0	0.0	0.1	0.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	6.6	0.1	0.0	3.4	0.2	0.0	0.2	0.1	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	0.0	26.6	17.9	0.0	22.8	11.9	0.0	12.3	12.2	0.0	14.1
LnGrp LOS	B	A	C	B	A	C	B	A	B	B	A	B
Approach Vol, veh/h	682			293			39			103		
Approach Delay, s/veh	23.5			22.7			12.0			13.9		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.1	24.8	5.2	22.4	5.9	24.0	10.5	17.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	19.5	5.0	22.5	5.0	19.5	6.7	20.8				
Max Q Clear Time (g_c+l1), s	2.2	2.4	2.2	16.4	2.4	4.4	6.3	10.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.6	0.0	0.4	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay	22.0											
HCM 6th LOS	C											




Lanes, Volumes, Timings
7: NE Lockwood Creek Road & E Spruce Avenue

2028 Background Traffic, PM Peak Hour

05/10/2025



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	293	233	1	2	24
Future Volume (vph)	27	293	233	1	2	24
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 42.6%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	27	293	233	1	2	24
Future Vol, veh/h	27	293	233	1	2	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	29	315	251	1	2	26

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	252	0	0	625	252
Stage 1	-	-	-	252	-
Stage 2	-	-	-	373	-
Critical Hdwy	4.12	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	3.5	3.3
Pot Cap-1 Maneuver	1313	-	-	452	792
Stage 1	-	-	-	795	-
Stage 2	-	-	-	701	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1313	-	-	440	792
Mov Cap-2 Maneuver	-	-	-	440	-
Stage 1	-	-	-	774	-
Stage 2	-	-	-	701	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	10
HCM LOS			B




Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1313	-	-	-	746
HCM Lane V/C Ratio	0.022	-	-	-	0.037
HCM Control Delay (s)	7.8	0	-	-	10
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Lanes, Volumes, Timings
8: Tanoak Avenue & NE 339th Street

2028 Background Traffic, PM Peak Hour

05/10/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱			↰	↘↙	
Traffic Volume (vph)	158	20	5	91	2	0
Future Volume (vph)	158	20	5	91	2	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 19.5%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	158	20	5	91	2	0
Future Vol, veh/h	158	20	5	91	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	198	25	6	114	3	0

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	223	0	337	211
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	126	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1358	-	663	834
Stage 1	-	-	-	-	829	-
Stage 2	-	-	-	-	905	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1358	-	660	834
Mov Cap-2 Maneuver	-	-	-	-	660	-
Stage 1	-	-	-	-	829	-
Stage 2	-	-	-	-	900	-





















Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	10.5
HCM LOS			B









Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	660	-	-	1358	-
HCM Lane V/C Ratio	0.004	-	-	0.005	-
HCM Control Delay (s)	10.5	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lanes, Volumes, Timings
1: Paradise Park Rd & NW La Center Rd

2028 Total Traffic, AM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	354	13	4	888	22	16	1	5	16	1	39
Future Volume (vph)	32	354	13	4	888	22	16	1	5	16	1	39
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	6%	6%	3%	3%	3%	47%	47%	47%	25%	25%	25%
Shared Lane Traffic (%)												
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 62.3% ICU Level of Service B												
Analysis Period (min) 15												

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	354	13	4	888	22	16	1	5	16	1	39
Future Vol, veh/h	32	354	13	4	888	22	16	1	5	16	1	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	275	-	-	175	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	6	6	6	3	3	3	47	47	47	25	25	25
Mvmt Flow	36	393	14	4	987	24	18	1	6	18	1	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1011	0	0	407	0	0	1501	1491	400	1483	1486	999
Stage 1	-	-	-	-	-	-	472	472	-	1007	1007	-
Stage 2	-	-	-	-	-	-	1029	1019	-	476	479	-
Critical Hdwy	4.16	-	-	4.13	-	-	7.57	6.97	6.67	7.35	6.75	6.45
Critical Hdwy Stg 1	-	-	-	-	-	-	6.57	5.97	-	6.35	5.75	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.57	5.97	-	6.35	5.75	-
Follow-up Hdwy	2.254	-	-	2.227	-	-	3.923	4.423	3.723	3.725	4.225	3.525
Pot Cap-1 Maneuver	670	-	-	1146	-	-	79	99	563	92	111	267
Stage 1	-	-	-	-	-	-	496	490	-	263	291	-
Stage 2	-	-	-	-	-	-	233	263	-	529	518	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	670	-	-	1146	-	-	63	93	563	86	105	267
Mov Cap-2 Maneuver	-	-	-	-	-	-	63	93	-	86	105	-
Stage 1	-	-	-	-	-	-	469	464	-	249	290	-
Stage 2	-	-	-	-	-	-	194	262	-	494	490	-






Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	65.1	32.1
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	63	306	670	-	-	1146	-	-	86	257
HCM Lane V/C Ratio	0.282	0.022	0.053	-	-	0.004	-	-	0.207	0.173
HCM Control Delay (s)	83.2	17	10.7	-	-	8.2	-	-	57.5	21.9
HCM Lane LOS	F	C	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	1	0.1	0.2	-	-	0	-	-	0.7	0.6

Lanes, Volumes, Timings
2: NW Timmen Rd & NW La Center Rd











2028 Total Traffic, AM Peak Hour
05/10/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰		↱	↲	↱	↲
Traffic Volume (vph)	355	17	89	867	26	51
Future Volume (vph)	355	17	89	867	26	51
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	7%	7%	14%	14%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 55.6%				ICU Level of Service B		
Analysis Period (min) 15						

Intersection								
Int Delay, s/veh	1.9							
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Vol, veh/h	355	17	89	867	26	51		
Future Vol, veh/h	355	17	89	867	26	51		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	165	-	0	125		
Veh in Median Storage, #	0	-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	88	88	88	88	88	88		
Heavy Vehicles, %	7	7	14	14	2	2		
Mvmt Flow	403	19	101	985	30	58		
Major/Minor	Major1		Major2		Minor1			
Conflicting Flow All	0	0	422	0	1600	413		
Stage 1	-	-	-	-	413	-		
Stage 2	-	-	-	-	1187	-		
Critical Hdwy	-	-	4.24	-	6.42	6.22		
Critical Hdwy Stg 1	-	-	-	-	5.42	-		
Critical Hdwy Stg 2	-	-	-	-	5.42	-		
Follow-up Hdwy	-	-	2.326	-	3.518	3.318		
Pot Cap-1 Maneuver	-	-	1076	-	117	639		
Stage 1	-	-	-	-	668	-		
Stage 2	-	-	-	-	290	-		
Platoon blocked, %	-	-		-				
Mov Cap-1 Maneuver	-	-	1076	-	106	639		
Mov Cap-2 Maneuver	-	-	-	-	106	-		
Stage 1	-	-	-	-	668	-		
Stage 2	-	-	-	-	263	-		
Approach	EB		WB		NB			
HCM Control Delay, s	0		0.8		24.8			
HCM LOS	C							
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	EBR	WBL	WBT
Capacity (veh/h)	106		639		-	-	1076	-
HCM Lane V/C Ratio	0.279		0.091		-	-	0.094	-
HCM Control Delay (s)	51.6		11.2		-	-	8.7	-
HCM Lane LOS	F		B		-	-	A	-
HCM 95th %tile Q(veh)	1		0.3		-	-	0.3	-

Lanes, Volumes, Timings
3: NW Pacific Hwy & E 4th Street

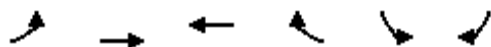
2028 Total Traffic, AM Peak Hour
05/10/2025






						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	665	60	89	279	97	302
Future Volume (vph)	665	60	89	279	97	302
Confl. Peds. (#/hr)		1			1	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	2%	2%	9%	9%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield
Intersection Summary						
Control Type: Roundabout						
Intersection Capacity Utilization 75.1%			ICU Level of Service D			
Analysis Period (min) 15						






Intersection				
Intersection Delay, s/veh	17.5			
Intersection LOS	C			
Approach	WB	NB	SB	
Entry Lanes	1	2	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	884	449	486	
Demand Flow Rate, veh/h	901	490	495	
Vehicles Circulating, veh/h	119	120	827	
Vehicles Exiting, veh/h	491	1202	193	
Ped Vol Crossing Leg, #/h	1	0	1	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	14.6	5.3	33.9	
Approach LOS	B	A	D	
Lane	Left	Left	Right	Left
Designated Moves	LR	LT	R	LT
Assumed Moves	LR	LT	R	LT
RT Channelized				
Lane Util	1.000	0.243	0.757	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
Entry Flow, veh/h	901	119	371	495
Cap Entry Lane, veh/h	1222	1273	1273	594
Entry HV Adj Factor	0.981	0.917	0.916	0.981
Flow Entry, veh/h	884	109	340	486
Cap Entry, veh/h	1199	1168	1167	582
V/C Ratio	0.737	0.093	0.291	0.834
Control Delay, s/veh	14.6	3.9	5.8	33.9
LOS	B	A	A	D
95th %tile Queue, veh	7	0	1	9

Lanes, Volumes, Timings
4: E 4th Street & Aspen Avenue

2028 Total Traffic, AM Peak Hour
05/10/2025

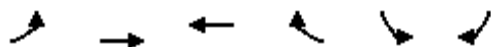





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	59	334	527	30	37	190
Future Volume (vph)	59	334	527	30	37	190
Confl. Peds. (#/hr)	1			1	1	1
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	6%	6%	4%	4%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Free		Free	Stop		
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 48.1%				ICU Level of Service A		
Analysis Period (min) 15						




Intersection						
Int Delay, s/veh	5.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	59	334	527	30	37	190
Future Vol, veh/h	59	334	527	30	37	190
Conflicting Peds, #/hr	1	0	0	1	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	65	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	6	6	4	4	4	4
Mvmt Flow	77	434	684	39	48	247
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	724	0	-	0	1294	706
Stage 1	-	-	-	-	705	-
Stage 2	-	-	-	-	589	-
Critical Hdwy	4.16	-	-	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.254	-	-	-	3.536	3.336
Pot Cap-1 Maneuver	860	-	-	-	178	432
Stage 1	-	-	-	-	486	-
Stage 2	-	-	-	-	551	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	859	-	-	-	162	431
Mov Cap-2 Maneuver	-	-	-	-	162	-
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	550	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.4	0		26		
HCM LOS				D		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	859	-	-	-	162	431
HCM Lane V/C Ratio	0.089	-	-	-	0.297	0.573
HCM Control Delay (s)	9.6	-	-	-	36.3	24
HCM Lane LOS	A	-	-	-	E	C
HCM 95th %tile Q(veh)	0.3	-	-	-	1.2	3.5

Lanes, Volumes, Timings
5: E 4th Street & Cedar Avenue

2028 Total Traffic, AM Peak Hour
05/10/2025



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	358	537	16	25	15
Future Volume (vph)	7	358	537	16	25	15
Confl. Peds. (#/hr)	9			2	2	9
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	6%	6%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 41.8%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	358	537	16	25	15
Future Vol, veh/h	7	358	537	16	25	15
Conflicting Peds, #/hr	9	0	0	2	2	9
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	6	6	5	5	3	3
Mvmt Flow	10	504	756	23	35	21

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	788	0	0 1303 786
Stage 1	-	-	- 777 -
Stage 2	-	-	- 526 -
Critical Hdwy	4.16	-	- 6.43 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.43 -
Follow-up Hdwy	2.254	-	- 3.527 3.327
Pot Cap-1 Maneuver	814	-	- 176 391
Stage 1	-	-	- 452 -
Stage 2	-	-	- 591 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	807	-	- 170 384
Mov Cap-2 Maneuver	-	-	- 170 -
Stage 1	-	-	- 440 -
Stage 2	-	-	- 586 -





















Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	27.6
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	807	-	-	-	215
HCM Lane V/C Ratio	0.012	-	-	-	0.262
HCM Control Delay (s)	9.5	0	-	-	27.6
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	1

Lanes, Volumes, Timings
6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

2028 Total Traffic, AM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	216	11	3	355	15	13	6	11	7	6	183
Future Volume (vph)	127	216	11	3	355	15	13	6	11	7	6	183
Confl. Peds. (#/hr)			1	6		5	1		6	5		
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	44%	44%	44%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	12.0	31.5		9.5	29.0		9.5	24.5		9.5	24.5	
Total Split (%)	16.0%	42.0%		12.7%	38.7%		12.7%	32.7%		12.7%	32.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Max		None	Max	
Act Effect Green (s)	35.6	34.2		28.9	23.8		22.8	21.9		22.0	20.1	
Actuated g/C Ratio	0.52	0.50		0.42	0.35		0.33	0.32		0.32	0.29	
v/c Ratio	0.66	0.39		0.01	0.89		0.09	0.07		0.02	0.43	
Control Delay	23.9	14.2		10.0	41.1		15.5	11.7		14.6	5.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	23.9	14.2		10.0	41.1		15.5	11.7		14.6	5.8	
LOS	C	B		A	D		B	B		B	A	
Approach Delay		17.7			40.9			13.4			6.2	
Approach LOS		B			D			B			A	

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 68.6

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 24.3









Intersection LOS: C

Intersection Capacity Utilization 52.9%

ICU Level of Service A

Analysis Period (min) 15





















Splits and Phases: 6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

			
Ø1	Ø2	Ø3	Ø4
9.5 s	24.5 s	9.5 s	31.5 s
			
Ø5	Ø6	Ø7	Ø8
9.5 s	24.5 s	12 s	29 s

HCM 6th Signalized Intersection Summary
6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

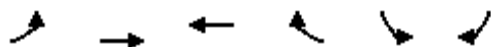
2028 Total Traffic, AM Peak Hour




05/10/2025




												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	216	11	3	355	15	13	6	11	7	6	183
Future Volume (veh/h)	127	216	11	3	355	15	13	6	11	7	6	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1841	1841	1841	1248	1248	1248	1856	1856	1856
Adj Flow Rate, veh/h	192	327	17	5	538	23	20	9	17	11	9	277
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Percent Heavy Veh, %	6	6	6	4	4	4	44	44	44	3	3	3
Cap, veh/h	300	721	37	407	586	25	225	114	216	510	14	437
Arrive On Green	0.09	0.42	0.42	0.01	0.33	0.33	0.02	0.30	0.30	0.01	0.29	0.29
Sat Flow, veh/h	1725	1706	89	1753	1752	75	1188	384	725	1767	49	1517
Grp Volume(v), veh/h	192	0	344	5	0	561	20	0	26	11	0	286
Grp Sat Flow(s),veh/h/ln	1725	0	1795	1753	0	1826	1188	0	1109	1767	0	1567
Q Serve(g_s), s	4.7	0.0	9.5	0.1	0.0	20.5	0.8	0.0	1.2	0.3	0.0	11.0
Cycle Q Clear(g_c), s	4.7	0.0	9.5	0.1	0.0	20.5	0.8	0.0	1.2	0.3	0.0	11.0
Prop In Lane	1.00		0.05	1.00		0.04	1.00		0.65	1.00		0.97
Lane Grp Cap(c), veh/h	300	0	759	407	0	611	225	0	330	510	0	452
V/C Ratio(X)	0.64	0.00	0.45	0.01	0.00	0.92	0.09	0.00	0.08	0.02	0.00	0.63
Avail Cap(c_a), veh/h	323	0	759	521	0	645	283	0	330	613	0	452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	14.3	15.2	0.0	22.2	17.6	0.0	17.5	17.0	0.0	21.5
Incr Delay (d2), s/veh	3.8	0.0	0.4	0.0	0.0	17.8	0.2	0.0	0.5	0.0	0.0	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	3.5	0.0	0.0	10.9	0.2	0.0	0.3	0.1	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	0.0	14.7	15.2	0.0	40.0	17.8	0.0	18.0	17.0	0.0	28.1
LnGrp LOS	B	A	B	B	A	D	B	A	B	B	A	C
Approach Vol, veh/h	536			566			46			297		
Approach Delay, s/veh	16.5			39.8			17.9			27.7		
Approach LOS	B			D			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.5	25.1	5.0	33.8	6.1	24.5	11.1	27.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	20.0	5.0	27.0	5.0	20.0	7.5	24.5				
Max Q Clear Time (g_c+l1), s	2.3	3.2	2.1	11.5	2.8	13.0	6.7	22.5				
Green Ext Time (p_c), s	0.0	0.1	0.0	1.7	0.0	1.0	0.0	0.7				
Intersection Summary												
HCM 6th Ctrl Delay	28.0											
HCM 6th LOS	C											

Lanes, Volumes, Timings
7: NE Lockwood Creek Road & E Spruce Avenue

2028 Total Traffic, AM Peak Hour
05/10/2025






Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	23	188	319	5	12	53
Future Volume (vph)	23	188	319	5	12	53
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles (%)	8%	8%	9%	9%	18%	18%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 39.8%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	23	188	319	5	12	53
Future Vol, veh/h	23	188	319	5	12	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	8	8	9	9	18	18
Mvmt Flow	38	313	532	8	20	88
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	540	0	-	0	925	536
Stage 1	-	-	-	-	536	-
Stage 2	-	-	-	-	389	-
Critical Hdwy	4.18	-	-	-	6.58	6.38
Critical Hdwy Stg 1	-	-	-	-	5.58	-
Critical Hdwy Stg 2	-	-	-	-	5.58	-
Follow-up Hdwy	2.272	-	-	-	3.662	3.462
Pot Cap-1 Maneuver	999	-	-	-	280	515
Stage 1	-	-	-	-	556	-
Stage 2	-	-	-	-	651	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	999	-	-	-	267	515
Mov Cap-2 Maneuver	-	-	-	-	267	-
Stage 1	-	-	-	-	530	-
Stage 2	-	-	-	-	651	-
Approach	EB	WB		SB		
HCM Control Delay, s	1	0		15.8		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	999	-	-	-	440	
HCM Lane V/C Ratio	0.038	-	-	-	0.246	
HCM Control Delay (s)	8.7	0	-	-	15.8	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	1	

Lanes, Volumes, Timings
8: Tanoak Avenue & NE 339th Street

2028 Total Traffic, AM Peak Hour
05/10/2025




	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Traffic Volume (vph)	53	19	4	140	16	2
Future Volume (vph)	53	19	4	140	16	2
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	10%	10%	4%	4%	13%	13%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 20.9%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	53	19	4	140	16	2
Future Vol, veh/h	53	19	4	140	16	2
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	10	10	4	4	13	13
Mvmt Flow	68	24	5	179	21	3
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	93	0	270	82
Stage 1	-	-	-	-	81	-
Stage 2	-	-	-	-	189	-
Critical Hdwy	-	-	4.14	-	6.53	6.33
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	-	-	2.236	-	3.617	3.417
Pot Cap-1 Maneuver	-	-	1489	-	696	948
Stage 1	-	-	-	-	915	-
Stage 2	-	-	-	-	817	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1488	-	693	946
Mov Cap-2 Maneuver	-	-	-	-	693	-
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	814	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.2		10.2	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	714	-	-	1488	-	
HCM Lane V/C Ratio	0.032	-	-	0.003	-	
HCM Control Delay (s)	10.2	-	-	7.4	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

Lanes, Volumes, Timings
9: North Site Access & NE 339th Street

2028 Total Traffic, AM Peak Hour
05/10/2025










	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Volume (vph)	72	6	0	155	21	0
Future Volume (vph)	72	6	0	155	21	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	10%	10%	4%	4%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 18.2%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	72	6	0	155	21	0
Future Vol, veh/h	72	6	0	155	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	10	10	4	4	0	0
Mvmt Flow	80	7	0	172	23	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	87	0	256	84
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	172	-
Critical Hdwy	-	-	4.14	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.236	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1496	-	737	981
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	863	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1496	-	737	981
Mov Cap-2 Maneuver	-	-	-	-	737	-
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	863	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	737	-	-	1496	-	
HCM Lane V/C Ratio	0.032	-	-	-	-	
HCM Control Delay (s)	10	-	-	0	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

Lanes, Volumes, Timings
10: Tanoak Avenue & East Site Access




2028 Total Traffic, AM Peak Hour

05/10/2025

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	2	1	16	23	1
Future Volume (vph)	2	2	1	16	23	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	10%	10%	10%	10%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 13.3%				ICU Level of Service A		
Analysis Period (min) 15						

HCM 6th TWSC
10: Tanoak Avenue & East Site Access

2028 Total Traffic, AM Peak Hour
05/10/2025

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	1	16	23	1
Future Vol, veh/h	2	2	1	16	23	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	10	10	10	10
Mvmt Flow	2	2	1	18	26	1

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	47	27	27	0	-	0
Stage 1	27	-	-	-	-	-
Stage 2	20	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.2	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.29	-	-	-
Pot Cap-1 Maneuver	968	1054	1536	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	967	1054	1536	-	-	-
Mov Cap-2 Maneuver	967	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	1008	-	-	-	-	-





















Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.4	0
HCM LOS	A		









Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1536	-	1009	-	-
HCM Lane V/C Ratio	0.001	-	0.004	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lanes, Volumes, Timings
1: Paradise Park Rd & NW La Center Rd

2028 Total Traffic, PM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	959	10	4	638	12	13	0	5	28	0	72
Future Volume (vph)	65	959	10	4	638	12	13	0	5	28	0	72
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	8%	8%	8%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 68.9%												

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	959	10	4	638	12	13	0	5	28	0	72
Future Vol, veh/h	65	959	10	4	638	12	13	0	5	28	0	72
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	275	-	-	175	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	2	2	2	8	8	8	2	2	2
Mvmt Flow	66	979	10	4	651	12	13	0	5	29	0	73

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	663	0	0	989	0	0	1818	1787	984	1784	1786	657
Stage 1	-	-	-	-	-	-	1116	1116	-	665	665	-
Stage 2	-	-	-	-	-	-	702	671	-	1119	1121	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.18	6.58	6.28	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.18	5.58	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.18	5.58	-	6.12	5.52	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.572	4.072	3.372	3.518	4.018	3.318
Pot Cap-1 Maneuver	931	-	-	699	-	-	58	79	294	63	81	465
Stage 1	-	-	-	-	-	-	245	276	-	449	458	-
Stage 2	-	-	-	-	-	-	419	446	-	251	282	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	931	-	-	699	-	-	46	73	294	58	75	465
Mov Cap-2 Maneuver	-	-	-	-	-	-	46	73	-	58	75	-
Stage 1	-	-	-	-	-	-	228	256	-	417	455	-
Stage 2	-	-	-	-	-	-	351	443	-	229	262	-






Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.1			86			42.9		
HCM LOS							F			E		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	46	294	931	-	-	699	-	-	58	465
HCM Lane V/C Ratio	0.288	0.017	0.071	-	-	0.006	-	-	0.493	0.158
HCM Control Delay (s)	112.3	17.5	9.2	-	-	10.2	-	-	116.6	14.2
HCM Lane LOS	F	C	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	1	0.1	0.2	-	-	0	-	-	1.9	0.6

Lanes, Volumes, Timings
2: NW Timmen Rd & NW La Center Rd











2028 Total Traffic, PM Peak Hour
05/10/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕		↙	↕	↙	↗
Traffic Volume (vph)	945	34	70	603	37	144
Future Volume (vph)	945	34	70	603	37	144
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 68.2%				ICU Level of Service C		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	945	34	70	603	37	144
Future Vol, veh/h	945	34	70	603	37	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	165	-	0	125
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	995	36	74	635	39	152
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	1031	0	1796	1013
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	783	-
Critical Hdwy	-	-	4.11	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.209	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	678	-	88	289
Stage 1	-	-	-	-	349	-
Stage 2	-	-	-	-	449	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	678	-	78	289
Mov Cap-2 Maneuver	-	-	-	-	78	-
Stage 1	-	-	-	-	349	-
Stage 2	-	-	-	-	400	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	1.1		42.7		
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	78	289	-	-	678	-
HCM Lane V/C Ratio	0.499	0.524	-	-	0.109	-
HCM Control Delay (s)	90.4	30.4	-	-	11	-
HCM Lane LOS	F	D	-	-	B	-
HCM 95th %tile Q(veh)	2.1	2.8	-	-	0.4	-

Lanes, Volumes, Timings
3: NW Pacific Hwy & E 4th Street

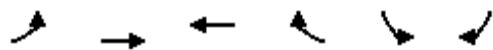
2028 Total Traffic, PM Peak Hour
05/10/2025






						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	496	88	306	778	80	183
Future Volume (vph)	496	88	306	778	80	183
Confl. Peds. (#/hr)	1	3		1	3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield
Intersection Summary						
Control Type: Roundabout						
Intersection Capacity Utilization 73.1%			ICU Level of Service D			
Analysis Period (min) 15						






Intersection				
Intersection Delay, s/veh	16.6			
Intersection LOS	C			
Approach	WB	NB		SB
Entry Lanes	1	2		1
Conflicting Circle Lanes	1	1		1
Adj Approach Flow, veh/h	615	1141		277
Demand Flow Rate, veh/h	621	1141		280
Vehicles Circulating, veh/h	322	85		527
Vehicles Exiting, veh/h	904	722		416
Follow-Up Headway, s	3.186	3.186		3.186
Ped Vol Crossing Leg, #/h	3	1		3
Ped Cap Adj	1.000	0.999		1.000
Approach Delay, s/veh	20.8	15.5		11.4
Approach LOS	C	C		B
Lane	Left	Left	Right	Left
Designated Moves	LR	LT	R	LT
Assumed Moves	LR	LT	R	LT
RT Channelized				
Lane Util	1.000	0.282	0.718	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	621	322	819	280
Cap Entry Lane, veh/h	819	1038	1038	667
Entry HV Adj Factor	0.990	1.000	1.000	0.990
Flow Entry, veh/h	615	322	819	277
Cap Entry, veh/h	811	1037	1037	660
V/C Ratio	0.759	0.311	0.790	0.420
Control Delay, s/veh	20.8	6.6	19.1	11.4
LOS	C	A	C	B
95th %tile Queue, veh	7	1	9	2

Lanes, Volumes, Timings
4: E 4th Street & Aspen Avenue

2028 Total Traffic, PM Peak Hour
05/10/2025



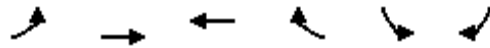
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	239	621	430	44	19	138
Future Volume (vph)	239	621	430	44	19	138
Confl. Peds. (#/hr)	11			4	4	11
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 55.0%				ICU Level of Service A		
Analysis Period (min) 15						




Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	239	621	430	44	19	138
Future Vol, veh/h	239	621	430	44	19	138
Conflicting Peds, #/hr	11	0	0	4	4	11
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	65	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	263	682	473	48	21	152
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	532	0	-	0	1720	519
Stage 1	-	-	-	-	508	-
Stage 2	-	-	-	-	1212	-
Critical Hdwy	4.1	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.2	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	1046	-	-	-	99	559
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	283	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1035	-	-	-	72	547
Mov Cap-2 Maneuver	-	-	-	-	72	-
Stage 1	-	-	-	-	448	-
Stage 2	-	-	-	-	280	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.7	0		21.4		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1035	-	-	-	72	547
HCM Lane V/C Ratio	0.254	-	-	-	0.29	0.277
HCM Control Delay (s)	9.7	-	-	-	74.3	14.1
HCM Lane LOS	A	-	-	-	F	B
HCM 95th %tile Q(veh)	1	-	-	-	1.1	1.1




Lanes, Volumes, Timings
5: E 4th Street & Cedar Avenue

2028 Total Traffic, PM Peak Hour

05/10/2025























Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	616	419	21	33	36
Future Volume (vph)	32	616	419	21	33	36
Confl. Peds. (#/hr)	16			6	6	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 73.5%				ICU Level of Service D		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	616	419	21	33	36
Future Vol, veh/h	32	616	419	21	33	36
Conflicting Peds, #/hr	16	0	0	6	6	16
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	36	684	466	23	37	40
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	505	0	-	0	1256	510
Stage 1	-	-	-	-	494	-
Stage 2	-	-	-	-	762	-
Critical Hdwy	4.11	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.209	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1065	-	-	-	189	563
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	461	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1049	-	-	-	173	546
Mov Cap-2 Maneuver	-	-	-	-	173	-
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	454	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.4	0		23.6		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1049	-	-	-	269	
HCM Lane V/C Ratio	0.034	-	-	-	0.285	
HCM Control Delay (s)	8.6	0	-	-	23.6	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1	

Lanes, Volumes, Timings
6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

2028 Total Traffic, PM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	193	437	33	8	265	5	19	2	14	7	5	95
Future Volume (vph)	193	437	33	8	265	5	19	2	14	7	5	95
Confl. Peds. (#/hr)			4	4			4		4			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	11.2	27.0		9.5	25.3		9.5	24.0		9.5	24.0	
Total Split (%)	16.0%	38.6%		13.6%	36.1%		13.6%	34.3%		13.6%	34.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Max		None	Max	
Act Effect Green (s)	25.2	24.2		19.4	14.3		20.6	19.8		20.6	19.8	
Actuated g/C Ratio	0.45	0.43		0.35	0.25		0.37	0.35		0.37	0.35	
v/c Ratio	0.50	0.65		0.03	0.63		0.04	0.03		0.01	0.18	
Control Delay	14.6	20.0		9.5	25.4		12.5	9.5		12.3	5.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.6	20.0		9.5	25.4		12.5	9.5		12.3	5.6	
LOS	B	B		A	C		B	A		B	A	
Approach Delay		18.4			24.9			11.1			6.1	
Approach LOS		B			C			B			A	

Intersection Summary

Cycle Length: 70

Actuated Cycle Length: 56.2

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 18.6

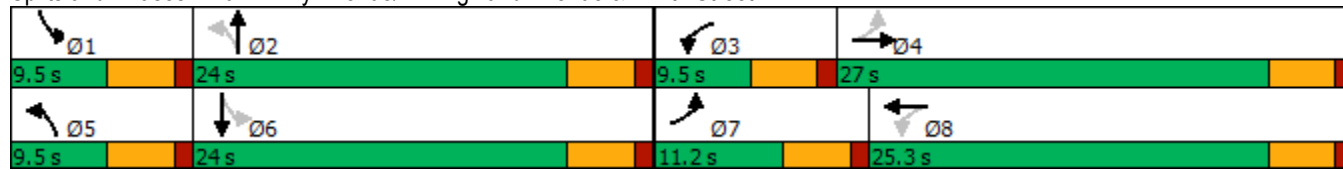
Intersection LOS: B

Intersection Capacity Utilization 55.4%

ICU Level of Service B

Analysis Period (min) 15

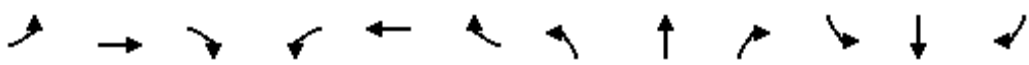








Splits and Phases: 6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street



HCM 6th Signalized Intersection Summary
6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

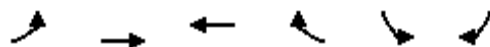
2028 Total Traffic, PM Peak Hour




05/10/2025




												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	437	33	8	265	5	19	2	14	7	5	95
Future Volume (veh/h)	193	437	33	8	265	5	19	2	14	7	5	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1900	1900	1900	1885	1885	1885
Adj Flow Rate, veh/h	214	486	37	9	294	6	21	2	16	8	6	106
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	2	2	2	0	0	0	1	1	1
Cap, veh/h	405	559	43	195	403	8	536	63	503	607	29	508
Arrive On Green	0.11	0.32	0.32	0.01	0.22	0.22	0.02	0.35	0.35	0.01	0.33	0.33
Sat Flow, veh/h	1795	1729	132	1781	1826	37	1810	181	1448	1795	86	1524
Grp Volume(v), veh/h	214	0	523	9	0	300	21	0	18	8	0	112
Grp Sat Flow(s),veh/h/ln	1795	0	1861	1781	0	1863	1810	0	1629	1795	0	1611
Q Serve(g_s), s	5.0	0.0	15.5	0.2	0.0	8.8	0.4	0.0	0.4	0.2	0.0	2.9
Cycle Q Clear(g_c), s	5.0	0.0	15.5	0.2	0.0	8.8	0.4	0.0	0.4	0.2	0.0	2.9
Prop In Lane	1.00		0.07	1.00		0.02	1.00		0.89	1.00		0.95
Lane Grp Cap(c), veh/h	405	0	602	195	0	411	536	0	566	607	0	536
V/C Ratio(X)	0.53	0.00	0.87	0.05	0.00	0.73	0.04	0.00	0.03	0.01	0.00	0.21
Avail Cap(c_a), veh/h	405	0	715	327	0	662	646	0	566	742	0	536
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	18.6	18.1	0.0	21.2	12.3	0.0	12.6	12.7	0.0	14.0
Incr Delay (d2), s/veh	1.3	0.0	9.9	0.1	0.0	2.5	0.0	0.0	0.1	0.0	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	7.4	0.1	0.0	3.7	0.2	0.0	0.2	0.1	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	0.0	28.5	18.2	0.0	23.7	12.3	0.0	12.7	12.7	0.0	14.9
LnGrp LOS	B	A	C	B	A	C	B	A	B	B	A	B
Approach Vol, veh/h		737			309			39			120	
Approach Delay, s/veh		24.8			23.6			12.5			14.7	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.1	24.8	5.2	23.4	5.9	24.0	11.2	17.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	19.5	5.0	22.5	5.0	19.5	6.7	20.8				
Max Q Clear Time (g_c+l1), s	2.2	2.4	2.2	17.5	2.4	4.9	7.0	10.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.4	0.0	0.5	0.0	1.2				
Intersection Summary												
HCM 6th Ctrl Delay			23.1									
HCM 6th LOS			C									

Lanes, Volumes, Timings
7: NE Lockwood Creek Road & E Spruce Avenue

2028 Total Traffic, PM Peak Hour
05/10/2025






Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	52	293	233	1	2	39
Future Volume (vph)	52	293	233	1	2	39
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 44.0%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	52	293	233	1	2	39
Future Vol, veh/h	52	293	233	1	2	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	56	315	251	1	2	42
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	252	0	-	0	679	252
Stage 1	-	-	-	-	252	-
Stage 2	-	-	-	-	427	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1313	-	-	-	420	792
Stage 1	-	-	-	-	795	-
Stage 2	-	-	-	-	662	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1313	-	-	-	398	792
Mov Cap-2 Maneuver	-	-	-	-	398	-
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	662	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.2	0		10.1		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1313	-	-	-	756	
HCM Lane V/C Ratio	0.043	-	-	-	0.058	
HCM Control Delay (s)	7.9	0	-	-	10.1	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	

Lanes, Volumes, Timings
8: Tanoak Avenue & NE 339th Street

2028 Total Traffic, PM Peak Hour
05/10/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶↷	
Traffic Volume (vph)	158	25	5	91	4	0
Future Volume (vph)	158	25	5	91	4	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 19.8%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	158	25	5	91	4	0
Future Vol, veh/h	158	25	5	91	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	198	31	6	114	5	0

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	229	0	340	214
Stage 1	-	-	-	-	214	-
Stage 2	-	-	-	-	126	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1351	-	660	831
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	905	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1351	-	657	831
Mov Cap-2 Maneuver	-	-	-	-	657	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	900	-




Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	657	-	-	1351	-
HCM Lane V/C Ratio	0.008	-	-	0.005	-
HCM Control Delay (s)	10.5	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lanes, Volumes, Timings
9: North Site Access & NE 339th Street










2028 Total Traffic, PM Peak Hour
05/10/2025




	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↘↙	
Traffic Volume (vph)	183	20	0	95	13	0
Future Volume (vph)	183	20	0	95	13	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 20.8%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	183	20	0	95	13	0
Future Vol, veh/h	183	20	0	95	13	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	203	22	0	106	14	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	225	0	320	214
Stage 1	-	-	-	-	214	-
Stage 2	-	-	-	-	106	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1356	-	678	831
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	923	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1356	-	678	831
Mov Cap-2 Maneuver	-	-	-	-	678	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	923	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10.4	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	678	-	-	1356	-	
HCM Lane V/C Ratio	0.021	-	-	-	-	
HCM Control Delay (s)	10.4	-	-	0	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

Lanes, Volumes, Timings
10: Tanoak Avenue & East Site Access

2028 Total Traffic, PM Peak Hour
05/10/2025






















						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	2	3	2	25	5
Future Volume (vph)	2	2	3	2	25	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	
Intersection Summary						
Control Type: Unsignalized						
Intersection Capacity Utilization 13.3%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	3	2	25	5
Future Vol, veh/h	2	2	3	2	25	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	2	3	2	28	6
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	39	31	34	0	-	0
Stage 1	31	-	-	-	-	-
Stage 2	8	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	978	1049	1591	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	1020	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	976	1049	1591	-	-	-
Mov Cap-2 Maneuver	976	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	1020	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.6	4.4		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1591	-	1011	-	-	
HCM Lane V/C Ratio	0.002	-	0.004	-	-	
HCM Control Delay (s)	7.3	0	8.6	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Lanes, Volumes, Timings
1: Paradise Park Rd & NW La Center Rd

2028 Background Traffic, AM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	342	13	4	852	22	16	1	5	16	1	39
Future Volume (vph)	32	342	13	4	852	22	16	1	5	16	1	39
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	6%	6%	3%	3%	3%	47%	47%	47%	25%	25%	25%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	47.0	47.0		47.0	47.0		23.0	23.0		23.0	23.0	
Total Split (%)	67.1%	67.1%		67.1%	67.1%		32.9%	32.9%		32.9%	32.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	31.1	31.1		31.1	31.1		6.9	6.9		6.9	6.9	
Actuated g/C Ratio	0.66	0.66		0.66	0.66		0.15	0.15		0.15	0.15	
v/c Ratio	0.18	0.34		0.01	0.81		0.13	0.04		0.11	0.20	
Control Delay	5.4	4.2		2.5	12.0		24.2	15.7		23.3	11.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	5.4	4.2		2.5	12.0		24.2	15.7		23.3	11.2	
LOS	A	A		A	B		C	B		C	B	
Approach Delay		4.3			12.0			21.8			14.8	
Approach LOS		A			B			C			B	

Intersection Summary

Cycle Length: 70

Actuated Cycle Length: 47.4

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 10.0

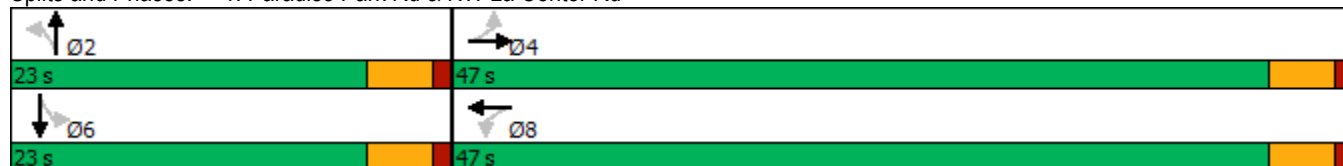
Intersection LOS: B

Intersection Capacity Utilization 61.2%

ICU Level of Service B

Analysis Period (min) 15





















Splits and Phases: 1: Paradise Park Rd & NW La Center Rd



HCM 6th Signalized Intersection Summary
1: Paradise Park Rd & NW La Center Rd

2028 Background Traffic, AM Peak Hour

05/10/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	342	13	4	852	22	16	1	5	16	1	39
Future Volume (veh/h)	32	342	13	4	852	22	16	1	5	16	1	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1856	1856	1856	1203	1203	1203	1530	1530	1530
Adj Flow Rate, veh/h	36	380	14	4	947	24	18	1	6	18	1	43
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	6	6	3	3	3	47	47	47	25	25	25
Cap, veh/h	321	1113	41	716	1155	29	270	19	115	325	4	163
Arrive On Green	0.64	0.64	0.64	0.64	0.64	0.64	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	561	1736	64	982	1802	46	877	149	894	1152	30	1271
Grp Volume(v), veh/h	36	0	394	4	0	971	18	0	7	18	0	44
Grp Sat Flow(s),veh/h/ln	561	0	1800	982	0	1847	877	0	1043	1152	0	1301
Q Serve(g_s), s	2.0	0.0	3.9	0.1	0.0	15.5	0.7	0.0	0.2	0.5	0.0	1.2
Cycle Q Clear(g_c), s	17.5	0.0	3.9	4.0	0.0	15.5	1.9	0.0	0.2	0.8	0.0	1.2
Prop In Lane	1.00		0.04	1.00		0.02	1.00		0.86	1.00		0.98
Lane Grp Cap(c), veh/h	321	0	1154	716	0	1185	270	0	134	325	0	167
V/C Ratio(X)	0.11	0.00	0.34	0.01	0.00	0.82	0.07	0.00	0.05	0.06	0.00	0.26
Avail Cap(c_a), veh/h	572	0	1960	1156	0	2012	573	0	494	724	0	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.9	0.0	3.2	4.1	0.0	5.3	16.2	0.0	14.9	15.3	0.0	15.4
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.0	0.0	1.5	0.1	0.0	0.2	0.1	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.0	0.0	0.7	0.1	0.0	0.1	0.1	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.1	0.0	3.4	4.1	0.0	6.8	16.3	0.0	15.1	15.3	0.0	16.2
LnGrp LOS	B	A	A	A	A	A	B	A	B	B	A	B
Approach Vol, veh/h	430			975			25			62		
Approach Delay, s/veh	4.1			6.7			16.0			15.9		
Approach LOS	A			A			B			B		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	9.5			29.5			9.5			29.5		
Change Period (Y+Rc), s	4.5			4.5			4.5			4.5		
Max Green Setting (Gmax), s	18.5			42.5			18.5			42.5		
Max Q Clear Time (g_c+11), s	3.9			19.5			3.2			17.5		
Green Ext Time (p_c), s	0.0			2.5			0.2			7.5		
Intersection Summary												
HCM 6th Ctrl Delay	6.5											
HCM 6th LOS	A											

Lanes, Volumes, Timings
2: NW Timmen Rd & NW La Center Rd

2028 Background Traffic, AM Peak Hour

05/10/2025

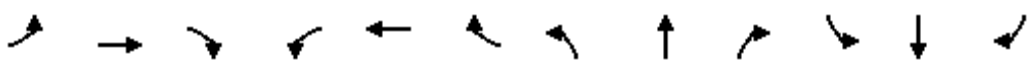
	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗		↖	↗	↖	↗
Traffic Volume (vph)	343	17	85	831	26	50
Future Volume (vph)	343	17	85	831	26	50
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	7%	7%	14%	14%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	
Intersection Summary						
Control Type: Roundabout						
Intersection Capacity Utilization 53.7%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection					
Intersection Delay, s/veh	12.3				
Intersection LOS	B				
Approach	EB	WB		NB	
Entry Lanes	1	2		2	
Conflicting Circle Lanes	1	1		1	
Adj Approach Flow, veh/h	409	1041		87	
Demand Flow Rate, veh/h	437	1187		89	
Vehicles Circulating, veh/h	111	31		417	
Vehicles Exiting, veh/h	1107	475		131	
Ped Vol Crossing Leg, #/h	0	0		0	
Ped Cap Adj	1.000	1.000		1.000	
Approach Delay, s/veh	6.6	15.3		4.2	
Approach LOS	A	C		A	
Lane	Left	Left	Right	Left	Right
Designated Moves	TR	L	TR	L	TR
Assumed Moves	TR	L	TR	L	TR
RT Channelized					
Lane Util	1.000	0.094	0.906	0.348	0.652
Follow-Up Headway, s	2.609	2.535	2.535	2.535	2.535
Critical Headway, s	4.976	4.544	4.544	4.544	4.544
Entry Flow, veh/h	437	111	1076	31	58
Cap Entry Lane, veh/h	1232	1381	1381	972	972
Entry HV Adj Factor	0.935	0.874	0.877	0.968	0.983
Flow Entry, veh/h	409	97	944	30	57
Cap Entry, veh/h	1152	1206	1211	940	955
V/C Ratio	0.355	0.080	0.779	0.032	0.060
Control Delay, s/veh	6.6	3.6	16.4	4.1	4.3
LOS	A	A	C	A	A
95th %tile Queue, veh	2	0	8	0	0

Lanes, Volumes, Timings
1: Paradise Park Rd & NW La Center Rd

2028 Background Traffic-MIT, PM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	919	10	4	614	12	13	0	5	28	0	72
Future Volume (vph)	65	919	10	4	614	12	13	0	5	28	0	72
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	8%	8%	8%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	41.0	41.0		41.0	41.0		24.0	24.0		24.0	24.0	
Total Split (%)	63.1%	63.1%		63.1%	63.1%		36.9%	36.9%		36.9%	36.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effect Green (s)	29.4	29.4		29.4	29.4		6.7	6.7		6.7	6.7	
Actuated g/C Ratio	0.65	0.65		0.65	0.65		0.15	0.15		0.15	0.15	
v/c Ratio	0.15	0.78		0.02	0.53		0.07	0.02		0.14	0.16	
Control Delay	3.9	11.1		3.0	6.0		20.5	0.0		21.3	0.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	3.9	11.1		3.0	6.0		20.5	0.0		21.3	0.8	
LOS	A	B		A	A		C	A		C	A	
Approach Delay		10.6			6.0			14.8			6.6	
Approach LOS		B			A			B			A	

Intersection Summary

Cycle Length: 65

Actuated Cycle Length: 45.4

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 8.7

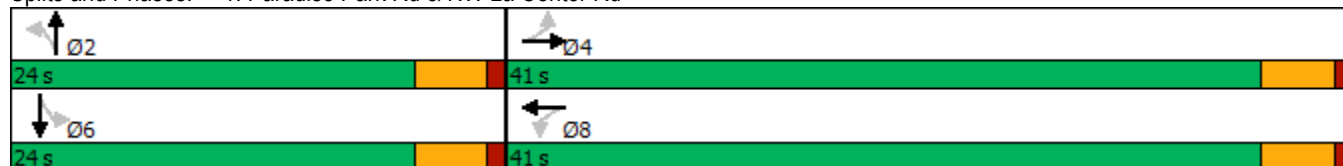
Intersection LOS: A

Intersection Capacity Utilization 69.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Paradise Park Rd & NW La Center Rd























HCM 6th Signalized Intersection Summary

1: Paradise Park Rd & NW La Center Rd

2028 Background Traffic-MIT, PM Peak Hour

05/10/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	919	10	4	614	12	13	0	5	28	0	72
Future Volume (veh/h)	65	919	10	4	614	12	13	0	5	28	0	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1781	1781	1781	1870	1870	1870
Adj Flow Rate, veh/h	66	938	10	4	627	12	13	0	5	29	0	73
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	2	2	2	8	8	8	2	2	2
Cap, veh/h	534	1163	12	337	1142	22	310	0	202	378	0	213
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.13	0.00	0.13	0.13	0.00	0.13
Sat Flow, veh/h	796	1862	20	592	1829	35	1264	0	1510	1411	0	1585
Grp Volume(v), veh/h	66	0	948	4	0	639	13	0	5	29	0	73
Grp Sat Flow(s),veh/h/ln	796	0	1882	592	0	1864	1264	0	1510	1411	0	1585
Q Serve(g_s), s	1.9	0.0	14.2	0.2	0.0	7.3	0.4	0.0	0.1	0.7	0.0	1.6
Cycle Q Clear(g_c), s	9.2	0.0	14.2	14.4	0.0	7.3	1.9	0.0	0.1	0.8	0.0	1.6
Prop In Lane	1.00		0.01	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	534	0	1175	337	0	1164	310	0	202	378	0	213
V/C Ratio(X)	0.12	0.00	0.81	0.01	0.00	0.55	0.04	0.00	0.02	0.08	0.00	0.34
Avail Cap(c_a), veh/h	816	0	1842	547	0	1825	801	0	789	927	0	829
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.6	0.0	5.3	10.7	0.0	4.0	15.5	0.0	14.0	14.4	0.0	14.7
Incr Delay (d2), s/veh	0.1	0.0	1.5	0.0	0.0	0.4	0.1	0.0	0.0	0.1	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.7	0.0	0.0	0.2	0.1	0.0	0.0	0.2	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.7	0.0	6.8	10.8	0.0	4.4	15.6	0.0	14.1	14.5	0.0	15.6
LnGrp LOS	A	A	A	B	A	A	B	A	B	B	A	B
Approach Vol, veh/h	1014			643			18			102		
Approach Delay, s/veh	6.8			4.4			15.2			15.3		
Approach LOS	A			A			B			B		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	9.5			27.8			9.5			27.8		
Change Period (Y+Rc), s	4.5			4.5			4.5			4.5		
Max Green Setting (Gmax), s	19.5			36.5			19.5			36.5		
Max Q Clear Time (g_c+l1), s	3.9			16.2			3.6			16.4		
Green Ext Time (p_c), s	0.0			7.1			0.3			3.7		
Intersection Summary												
HCM 6th Ctrl Delay	6.5											
HCM 6th LOS	A											






















	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗		↖	↗	↖	↗
Traffic Volume (vph)	905	34	67	579	37	139
Future Volume (vph)	905	34	67	579	37	139
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	
Intersection Summary						
Control Type: Roundabout						
Intersection Capacity Utilization 65.7%				ICU Level of Service C		
Analysis Period (min) 15						

Intersection					
Intersection Delay, s/veh	23.7				
Intersection LOS	C				
Approach	EB	WB	NB		
Entry Lanes	1	2	2		
Conflicting Circle Lanes	1	1	1		
Adj Approach Flow, veh/h	989	680	185		
Demand Flow Rate, veh/h	989	687	190		
Vehicles Circulating, veh/h	72	40	953		
Vehicles Exiting, veh/h	655	1103	108		
Follow-Up Headway, s	3.186	3.186	3.186		
Ped Vol Crossing Leg, #/h	0	0	0		
Ped Cap Adj	1.000	1.000	1.000		
Approach Delay, s/veh	35.1	9.8	13.6		
Approach LOS	E	A	B		
Lane	Left	Left	Right	Left	Right
Designated Moves	TR	L	TR	L	TR
Assumed Moves	TR	L	TR	L	TR
RT Channelized					
Lane Util	1.000	0.105	0.895	0.211	0.789
Critical Headway, s	5.193	5.193	5.193	5.193	5.193
Entry Flow, veh/h	989	72	615	40	150
Cap Entry Lane, veh/h	1051	1086	1086	436	436
Entry HV Adj Factor	1.000	0.986	0.990	0.975	0.973
Flow Entry, veh/h	989	71	609	39	146
Cap Entry, veh/h	1051	1071	1075	425	424
V/C Ratio	0.941	0.066	0.566	0.092	0.344
Control Delay, s/veh	35.1	3.9	10.5	9.8	14.6
LOS	E	A	B	A	B
95th %tile Queue, veh	16	0	4	0	2

Lanes, Volumes, Timings
1: Paradise Park Rd & NW La Center Rd

2028 Total Traffic-MIT, AM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	354	13	4	888	22	16	1	5	16	1	39
Future Volume (vph)	32	354	13	4	888	22	16	1	5	16	1	39
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	6%	6%	3%	3%	3%	47%	47%	47%	25%	25%	25%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	46.0	46.0		46.0	46.0		24.0	24.0		24.0	24.0	
Total Split (%)	65.7%	65.7%		65.7%	65.7%		34.3%	34.3%		34.3%	34.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effect Green (s)	34.4	34.4		34.4	34.4		6.8	6.8		6.8	6.8	
Actuated g/C Ratio	0.68	0.68		0.68	0.68		0.13	0.13		0.13	0.13	
v/c Ratio	0.18	0.33		0.01	0.81		0.14	0.04		0.12	0.21	
Control Delay	5.4	4.1		2.5	12.2		24.9	15.7		23.9	11.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	5.4	4.1		2.5	12.2		24.9	15.7		23.9	11.3	
LOS	A	A		A	B		C	B		C	B	
Approach Delay		4.2			12.2			22.3			15.0	
Approach LOS		A			B			C			B	

Intersection Summary

Cycle Length: 70

Actuated Cycle Length: 50.5

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 10.2

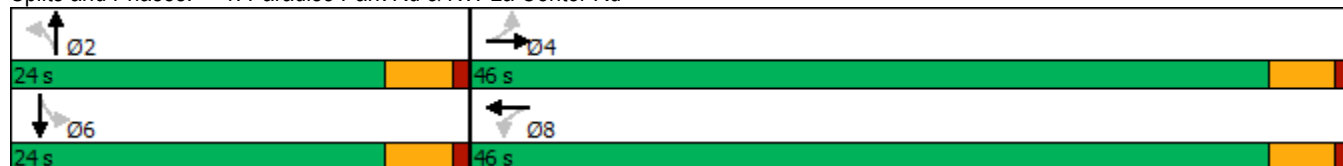
Intersection LOS: B

Intersection Capacity Utilization 63.1%

ICU Level of Service B

Analysis Period (min) 15





















Splits and Phases: 1: Paradise Park Rd & NW La Center Rd



HCM 6th Signalized Intersection Summary
1: Paradise Park Rd & NW La Center Rd

2028 Total Traffic-MIT, AM Peak Hour

05/10/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	354	13	4	888	22	16	1	5	16	1	39
Future Volume (veh/h)	32	354	13	4	888	22	16	1	5	16	1	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1856	1856	1856	1203	1203	1203	1530	1530	1530
Adj Flow Rate, veh/h	36	393	14	4	987	24	18	1	6	18	1	43
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	6	6	3	3	3	47	47	47	25	25	25
Cap, veh/h	306	1140	41	716	1183	29	258	18	110	312	4	156
Arrive On Green	0.66	0.66	0.66	0.66	0.66	0.66	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	540	1738	62	971	1804	44	877	149	894	1152	30	1271
Grp Volume(v), veh/h	36	0	407	4	0	1011	18	0	7	18	0	44
Grp Sat Flow(s),veh/h/ln	540	0	1800	971	0	1848	877	0	1043	1152	0	1301
Q Serve(g_s), s	2.2	0.0	4.1	0.1	0.0	16.9	0.8	0.0	0.2	0.6	0.0	1.2
Cycle Q Clear(g_c), s	19.1	0.0	4.1	4.2	0.0	16.9	2.0	0.0	0.2	0.8	0.0	1.2
Prop In Lane	1.00		0.03	1.00		0.02	1.00		0.86	1.00		0.98
Lane Grp Cap(c), veh/h	306	0	1180	716	0	1212	258	0	128	312	0	160
V/C Ratio(X)	0.12	0.00	0.34	0.01	0.00	0.83	0.07	0.00	0.05	0.06	0.00	0.28
Avail Cap(c_a), veh/h	503	0	1837	1070	0	1885	570	0	500	722	0	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.6	0.0	3.1	4.0	0.0	5.3	17.1	0.0	15.7	16.1	0.0	16.2
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.0	0.0	2.0	0.1	0.0	0.2	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.0	0.0	0.9	0.1	0.0	0.1	0.1	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.8	0.0	3.3	4.0	0.0	7.3	17.2	0.0	15.9	16.2	0.0	17.1
LnGrp LOS	B	A	A	A	A	A	B	A	B	B	A	B
Approach Vol, veh/h	443			1015			25			62		
Approach Delay, s/veh	4.1			7.3			16.9			16.8		
Approach LOS	A			A			B			B		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	9.5			31.2			9.5			31.2		
Change Period (Y+Rc), s	4.5			4.5			4.5			4.5		
Max Green Setting (Gmax), s	19.5			41.5			19.5			41.5		
Max Q Clear Time (g_c+l1), s	4.0			21.1			3.2			18.9		
Green Ext Time (p_c), s	0.1			2.5			0.2			7.8		
Intersection Summary												
HCM 6th Ctrl Delay	6.9											
HCM 6th LOS	A											

Lanes, Volumes, Timings
2: NW Timmen Rd & NW La Center Rd

2028 Total Traffic-MIT, AM Peak Hour

05/10/2025

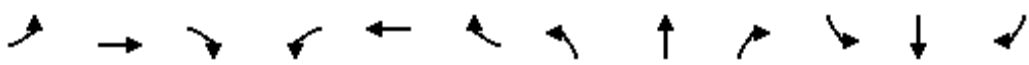
	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻		↻	↻	↻	↻
Traffic Volume (vph)	355	17	89	867	26	51
Future Volume (vph)	355	17	89	867	26	51
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	7%	7%	14%	14%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	
Intersection Summary						
Control Type: Roundabout						
Intersection Capacity Utilization 55.6% ICU Level of Service B						
Analysis Period (min) 15						

Intersection					
Intersection Delay, s/veh	13.6				
Intersection LOS	B				
Approach	EB	WB		NB	
Entry Lanes	1	2		2	
Conflicting Circle Lanes	1	1		1	
Adj Approach Flow, veh/h	422	1086		88	
Demand Flow Rate, veh/h	451	1238		90	
Vehicles Circulating, veh/h	115	31		431	
Vehicles Exiting, veh/h	1154	490		135	
Ped Vol Crossing Leg, #/h	0	0		0	
Ped Cap Adj	1.000	1.000		1.000	
Approach Delay, s/veh	6.8	17.1		4.3	
Approach LOS	A	C		A	
Lane	Left	Left	Right	Left	Right
Designated Moves	TR	L	TR	L	TR
Assumed Moves	TR	L	TR	L	TR
RT Channelized					
Lane Util	1.000	0.093	0.907	0.344	0.656
Follow-Up Headway, s	2.609	2.535	2.535	2.535	2.535
Critical Headway, s	4.976	4.544	4.544	4.544	4.544
Entry Flow, veh/h	451	115	1123	31	59
Cap Entry Lane, veh/h	1227	1381	1381	959	959
Entry HV Adj Factor	0.935	0.878	0.877	0.968	0.983
Flow Entry, veh/h	422	101	985	30	58
Cap Entry, veh/h	1148	1213	1211	928	943
V/C Ratio	0.368	0.083	0.813	0.032	0.062
Control Delay, s/veh	6.8	3.7	18.4	4.2	4.4
LOS	A	A	C	A	A
95th %tile Queue, veh	2	0	10	0	0

Lanes, Volumes, Timings
1: Paradise Park Rd & NW La Center Rd

2028 Total Traffic-MIT, PM Peak Hour

05/10/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	959	10	4	638	12	13	0	5	28	0	72
Future Volume (vph)	65	959	10	4	638	12	13	0	5	28	0	72
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	8%	8%	8%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	41.0	41.0		41.0	41.0		24.0	24.0		24.0	24.0	
Total Split (%)	63.1%	63.1%		63.1%	63.1%		36.9%	36.9%		36.9%	36.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effect Green (s)	32.0	32.0		32.0	32.0		6.7	6.7		6.7	6.7	
Actuated g/C Ratio	0.67	0.67		0.67	0.67		0.14	0.14		0.14	0.14	
v/c Ratio	0.15	0.79		0.02	0.53		0.08	0.02		0.15	0.17	
Control Delay	3.8	11.6		3.0	5.9		20.8	0.2		21.9	0.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	3.8	11.6		3.0	5.9		20.8	0.2		21.9	0.9	
LOS	A	B		A	A		C	A		C	A	
Approach Delay		11.1			5.9			15.1			6.9	
Approach LOS		B			A			B			A	

Intersection Summary

Cycle Length: 65

Actuated Cycle Length: 47.8

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 9.0

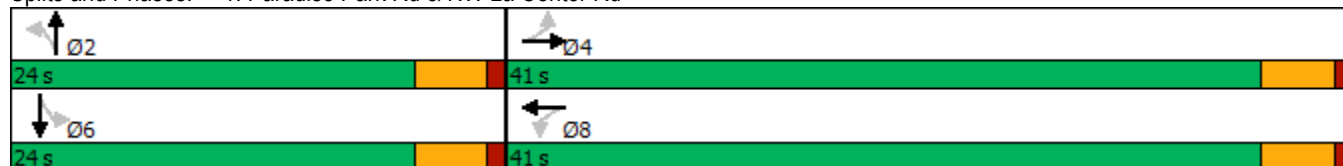
Intersection LOS: A

Intersection Capacity Utilization 69.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Paradise Park Rd & NW La Center Rd























HCM 6th Signalized Intersection Summary

1: Paradise Park Rd & NW La Center Rd

2028 Total Traffic-MIT, PM Peak Hour












05/10/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	959	10	4	638	12	13	0	5	28	0	72
Future Volume (veh/h)	65	959	10	4	638	12	13	0	5	28	0	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1781	1781	1781	1870	1870	1870
Adj Flow Rate, veh/h	66	979	10	4	651	12	13	0	5	29	0	73
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	2	2	2	8	8	8	2	2	2
Cap, veh/h	528	1191	12	322	1171	22	295	0	194	363	0	204
Arrive On Green	0.64	0.64	0.64	0.64	0.64	0.64	0.13	0.00	0.13	0.13	0.00	0.13
Sat Flow, veh/h	778	1863	19	569	1831	34	1264	0	1510	1411	0	1585
Grp Volume(v), veh/h	66	0	989	4	0	663	13	0	5	29	0	73
Grp Sat Flow(s),veh/h/ln	778	0	1882	569	0	1864	1264	0	1510	1411	0	1585
Q Serve(g_s), s	2.0	0.0	15.5	0.2	0.0	7.7	0.4	0.0	0.1	0.7	0.0	1.6
Cycle Q Clear(g_c), s	9.7	0.0	15.5	15.7	0.0	7.7	2.0	0.0	0.1	0.8	0.0	1.6
Prop In Lane	1.00		0.01	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	528	0	1204	322	0	1192	295	0	194	363	0	204
V/C Ratio(X)	0.12	0.00	0.82	0.01	0.00	0.56	0.04	0.00	0.03	0.08	0.00	0.36
Avail Cap(c_a), veh/h	762	0	1768	493	0	1752	767	0	758	890	0	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.6	0.0	5.3	11.3	0.0	3.9	16.4	0.0	14.8	15.2	0.0	15.5
Incr Delay (d2), s/veh	0.1	0.0	2.1	0.0	0.0	0.4	0.1	0.0	0.1	0.1	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.9	0.0	0.0	0.2	0.1	0.0	0.0	0.2	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.7	0.0	7.4	11.3	0.0	4.3	16.4	0.0	14.8	15.2	0.0	16.5
LnGrp LOS	A	A	A	B	A	A	B	A	B	B	A	B
Approach Vol, veh/h	1055			667			18			102		
Approach Delay, s/veh	7.4			4.4			16.0			16.2		
Approach LOS	A			A			B			B		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	9.5			29.3			9.5			29.3		
Change Period (Y+Rc), s	4.5			4.5			4.5			4.5		
Max Green Setting (Gmax), s	19.5			36.5			19.5			36.5		
Max Q Clear Time (g_c+l1), s	4.0			17.5			3.6			17.7		
Green Ext Time (p_c), s	0.0			7.3			0.3			3.8		
Intersection Summary												
HCM 6th Ctrl Delay	6.8											
HCM 6th LOS	A											

Lanes, Volumes, Timings
2: NW Timmen Rd & NW La Center Rd

2028 Total Traffic-MIT, PM Peak Hour

05/10/2025

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	945	34	70	603	37	144
Future Volume (vph)	945	34	70	603	37	144
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	
Intersection Summary						
Control Type: Roundabout						
Intersection Capacity Utilization 68.2%				ICU Level of Service C		
Analysis Period (min) 15						

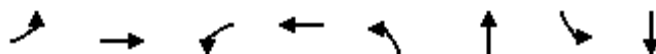
Intersection					
Intersection Delay, s/veh	28.6				
Intersection LOS	D				
Approach	EB	WB		NB	
Entry Lanes	1	2		2	
Conflicting Circle Lanes	1	1		1	
Adj Approach Flow, veh/h	1031	709		191	
Demand Flow Rate, veh/h	1031	716		197	
Vehicles Circulating, veh/h	75	40		995	
Vehicles Exiting, veh/h	681	1152		111	
Follow-Up Headway, s	3.186	3.186		3.186	
Ped Vol Crossing Leg, #/h	0	0		0	
Ped Cap Adj	1.000	1.000		1.000	
Approach Delay, s/veh	43.8	10.3		14.9	
Approach LOS	E	B		B	
Lane	Left	Left	Right	Left	Right
Designated Moves	TR	L	TR	L	TR
Assumed Moves	TR	L	TR	L	TR
RT Channelized					
Lane Util	1.000	0.105	0.895	0.203	0.797
Critical Headway, s	5.193	5.193	5.193	5.193	5.193
Entry Flow, veh/h	1031	75	641	40	157
Cap Entry Lane, veh/h	1048	1086	1086	418	418
Entry HV Adj Factor	1.000	0.987	0.990	0.975	0.968
Flow Entry, veh/h	1031	74	635	39	152
Cap Entry, veh/h	1048	1071	1075	407	404
V/C Ratio	0.983	0.069	0.590	0.096	0.376
Control Delay, s/veh	43.8	4.0	11.0	10.3	16.0
LOS	E	A	B	B	C
95th %tile Queue, veh	19	0	4	0	2

Queues

2028 Background Traffic, AM Peak Hour

6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

05/10/2025



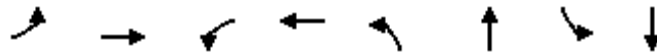
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	182	332	5	528	20	26	11	251
v/c Ratio	0.59	0.38	0.01	0.87	0.08	0.07	0.02	0.39
Control Delay	19.6	14.2	10.0	38.8	15.3	11.7	14.6	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.6	14.2	10.0	38.8	15.3	11.7	14.6	5.8
Queue Length 50th (ft)	33	64	1	180	6	3	3	3
Queue Length 95th (ft)	58	128	5	225	13	13	9	15
Internal Link Dist (ft)		363		508		383		475
Turn Bay Length (ft)	145		125		65		150	
Base Capacity (vph)	308	872	470	666	255	389	469	641
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.38	0.01	0.79	0.08	0.07	0.02	0.39
Intersection Summary								

Queues

2028 Background Traffic, PM Peak Hour

6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

05/10/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	187	495	9	284	21	18	8	95
v/c Ratio	0.43	0.62	0.03	0.61	0.04	0.03	0.01	0.15
Control Delay	13.2	19.1	9.5	24.8	12.4	9.4	12.1	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.2	19.1	9.5	24.8	12.4	9.4	12.1	5.9
Queue Length 50th (ft)	33	104	1	78	4	0	2	1
Queue Length 95th (ft)	84	#349	9	170	17	14	9	33
Internal Link Dist (ft)		363		508		383		475
Turn Bay Length (ft)	145		125		65		150	
Base Capacity (vph)	437	816	327	706	530	582	554	632
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.61	0.03	0.40	0.04	0.03	0.01	0.15

Intersection Summary

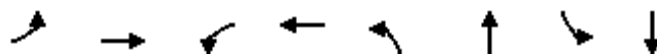
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

2028 Total Traffic, AM Peak Hour

05/10/2025

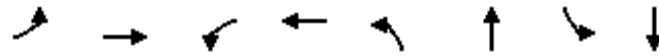


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	192	344	5	561	20	26	11	286
v/c Ratio	0.66	0.39	0.01	0.89	0.09	0.07	0.02	0.43
Control Delay	23.9	14.2	10.0	41.1	15.5	11.7	14.6	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.9	14.2	10.0	41.1	15.5	11.7	14.6	5.8
Queue Length 50th (ft)	35	67	1	197	6	3	3	3
Queue Length 95th (ft)	60	133	5	241	13	13	9	14
Internal Link Dist (ft)		363		508		383		475
Turn Bay Length (ft)	145		125		65		150	
Base Capacity (vph)	293	888	476	654	229	383	462	658
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.39	0.01	0.86	0.09	0.07	0.02	0.43
Intersection Summary								

Queues
6: NE Ivy Avenue/NE Highland Avenue & E. 4th Street

2028 Total Traffic, PM Peak Hour

05/10/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	214	523	9	300	21	18	8	112
v/c Ratio	0.50	0.65	0.03	0.63	0.04	0.03	0.01	0.18
Control Delay	14.6	20.0	9.5	25.4	12.5	9.5	12.3	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	20.0	9.5	25.4	12.5	9.5	12.3	5.6
Queue Length 50th (ft)	38	112	1	84	4	0	2	1
Queue Length 95th (ft)	96	#380	9	180	17	14	9	35
Internal Link Dist (ft)		363		508		383		475
Turn Bay Length (ft)	145		125		65		150	
Base Capacity (vph)	430	820	313	699	521	577	549	638
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.64	0.03	0.43	0.04	0.03	0.01	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.