SEC Stetson Avenue & Elk Street Traffic Impact Analysis

City of Hemet, California

June 6, 2024

TJW ENGINEERING, INC.
9841 Irvine Center Drive, Suite 200
Irvine, CA 92618
949.878.3509 | www.tjwengineering.com

June 6, 2024

TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

Mr. James Coleman
HIGHPOINTE HEMET I, LLC
16501 Scientific Way
Irvine, CA 92618

Subject: Traffic Impact Analysis – SEC Stetson Avenue and Elk Street, City of Hemet

Dear Mr. Coleman:

TJW ENGINEERING, INC. (TJW) is pleased to present you with this traffic impact analysis for the proposed project, SEC Stetson Avenue and Elk Street, also known as Aster Apartments, located on the southeast corner of West Stetson Avenue and South Elk Street in the City of Hemet.

This traffic study has been prepared to meet the traffic study requirements for the City of Hemet and assesses the forecast traffic operations associated with the proposed project and its impact on the local street network. This report is being submitted to you for review and forwarding to the City of Hemet.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

Thomas Wheat, PE, TE
Principal Engineer
Registered Civil Engineer *#69467*
Registered Traffic Engineer *#2565*

David Chew, PTP
Transportation Planner

Travis Yokota
Assistant Transportation Planner

SEC Stetson Avenue & Elk Street
Traffic Impact Analysis

City of Hemet, California

June 6, 2024

Prepared for:
HIGHPOINTE HEMET I, LLC
16501 Scientific Way
Irvine, CA 92618

Prepared by:
Thomas Wheat, PE, TE
David Chew, PTP
Travis Yokota

TJW ENGINEERING, INC.
9841 Irvine Center Drive, Suite 200
Irvine, CA 92618
949.878.3509|www.tjwengineering.com

Table of Contents

List of Tables

List of Exhibits

Appendices

1.0 EXECUTIVE SUMMARY

This Traffic Impact Analysis (TIA) analyzes the projected traffic operations associated with the proposed project, SEC Stetson Avenue and Elk Street, also known as Aster Apartments, located on the southeast corner of West Stetson Avenue and South Elk Street in the City of Hemet. The purpose of this TIA is to evaluate potential circulation system deficiencies that may result from development of the proposed project, and, if applicable, to recommend improvements to achieve acceptable operations. This analysis was prepared in coordination with the City of Hemet via a scoping agreement (See **Appendix A**) and is pursuant to applicable traffic impact analysis guidelines found in the *City of Hemet 2030 General Plan Circulation Element (Hemet Circulation Element)* (January 2012).

The proposed project is for the construction of 228 multi-family apartment dwelling units. The anticipated year of completion is 2028. Site access is planned via one new full-access driveway on South Elk Street. The site is currently zoned as R-3 Multiple Family Residential (max 30.0 du/ac). The current General Plan Land Use is High Density Residential (18.1 – 30.0 du/ac). There is no plan to propose changes to either zoning or land use. The project site is currently vacant.

A growth rate of two percent (2%) was used to account for 2028 traffic volumes. Upon completion, the project is projected to generate 1,537 daily trips with 91 AM and 116 PM peak hour trips.

The following four (4) intersections in the vicinity of the project site have been included in the level of service (LOS) analysis:

1. South Elk Street/West Stetson Avenue;
2. South Palm Avenue/West Stetson Avenue;
3. South Lyon Avenue/West Stetson Avenue;
4. South Elk Street/Project Driveway.

The study intersections are analyzed for the following study scenarios:

- Existing Traffic Conditions (Existing);
- Opening Year with Project Traffic Conditions (OYP);
- Opening Year Cumulative with Project Traffic Conditions (OYCP).

1.1 SUMMARY OF LEVEL OF SERVICE ANALYSIS RESULTS

Table ES-1 summarizes the results of the intersection level of service analysis based on the *Hemet Circulation Element* thresholds of significance for analyzing transportation deficiencies.

Table ES-1

Summary of Transportation Deficiencies at Study Intersections

Intersection			Existing Conditions	Opening Year Cumulative with Project Conditions
1	South Elk Street	West Stetson Avenue	No Deficiencies	No Deficiencies
2	South Palm Avenue	West Stetson Avenue	No Deficiencies	No Deficiencies
3	South Lyon Avenue	West Stetson Avenue	No Deficiencies	No Deficiencies
4	South Elk Street	Project Driveway	N/A	No Deficiencies

Existing Traffic Conditions

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for Existing Traffic Conditions.

Opening Year with Project Traffic Conditions (OYP)

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for Opening Year with Project Traffic Conditions.

Opening Year Cumulative with Project Traffic Conditions (OYCP)

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for Opening Year Cumulative with Project Traffic Conditions.

2.0 INTRODUCTION

This Traffic Impact Analysis (TIA) analyzes the projected traffic operations associated with the proposed project, SEC Stetson Avenue and Elk Street, also known as Aster Apartments, located on the southeast corner of West Stetson Avenue and South Elk Street in the City of Hemet. The purpose of this TIA is to evaluate potential circulation system deficiencies that may result from the development of the proposed project, and, if applicable, to recommend improvements to achieve acceptable operations. This analysis was prepared in coordination with the City of Perris via a scoping agreement (See **Appendix A**) and is pursuant to applicable traffic impact analysis guidelines found in the *City of Hemet 2030 General Plan Circulation Element (Hemet Circulation Element)* (January 2012).

2.1 PROJECT DESCRIPTION

The proposed project is for the construction of 228 multi-family apartment dwelling units. The anticipated year of completion is 2028. Site access is planned via one new full-access driveway on South Elk Street. The site is currently zoned as R-3 Multiple Family Residential (max 30.0 du/ac). The current General Plan Land Use is High Density Residential (18.1 – 30.0 du/ac). There is no plan to propose changes to either zoning or land use. The project site is currently vacant.

A growth rate of two percent (2%) was used to account for 2028 traffic volumes. Upon completion, the project is projected to generate 1,537 daily trips with 91 AM and 116 PM peak hour trips.

Exhibit 1 shows the proposed project site location and study area. **Exhibit 2** shows the proposed project site plan.

2.2 STUDY AREA

The following four (4) intersections in the vicinity of the project site have been included in the level of service (LOS) analysis:

1. South Elk Street/West Stetson Avenue;
2. South Palm Avenue/West Stetson Avenue;
3. South Lyon Avenue/West Stetson Avenue;
4. South Elk Street/Project Driveway.

The study intersections are analyzed for the following study scenarios:

- Existing Traffic Conditions (Existing);
- Opening Year with Project Traffic Conditions (OYP);
- Opening Year Cumulative with Project Traffic Conditions (OYCP).

Traffic operations are evaluated for the following time periods:

- Weekday AM Peak Hour occurring between 7:00 AM to 9:00 AM;
- Weekday PM Peak Hour occurring between 4:00 PM to 6:00 PM.

2.3 INTERSECTION ANALYSIS METHODOLOGY

Level of Service (LOS) is commonly used to describe the quality of flow on roadways and at intersections using a range from LOS A, very favorable progression, to LOS F, very poor progression. The LOS definitions for interruption of traffic flow differ depending on the type of traffic control (traffic signal, unsignalized intersection with side street stops, unsignalized intersection with all-way stops). The *Highway Capacity Manual* (*HCM*) *7th Edition* (Transportation Research Board, 2022) methodology expresses the LOS of an intersection in terms of delay time for the intersection approaches. The HCM methodology utilizes different procedures for different types of intersection control.

The *Hemet Circulation Element* requires both signalized and unsignalized intersection operations to be analyzed utilizing the HCM methodology.

Intersection LOS for signalized intersections is based on the intersection's average control delay for all movements at the intersection during the peak hour. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Table 1 identifies each Level of Service category with the corresponding general characteristics of traffic flow plus accompanying delay ranges at signalized intersections.

Table 1

HCM – LOS & Delay Ranges – Signalized Intersections

Level of Service	Description	Delay (in seconds)
A	Very favorable progression; most vehicles arrive during green signal and do not stop. Short cycle lengths.	0 – 10.00
B	Good progression, short cycle lengths. More vehicles stop than for LOS A.	10.01 – 20.00
C	Fair progression; longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant, though many vehicles still pass through without stopping.	20.01 – 35.00
D	Progression less favorable, longer cycle length and high flow/capacity ratio. The proportion of vehicles that pass through without stopping diminishes. Individual cycle failures are obvious.	35.01 – 55.00
E	Severe congestion with some long-standing queues on critical approaches. Poor progression, long cycle lengths and high flow/capacity ratio. Individual cycle failures are frequent.	55.01 – 80.00
F	Very poor progression, long cycle lengths and many individual cycle failures. Arrival flow rates exceed capacity of intersection.	> 80.01

Source: Transportation Research Board, *Highway Capacity Manual*, HCM 7th Edition (Washington D.C., 2022).

Operation for unsignalized intersections is based on the weighted average control delay expressed in seconds per vehicle. At a two-way or side-street stop-controlled intersection, LOS is calculated for each stop-controlled minor street movement, for the left-turn movement(s) from the major street, and for the intersection as a whole. For approaches consisting of a single lane, the delay is calculated as the average of all movements in that lane. For all-way stop-controlled intersections, LOS is computed for the intersection as a whole.

Table 2 identifies each unsignalized intersection LOS category with their corresponding general characteristics of traffic flow, plus their accompanying delay ranges.

Table 2

HCM – LOS & Delay Ranges – Unsignalized Intersections

Level of Service	Description	Delay (in seconds)
A	Little or no delays.	0 – 10.00
B	Short traffic delays.	10.01 – 15.00
C	Average traffic delays.	15.01 – 25.00
D	Long traffic delays. Multiple vehicles in queue.	25.01 – 35.00
E	Very long delays. Demand approaching capacity of intersection	35.01 – 50.00
F	Very constrained flow with extreme delays and intersection capacity exceeded.	> 50.01

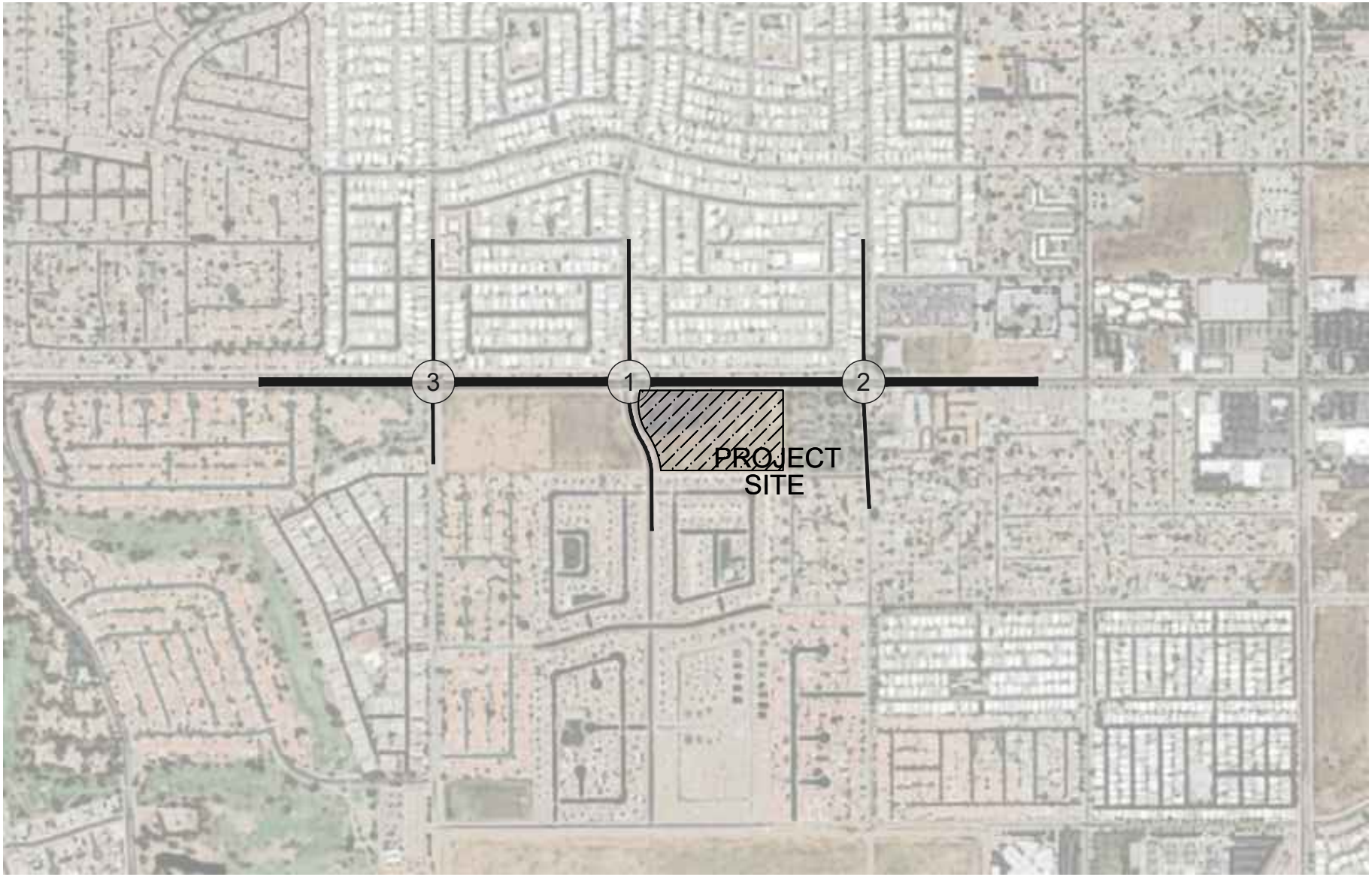
Source: Transportation Research Board, *Highway Capacity Manual*, HCM 7th Edition (Washington D.C., 2022).

For both signalized and unsignalized intersections, collected peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. It is a common practice in LOS analysis to conservatively use a peak 15-minute flow rate applied to the entire hour to derive flow rates in vehicles per hour that are used in the LOS analysis. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume. PHF = [Hourly Volume]/ [4 * Peak 15-Minute Volume]. The use of a 15-minute PHF produces a more detailed and conservative analysis compared to analyzing vehicles per hour. Existing PHF's, obtained from the existing traffic counts have been used for all analysis scenarios in this study.

This study utilizes *PTV Vistro 2022* software for all signalized and unsignalized intersections. Vistro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis specified in Chapter 16 of the HCM. The level of service and capacity analysis performed within Vistro takes into consideration the optimization and coordination of signalized and unsignalized intersections within a network.

2.4 PERFORMANCE CRITERIA

The *Hemet Circulation Element* has established the LOS "D" or better as acceptable LOS during peak hour traffic for all signalized intersections within the designated street system within the City of Hemet. The City has not adopted an LOS standard for unsignalized intersections and evaluates performance on a case-by-case basis.



Legend:

Project Site

(#) Study Intersection Location

Exhibit 1: Project Location and Study Area

TJW Engineering, Inc. Traffic Engineering & Transportation Planning Consultants

SEC STETSON AVENUE AND ELK STREET

BAW-23-003

Not to Scale

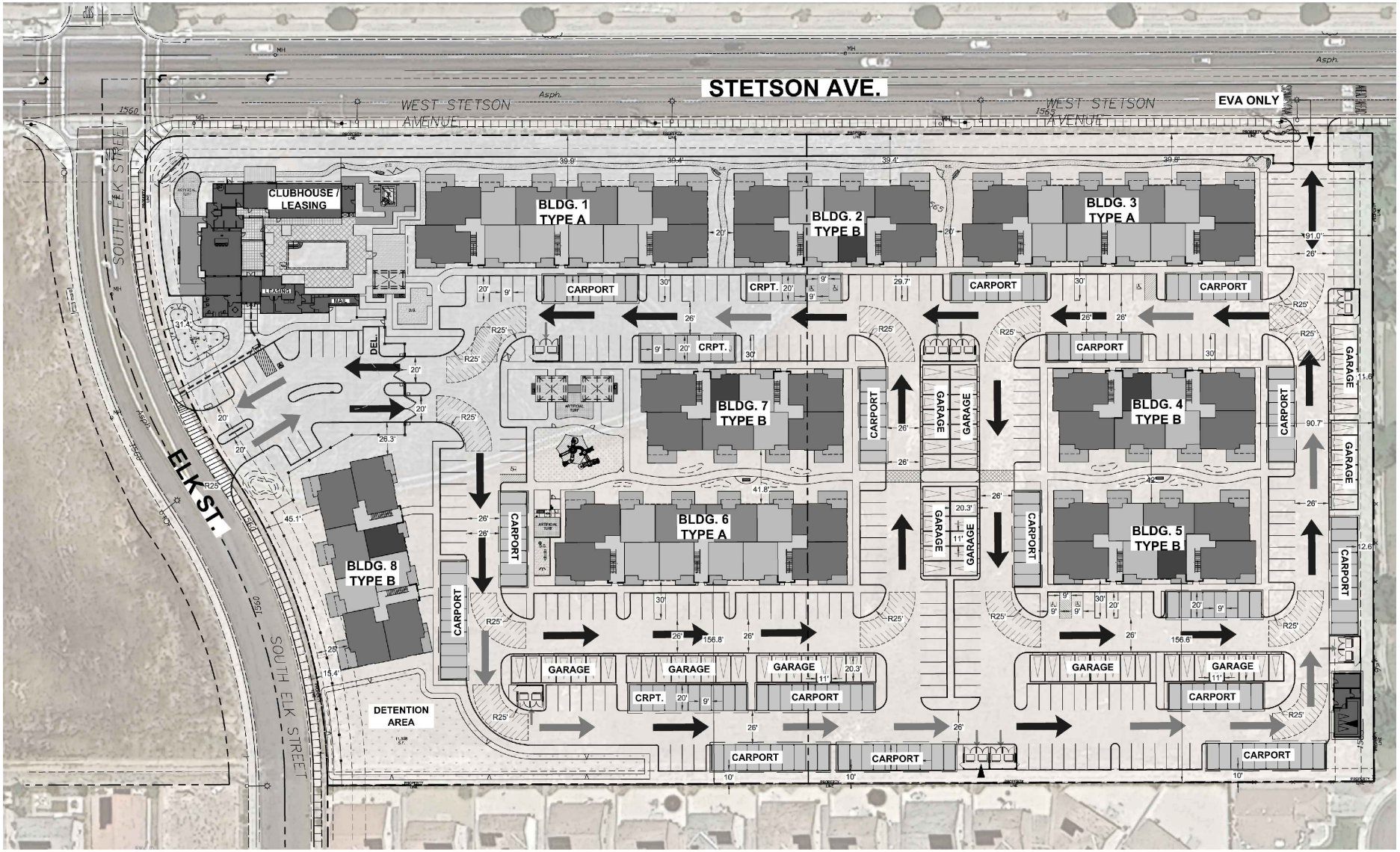


Exhibit 2: Proposed Project Site Plan

SEC STETSON AVENUE AND ELK STREET

BAW-23-003

Not to Scale

TJW ENGINEERING, INC.
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING CONSULTANTS

3.0 EXISTING CONDITIONS

3.1 EXISTING CIRCULATION NETWORK/STUDY AREA CONDITIONS

The proposed project site is located within the City of Hemet. The characteristics of the roadway system within the study area of the proposed project site are described in **Table 3**.

Table 3
Roadway Characteristics Within Study Area

Roadway	Classification[1]	Jurisdiction	Direction	Existing Travel Lanes	Median Type[2]	Speed Limit (mph)	On-Street Parking
South Elk Street	Collector	Hemet	North-South	2	NM	25	Yes
South Palm Avenue	Collector	Hemet	North-South	2	NM	25	Yes
South Lyon Avenue (northbound)	Express Collector	Hemet	North-South	2	NM	40	Yes
South Lyon Avenue (southbound)	Collector	Hemet	North-South	2	NM	25	Yes
West Stetson Avenue	Major	Hemet	East-West	4	TWLTL	45	No

1: Sources: City of Hemet General Plan Circulation Element (January 2012)
2: NM = No Median, TWLTL = Two-Way Left-Turn Lane.

Exhibit 3 shows existing intersection controls and roadway geometry of each study area intersection.

3.2 CITY OF HEMET GENERAL PLAN CIRCULATION ELEMENT

The *Hemet Circulation Element* provides a classification system for the roadways within the City of Hemet. It includes illustrations of roadway cross-sections for each classification type. The *Hemet Circulation Element* is attached in **Appendix A.**

3.3 EXISTING BICYCLE AND PEDESTRIAN FACILITIES

The *Hemet Circulation Element* provides bikeway classifications. Currently, there is a Class 1 bikeway on West Stetson Avenue, a Class 2 bikeway on South Palm Avenue, and a Class 3 bikeway (bike route) on South Lyon Avenue. The *Hemet Circulation Element* in **Appendix A** contains both a map and description of the City Bikeway System.

There are pedestrian sidewalks along each side of all roadways in the study area.

3.4 EXISTING PUBLIC TRANSIT SERVICES

The City of Hemet is served by the Riverside Transit Authority (RTA), the transit operator for the Riverside County area, which operates bus routes throughout the County. There are no current RTA bus routes with stops within one-half a mile from the proposed project.

3.5 EXISTING TRAFFIC VOLUMES

To determine the existing operation of the study intersections, AM and PM peak period traffic volumes were estimated based on new traffic counts collected on February 8, 2024. Detailed traffic count data is provided in **Appendix B**. Existing Traffic AM peak hour volumes at the existing study intersections are shown in **Exhibit 4** while Existing PM peak hour volumes are shown in **Exhibit 5**.

3.6 EXISTING TRAFFIC CONDITIONS INTERSECTION LEVEL OF SERVICE ANALYSIS

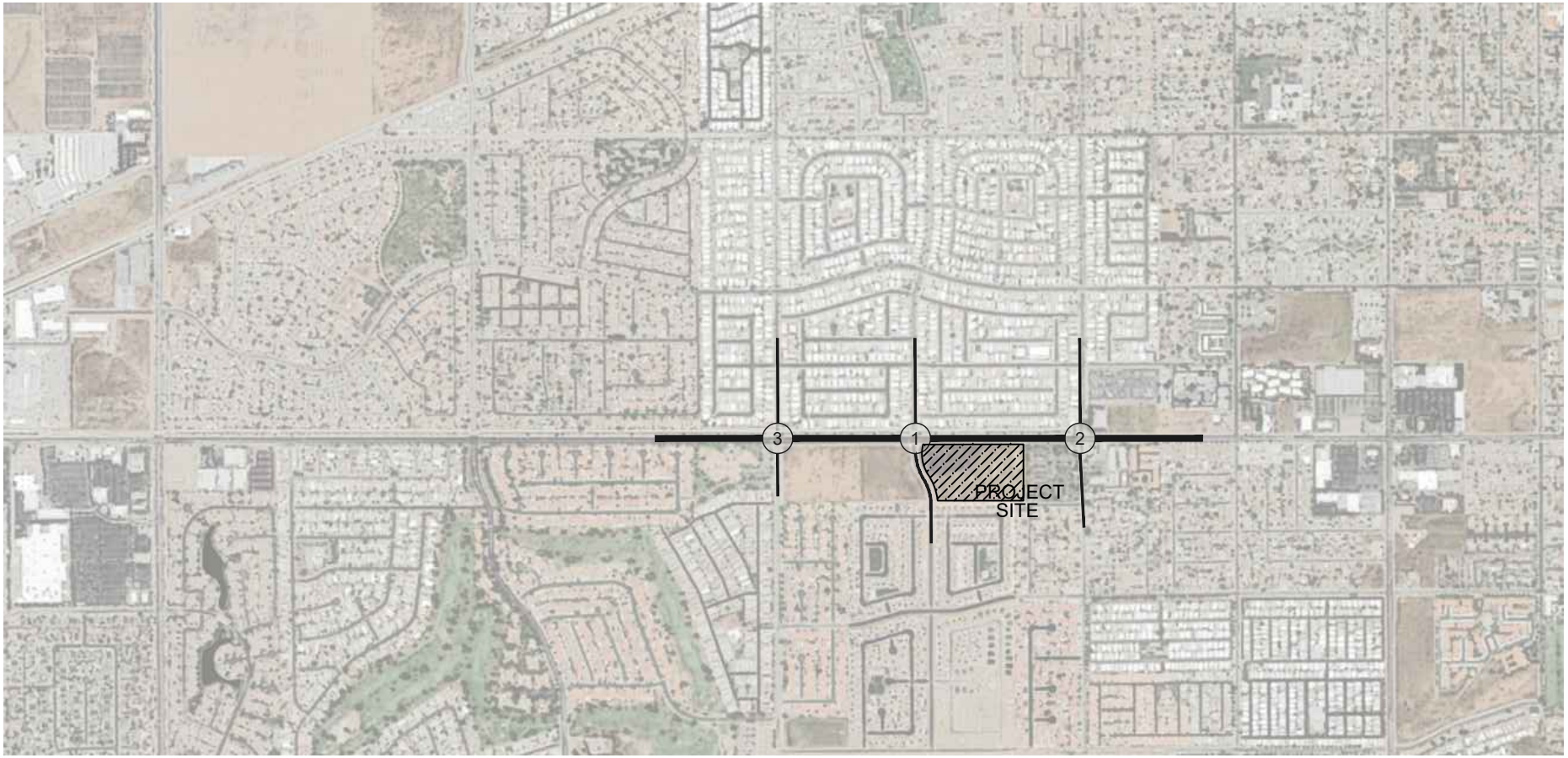
Existing intersection analysis of AM and PM peak hour conditions is shown in **Table 4**. Calculations are based on the existing geometrics at the study area intersections as shown in **Exhibit 3.** HCM 7 analysis sheets are provided in **Appendix C**.

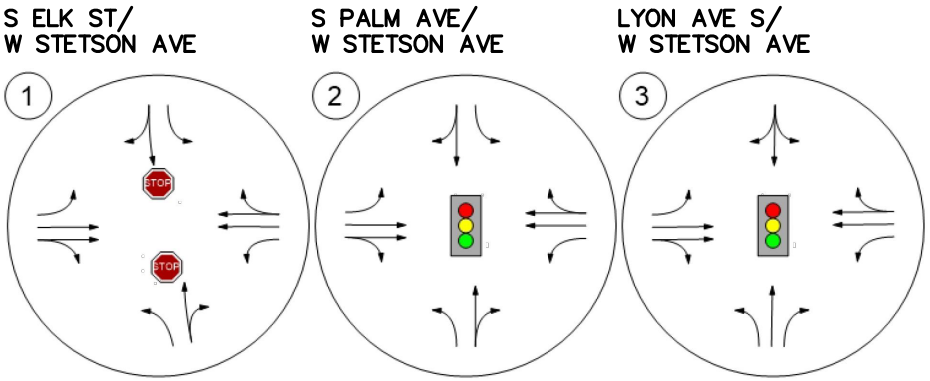
Table 4
Intersection Analysis - Existing Traffic Conditions

Intersection			Control Type	Peak Hour	Existing Conditions	
					Delay[1]	LOS
1	South Elk Street	West Stetson Avenue	Signal	AM	7.62	A
				PM	8.16	A
2	South Palm Avenue	West Stetson Avenue	Signal	AM	14.27	B
				PM	14.37	B
3	South Lyon Avenue	West Stetson Avenue	Signal	AM	20.04	C
				PM	23.16	C

1: Delay shown in seconds per vehicle.

As shown in **Table 4**, the existing study intersections are currently operating at an acceptable LOS during the AM and PM peak hours under Existing Traffic Conditions**.**



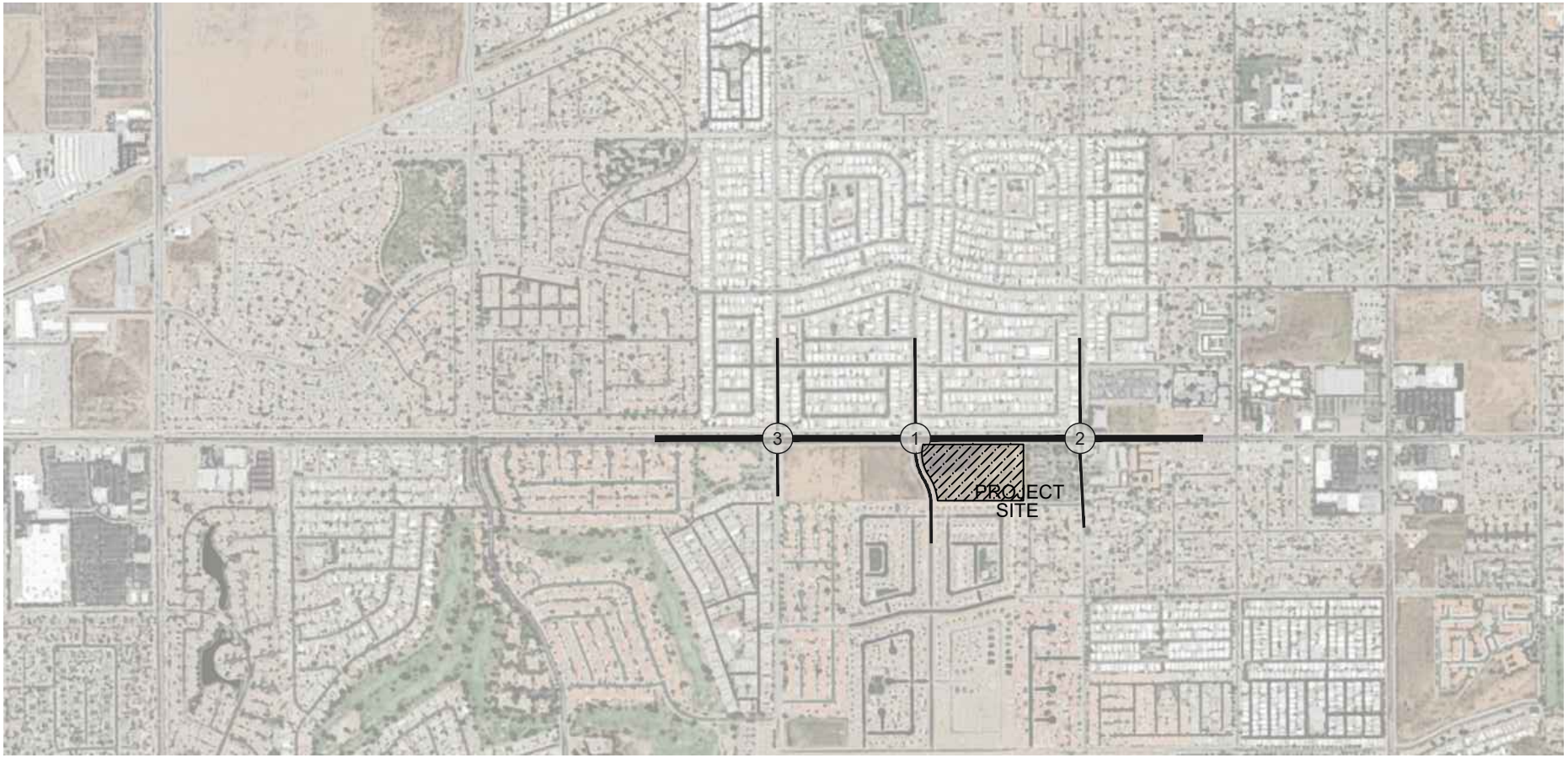


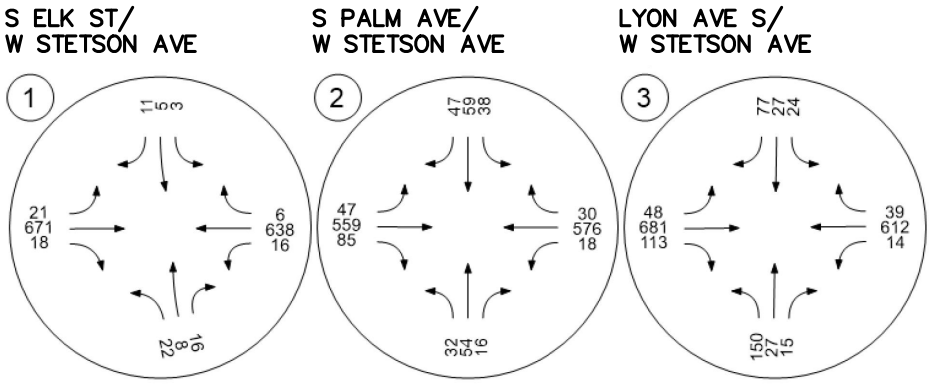
Legend:

Project Site

(#) Study Intersection Location

Exhibit 3: Existing Lane Geometry and Intersection Controls

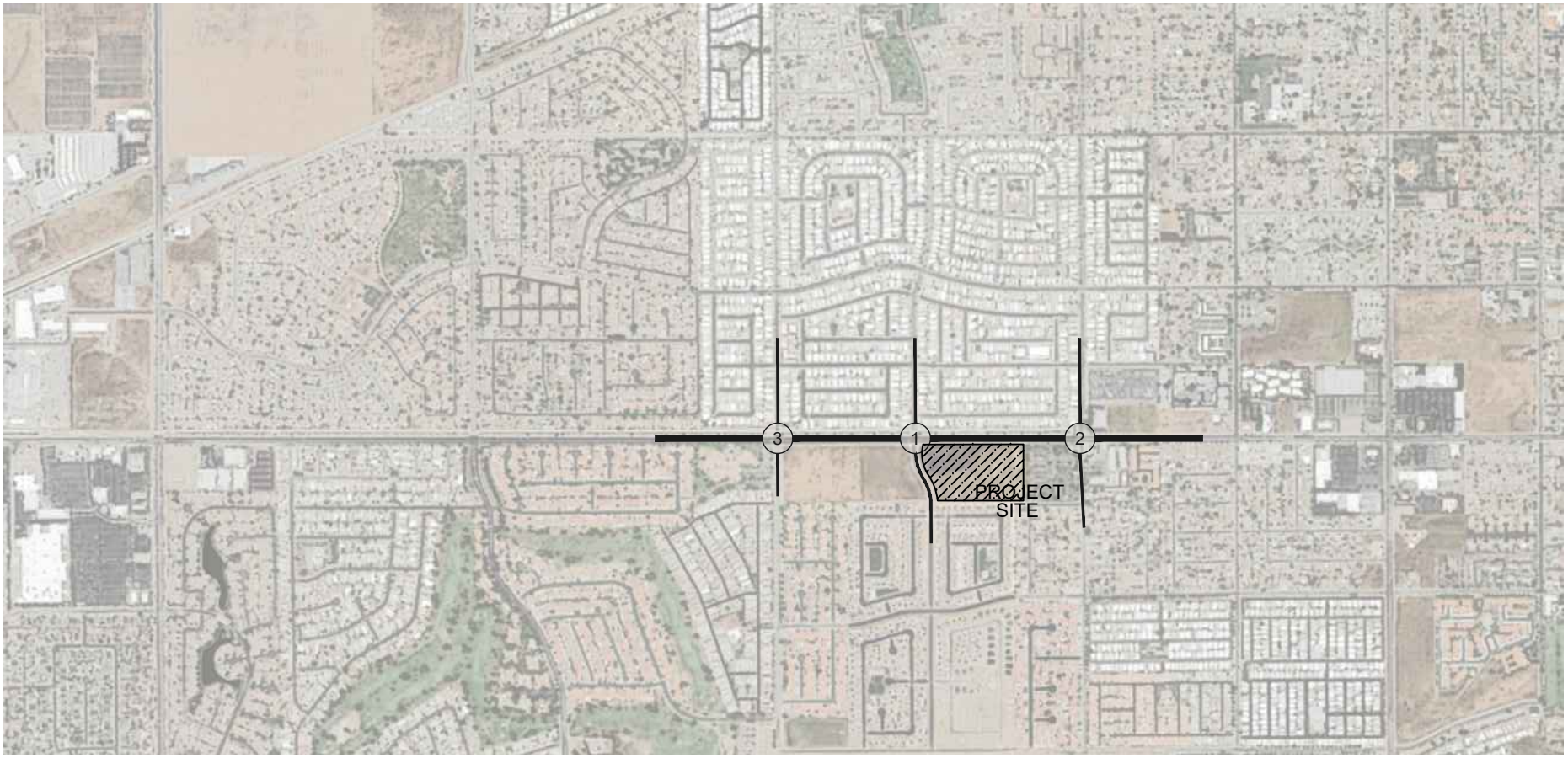


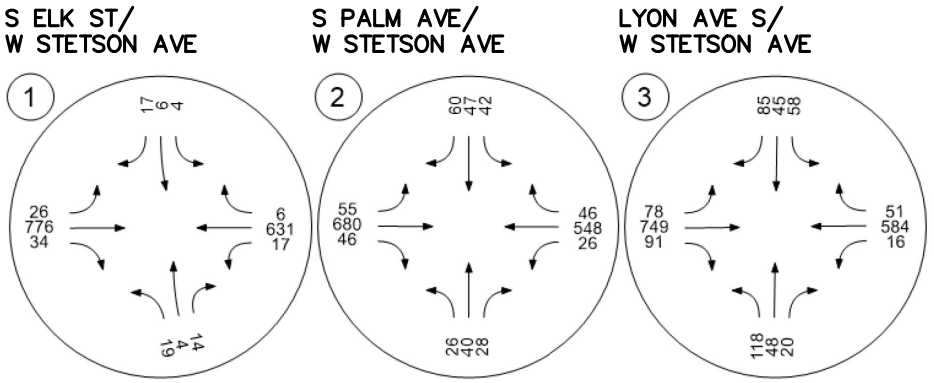


Legend:

Project Site

(#) Study Intersection Location





Legend:

Project Site

(#) Study Intersection Location

4.0 PROPOSED PROJECT

4.1 PROJECT DESCRIPTION

The proposed project is for the construction of 228 multi-family apartment dwelling units. The anticipated year of completion is 2028. A growth rate of two percent (2%) is used to account for 2028 traffic volumes.

Site access is planned via one new full-access driveway on South Elk Street. The site is currently zoned as R-3 Multiple Family Residential (max 30.0 du/ac). The current General Plan Land Use is High Density Residential (18.1 – 30.0 du/ac). There is no plan to propose changes to either zoning or land use. The project site is currently vacant. Emergency vehicle access will be via a proposed gated driveway along West Stetson Avenue.

As previously shown, **Exhibit 1** shows the proposed project site location while **Exhibit 2** shows the proposed project site plan.

4.2 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic, both inbound and outbound, produced by a development. Determining trip generation for a proposed project is based on projecting the amount of traffic that the specific land uses being proposed will produce. Industry standard *Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021)* trip generation rates were used to determine trip generation based on the proposed project land uses.

Table 5 summarizes the projected AM peak hour, PM peak hour and daily trip generation of the proposed project. Upon completion in 2028, the project is projected to generate 1,537 daily trips with 91 AM and 116 PM peak hour trips.

Table 5
Proposed Project Trip Generation

Proposed Land Use[1]	ITE Code	Qty	Unit[2]	Daily		AM Peak Hour					PM Peak Hour				
				Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume		
								In	Out	Total			In	Out	Total
Multifamily Housing (Low-Rise), Not Close to Rail Transit	220	228	DU	6.74	1,537	0.4	24:76	22	69	91	0.51	63:37	73	43	116

1: Trip generation rates from ITE Trip Generation (11th Edition, 2021).
2: DU = Dwelling Unit.

4.3 PROJECT TRIP DISTRIBUTION

Projecting trip distribution involves the process of identifying probable destinations and traffic routes that will be utilized by the proposed project's traffic. The potential interaction between the proposed land use and surrounding regional access routes are considered to identify the probable routes onto which project traffic would distribute. The projected trip distribution for the proposed project is based on anticipated travel patterns to and from the project site.

Exhibit 6 shows the projected distribution and assignment of proposed project trips.

4.4 SIGHT DISTANCE ANALYSIS

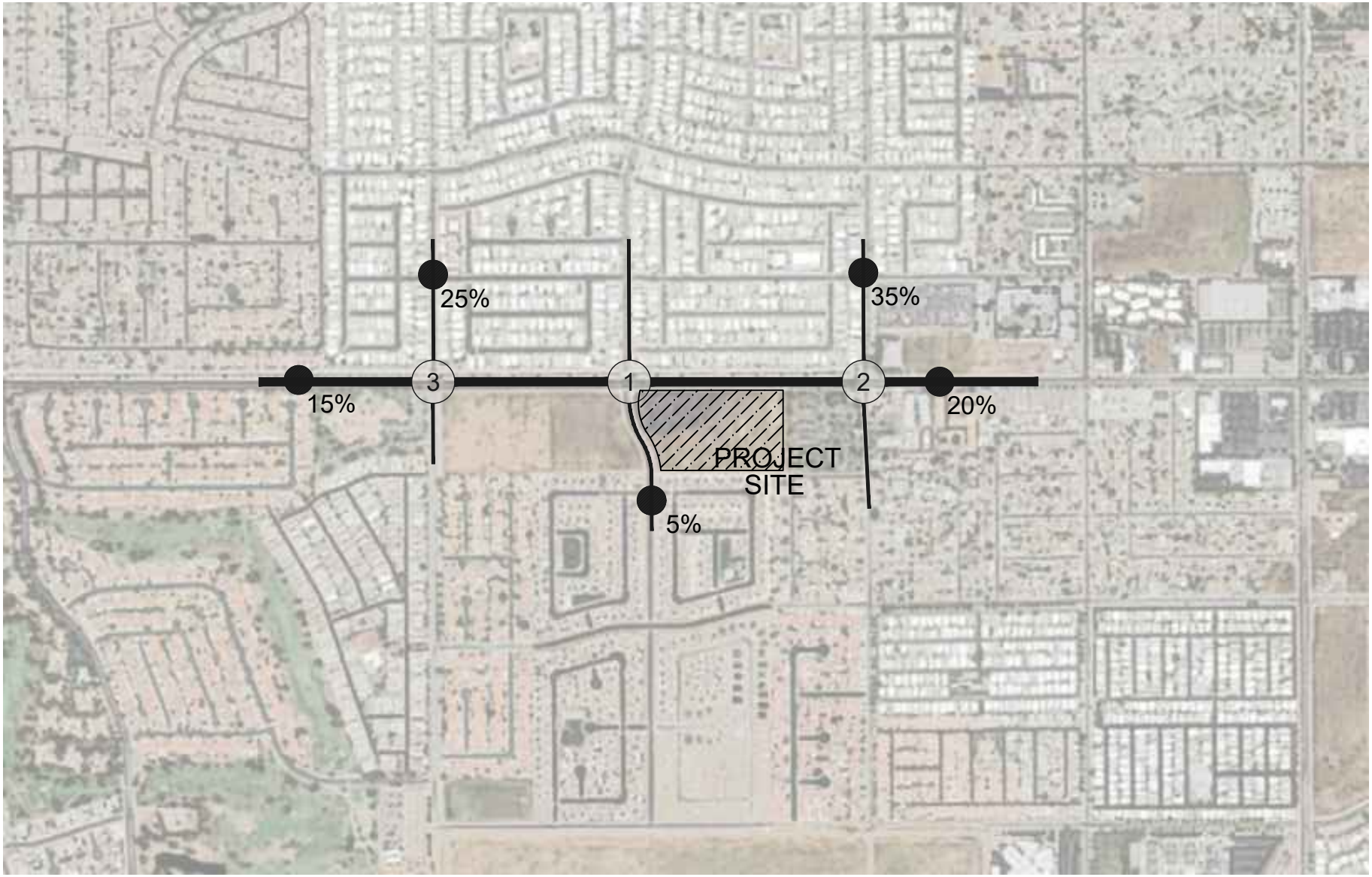
A sight distance analysis for the proposed Project Driveway at South Elk Street has been prepared based on the "corner sight distance" requirements determined by Topic 405. Table 405.1, and Table 405.1A of the *Caltrans Highway Design Manual (HDM),* last edition.

As shown in **Exhibit 7**, the following corner sight distances are required at the proposed project driveway on South Elk Street:

- 240 feet of corner sight distance for right turns at the proposed driveway on South Elk Street.
- 275 feet of corner sight distance for left turns at the proposed driveway on South Elk Street.

Exhibit 7 shows the corner sight distance conditions at the project driveway in relation to the proposed sidewalk and striping on South Elk Street. The required 15-foot setback from the edge of travel way and the corner sight distance required is based on the posted speed limit of 25 miles per hour.

The corner sight distance for left turns is shown to have a limited use area of 164 feet in length. It is recommended to not install any permanent obstructions over a height of 30 inches within the limited use area.



Legend:

▨	Project Site
(#)	Study Intersection Location
(XX%)	Percent Trip Distribution

Exhibit 6: Proposed Project Trip Distribution

NOTE: FOR URBAN DRIVEWAYS, SECTION 405.1 OF THE HDM RECOMMENDS PARKING RESTRICTIONS BE SET PER CA MUTCD SECTION 3B.19.

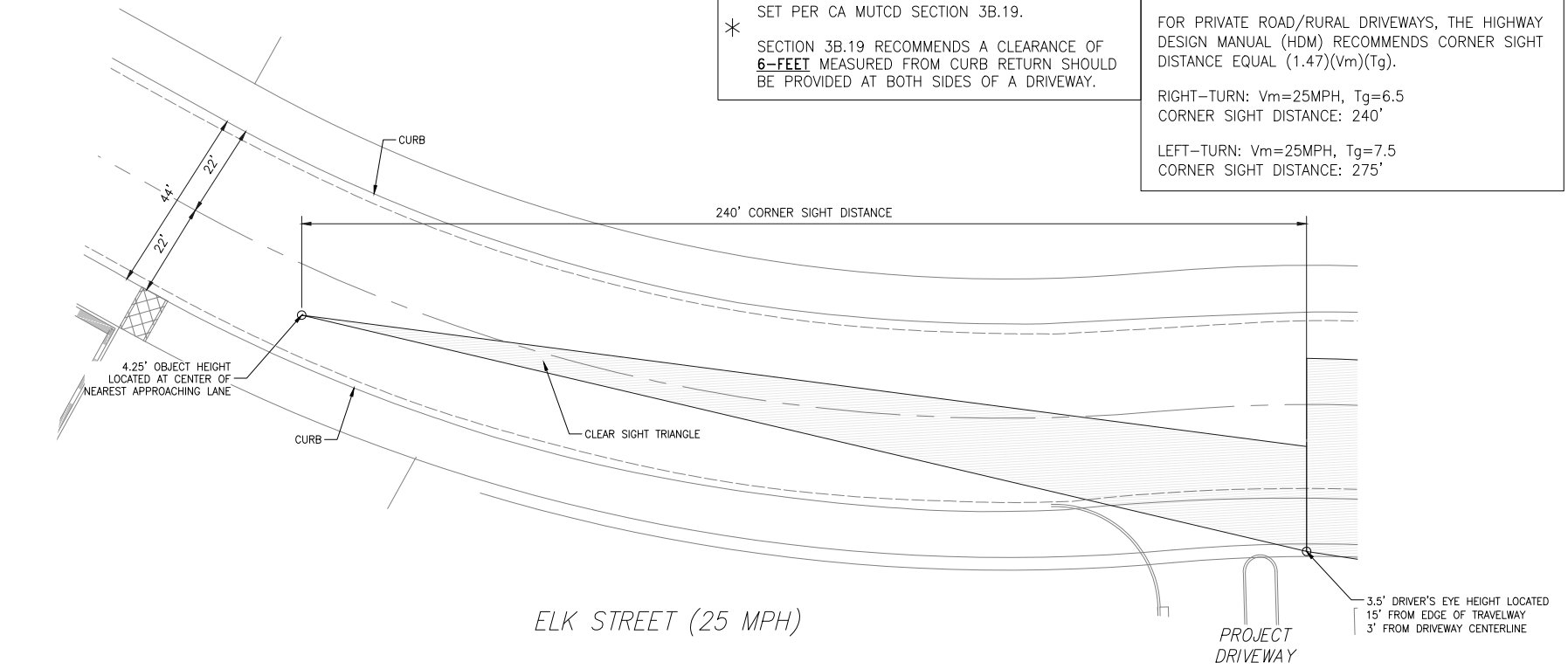
SECTION 3B.19 RECOMMENDS A CLEARANCE OF **6-FEET** MEASURED FROM CURB RETURN SHOULD BE PROVIDED AT BOTH SIDES OF A DRIVEWAY.

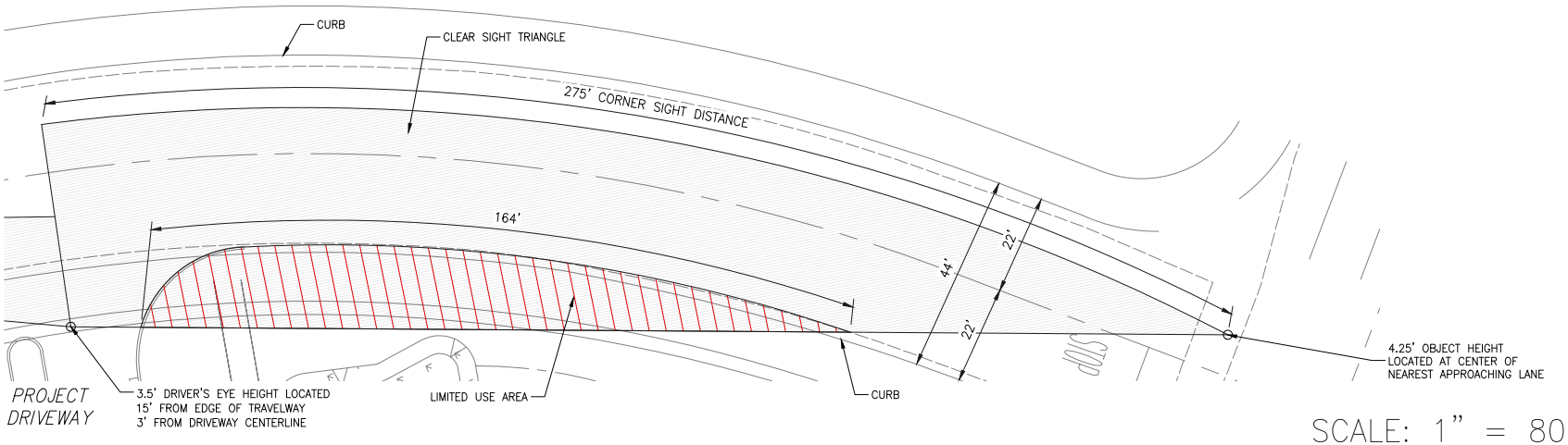
CORNER SIGHT DISTANCE NOTES:

FOR PRIVATE ROAD/RURAL DRIVEWAYS, THE HIGHWAY DESIGN MANUAL (HDM) RECOMMENDS CORNER SIGHT DISTANCE EQUAL (1.47)(Vm)(Tg).

RIGHT-TURN: Vm=25MPH, Tg=6.5
CORNER SIGHT DISTANCE: 240'

LEFT-TURN: Vm=25MPH, Tg=7.5
CORNER SIGHT DISTANCE: 275'





SCALE: 1" = 80'

20 0 20 40 60

Exhibit 7: Sight Distance Analysis

5.0 OPENING YEAR WITH PROJECT TRAFFIC CONDITIONS (OYP)

Opening Year with Project Traffic Conditions (OYP) analysis is intended to identify the impacts of the project on near-term traffic conditions at the time of completion.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for the OYP scenario are the addition of a single driveway on South Elk Street for full access with the proposed project site. The new lane geometry is shown in **Exhibit 8**.

5.2 OYP TRAFFIC VOLUMES

OYP traffic volumes were estimated based on a yearly growth rate of two percent (2%) per year from base year, 2024, to the proposed project's estimated year of completion, 2028.

OYP Traffic Volumes = (Existing (2024) Counts * 1.02^4) + Project

5.3 OYP INTERSECTION LEVEL OF SERVICE ANALYSIS

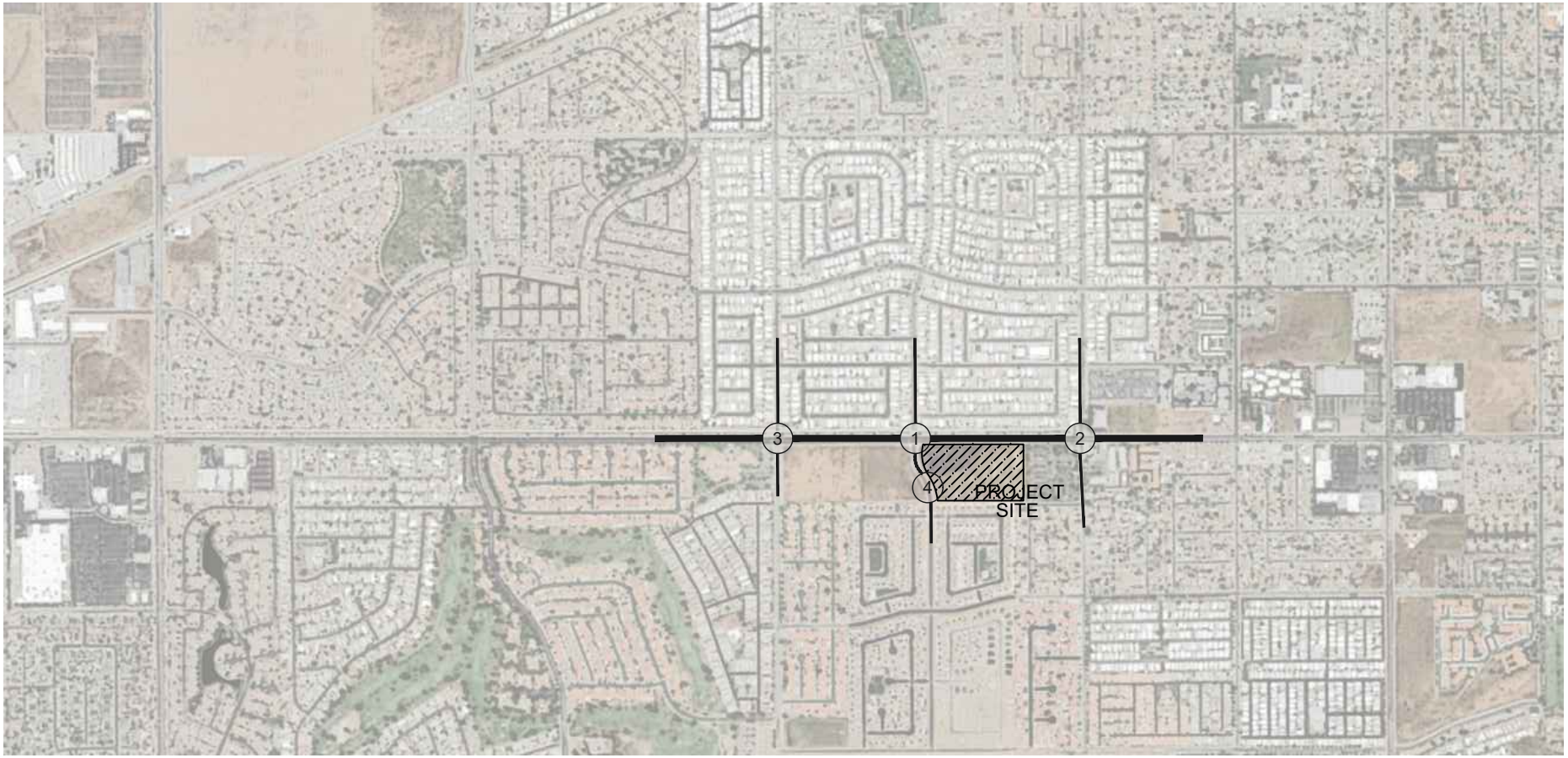
OYP traffic AM and PM peak hour intersection analysis is shown in **Table 6**. OYP Traffic AM peak hour volumes at the study intersections are shown in **Exhibit 9** and OYP PM peak hour volumes are shown in **Exhibit 10**. HCM analysis sheets are provided in **Appendix C**.

Table 6
Intersection Analysis – Opening Year with Project Traffic Conditions

Intersection			Control Type	Peak Hour	OYP Conditions	
					Delay[2]	LOS
1	South Elk Street	West Stetson Avenue	Signal	AM	10.61	B
				PM	11.08	B
2	South Palm Avenue	West Stetson Avenue	Signal	AM	15.61	B
				PM	15.82	B
3	South Lyon Avenue	West Stetson Avenue	Signal	AM	21.41	C
				PM	25.48	C
4	South Elk Street	Project Driveway	OWSC[1]	AM	8.81	A
				PM	8.71	A

1: OWSC = One-Way Stop-Control.
2: Delay shown in seconds per vehicle. Per the Highway Capacity Manual 7th Edition, for intersections with one or two-way stop-control, the delay and LOS for the worst individual movement is shown.

As shown in **Table 6**, for OYP Traffic Conditions, the proposed project driveway is expected to operate an acceptable LOS during the AM and PM peak hours, and the three existing intersections are projected to continue operating at an acceptable LOS during the AM and PM peak hours.



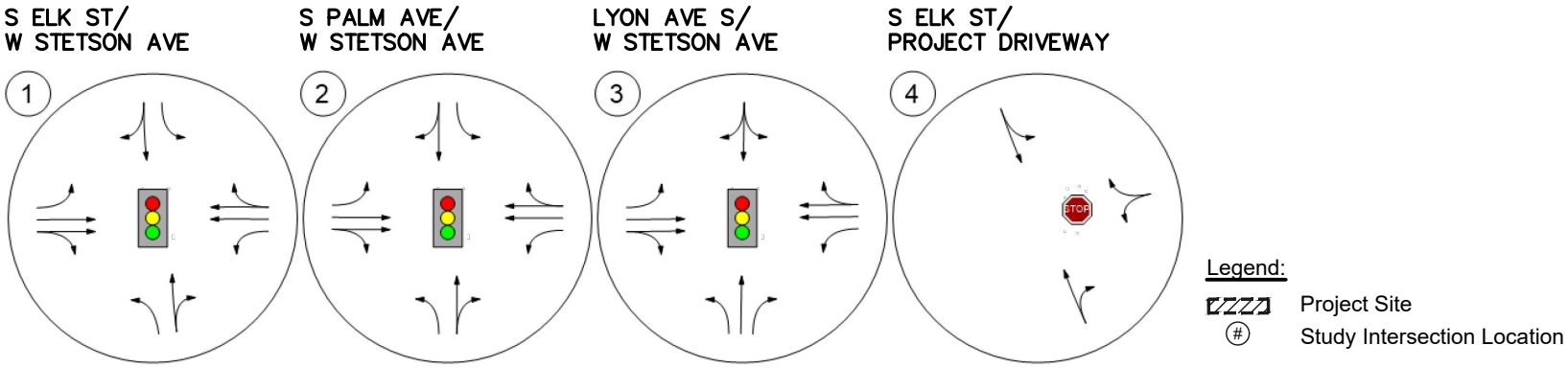
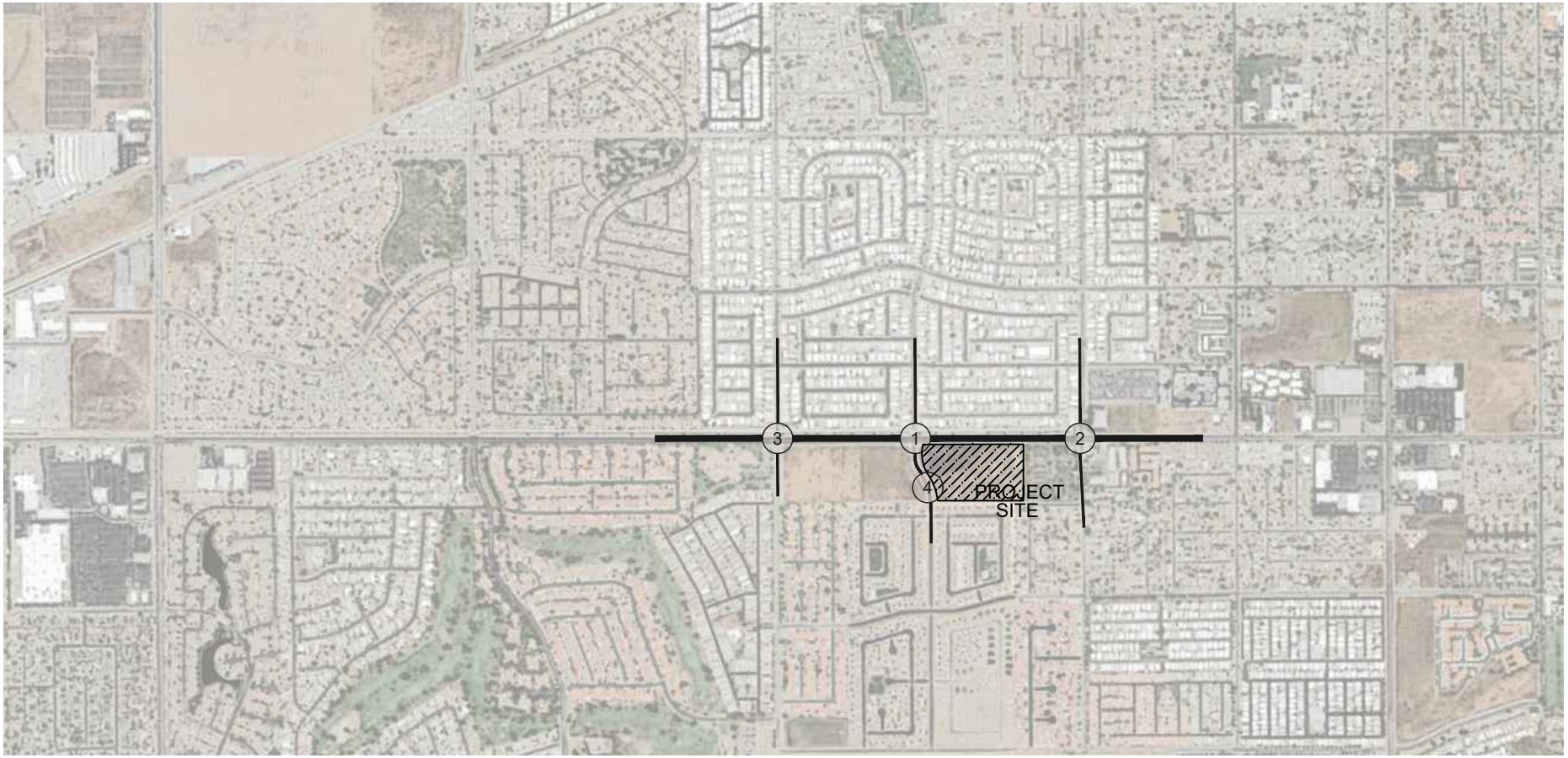
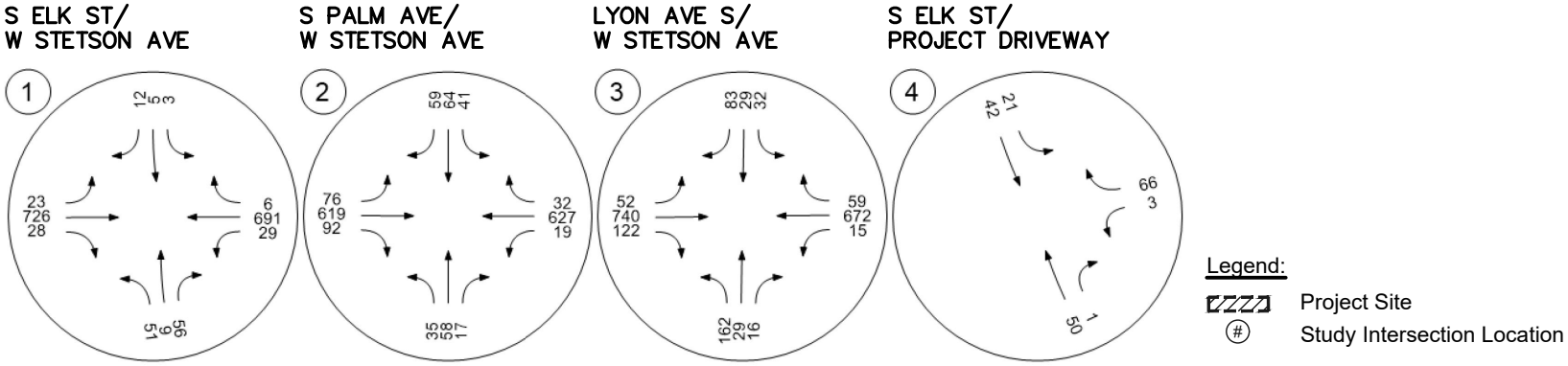
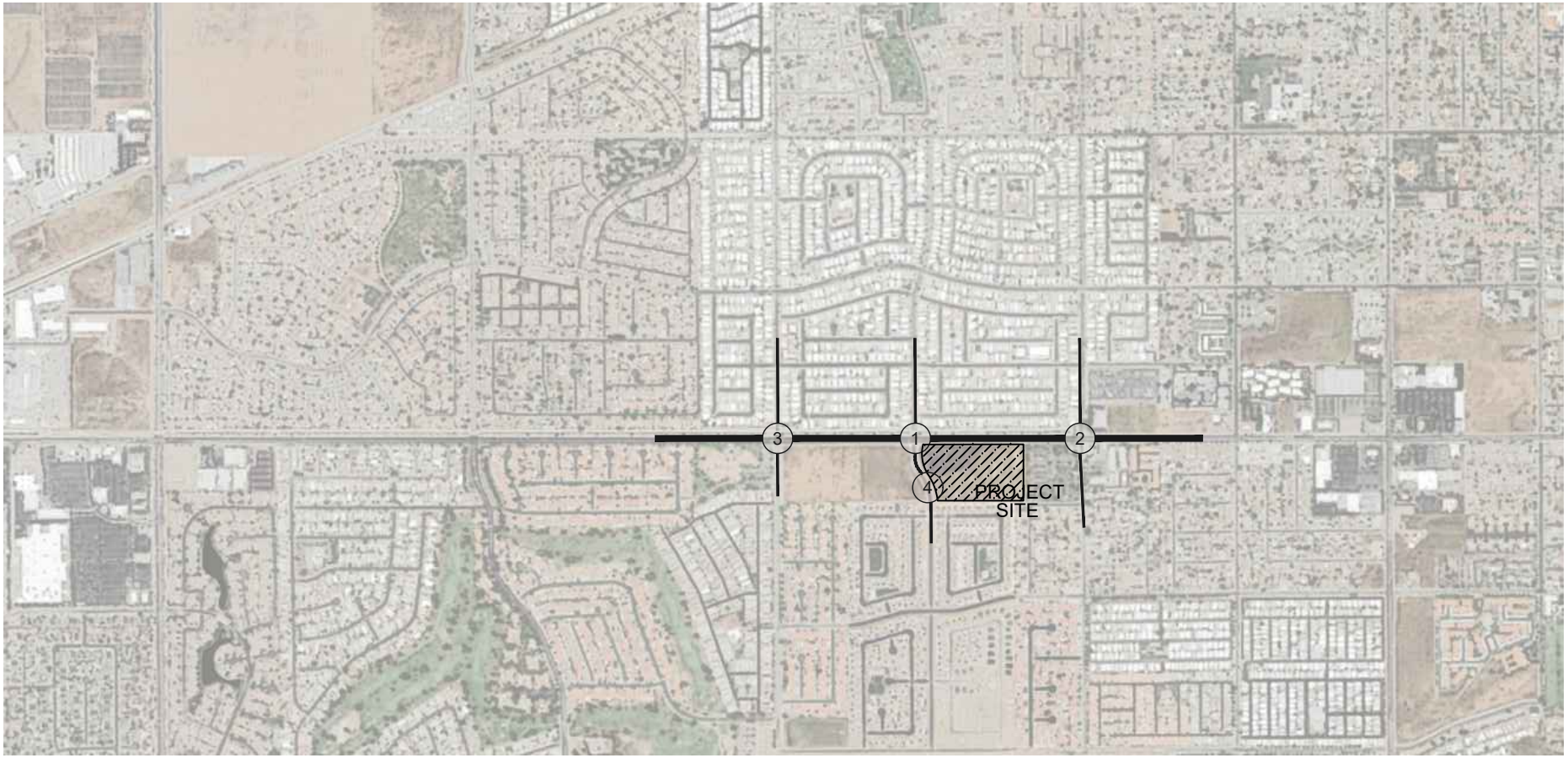
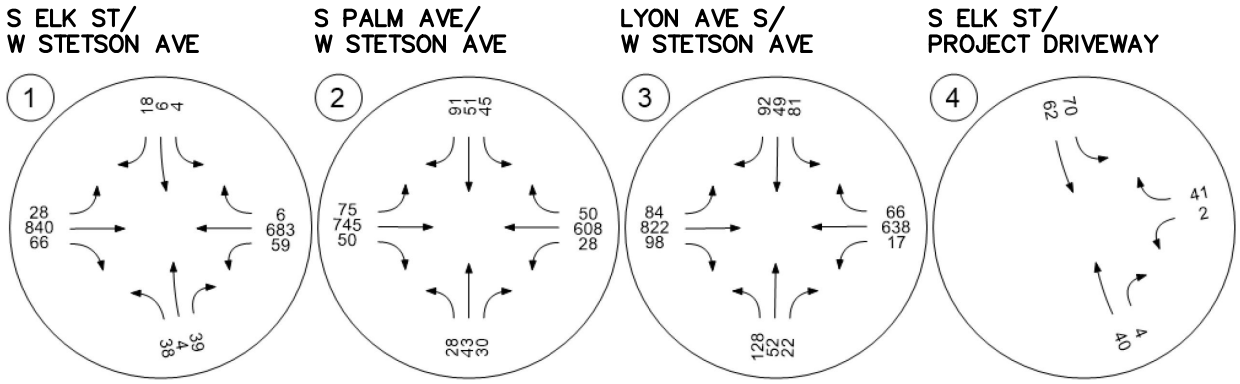


Exhibit 8: Opening Year with Project Lane Geometry and Intersection Controls


3
1
2
4
PROJECT
SITE


S ELK ST/
W STETSON AVE
1
12
5
3
23
726
28
6
691
29
51
6
55
S PALM AVE/
W STETSON AVE
2
59
64
41
76
619
92
32
627
19
35
58
17
LYON AVE S/
W STETSON AVE
3
83
29
32
52
740
122
59
672
15
162
29
16
S ELK ST/
PROJECT DRIVEWAY
4
21
42
66
3
50
1
Legend:
Project Site
Study Intersection Location





Legend:

Project Site

(#) Study Intersection Location

TJW Engineering, Inc.
Traffic Engineering & Transportation Planning Consultants

Exhibit 10: Opening Year with Project PM Peak Hour Volumes

SEC STETSON AVENUE AND ELK STREET

BAW-23-003

Not to Scale

6.0 OPENING YEAR CUMULATIVE WITH PROJECT TRAFFIC CONDITIONS (OYCP)

Opening Year Cumulative with Project Traffic Conditions (OYCP) analysis is intended to identify both the project-related and cumulative impacts on the planned near-term circulation system.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for the OYCP scenario are consistent with those previously shown in **Exhibit 8**.

6.2 CUMULATIVE PROJECTS

This analysis accounts for the impact of other reasonably foreseeable development projects in the study area. The City of Hemet provided a list of cumulative projects in various stages of planning, entitlement, or construction. Projects considered to potentially have a significant impact on traffic conditions in the study area were within a one-half mile radius of the proposed project site. One project from the list met this criteria. The location of this project is shown in **Exhibit 11**. The project land use and trip generation are shown in **Table 7.**

Table 7
Cumulative Project Trip Generation

Project	Land Use[1]	ITE Code	Qty	Unit[2]	Daily		AM Peak Hour					PM Peak Hour				
					Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume		
									In	Out	Total			In	Out	Total
TTM36892 River Oaks	Single-Family Detached Housing	210	85	DU	9.43	802	0.7	26:74	16	44	60	0.94	63:37	50	30	80

1: Trip generation rates from ITE Trip Generation (11th Edition, 2021).
2: DU = Dwelling Unit.

6.3 OYCP TRAFFIC VOLUMES

OYCP traffic volumes were estimated based on a yearly growth rate of two percent (2%) per year from base year, 2024, to the proposed project's estimated year of completion, 2028.

OYCP Traffic Volumes = (Existing (2024) Counts * 1.02^4) + Cumulative + Project

6.4 OYCP TRAFFIC INTERSECTION LEVEL OF SERVICE ANALYSIS

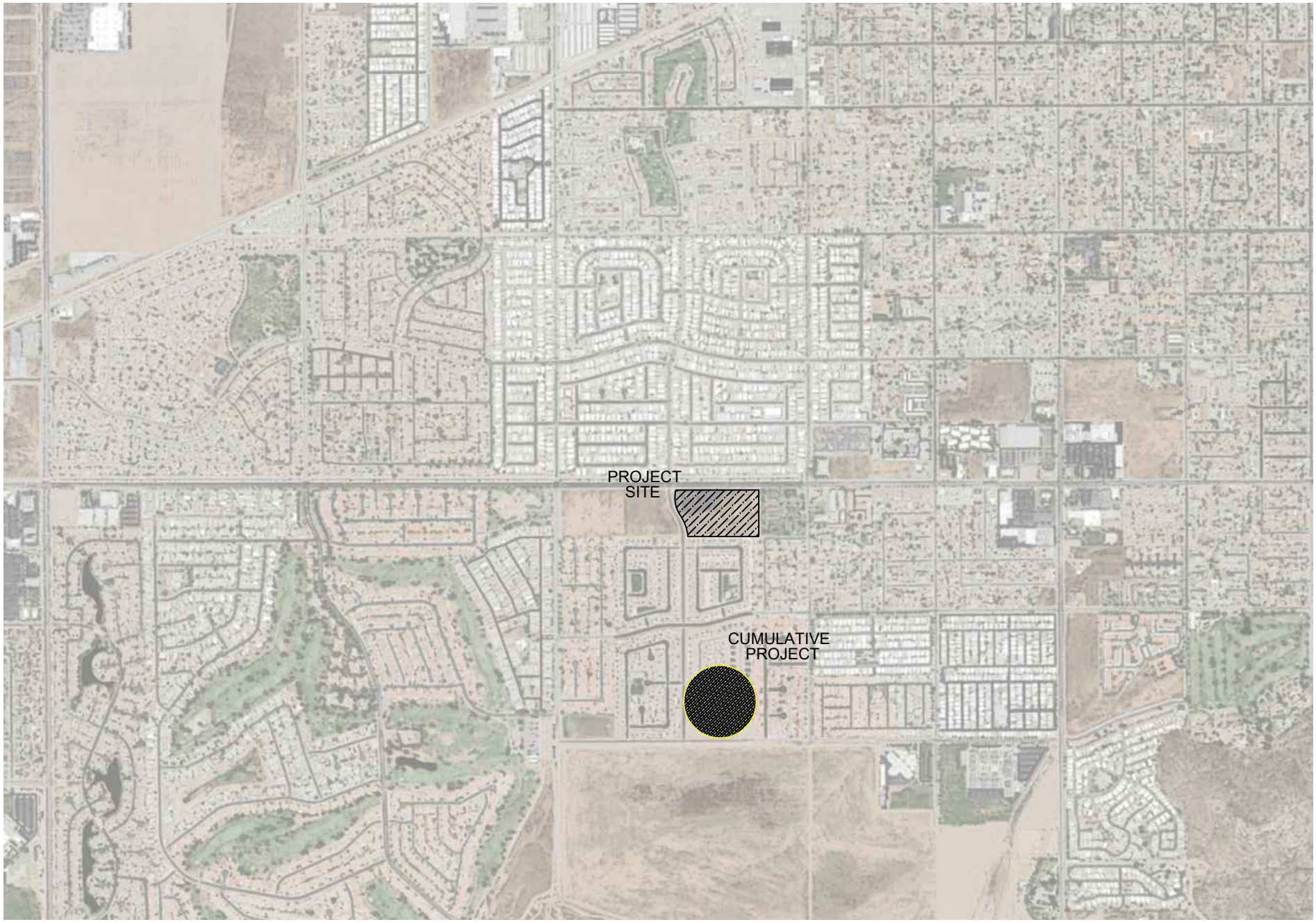
OYCP intersection analysis is shown in **Table 8.** OYCP traffic AM and PM peak hour volumes at the study intersections are shown in **Exhibit 12** and **Exhibit 13**. HCM analysis sheets are provided in **Appendix C.**

Table 8
Intersection Analysis – Cumulative (OYCP) Traffic Conditions

Intersection			Control Type	Peak Hour	Existing Conditions		OYCP Conditions		Change	Deficient
					Delay[2]	LOS	Delay[2]	LOS		
1	South Elk Street	West Stetson Avenue	Signal	AM	7.62	A	11.94	B	4.32	--
				PM	8.16	A	12.44	B	4.28	--
2	South Palm Avenue	West Stetson Avenue	Signal	AM	14.27	B	16.01	B	1.74	--
				PM	14.37	B	16.15	B	1.78	--
3	South Lyon Avenue	West Stetson Avenue	Signal	AM	20.04	C	21.64	C	1.60	--
				PM	23.16	C	25.58	C	2.42	--
4	South Elk Street	Project Driveway	OWSC[1]	AM	--	--	9.01	A	--	--
				PM	--	--	8.92	A	--	--

1: OWSC = One-Way Stop-Control.
2: Delay shown in seconds per vehicle. Per the Highway Capacity Manual 7th Edition, for intersections with one or two-way stop-control, the delay and LOS for the worst individual movement is shown.

As shown in **Table 8**, the study intersections are projected to continue to operate at an acceptable LOS during the AM and PM peak hours for OYCP Traffic Conditions.



Legend:

Project Site

Cumulative Project Site

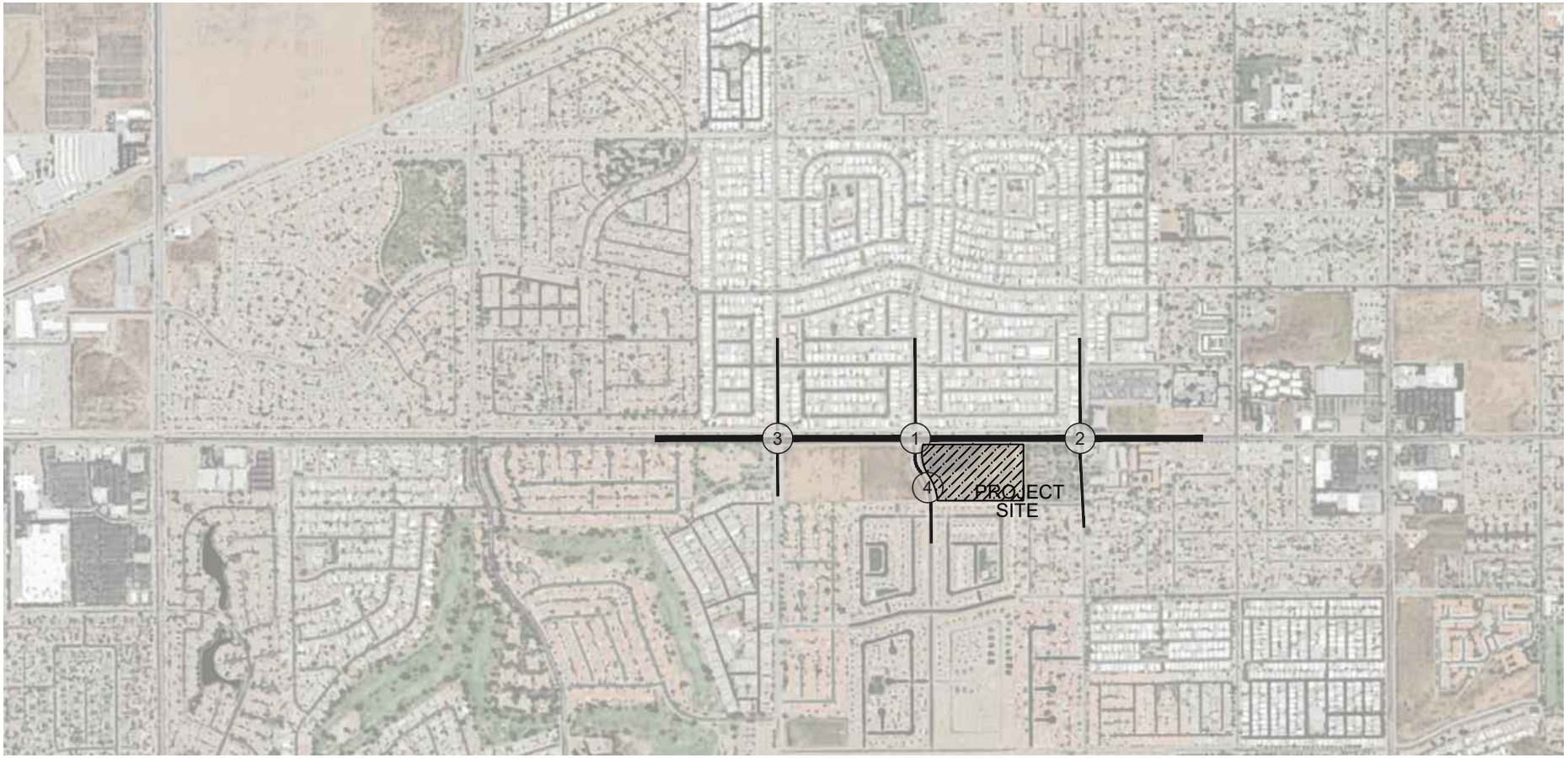
Exhibit 11: Cumulative Project Location

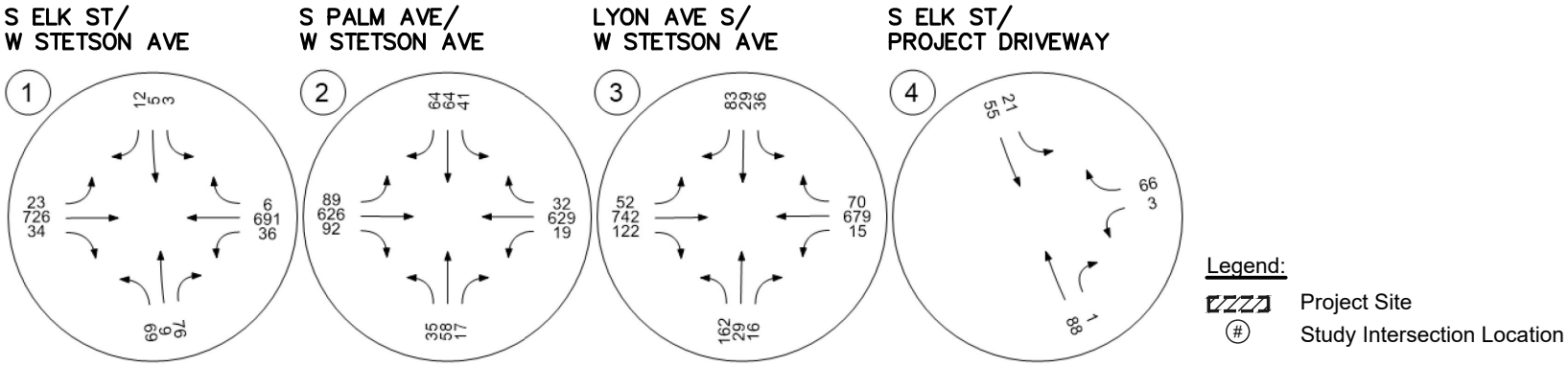
TJW Engineering, Inc.
Traffic Engineering & Transportation Planning Consultants

SEC STETSON AVENUE AND ELK STREET

BAW-23-003

Not to Scale





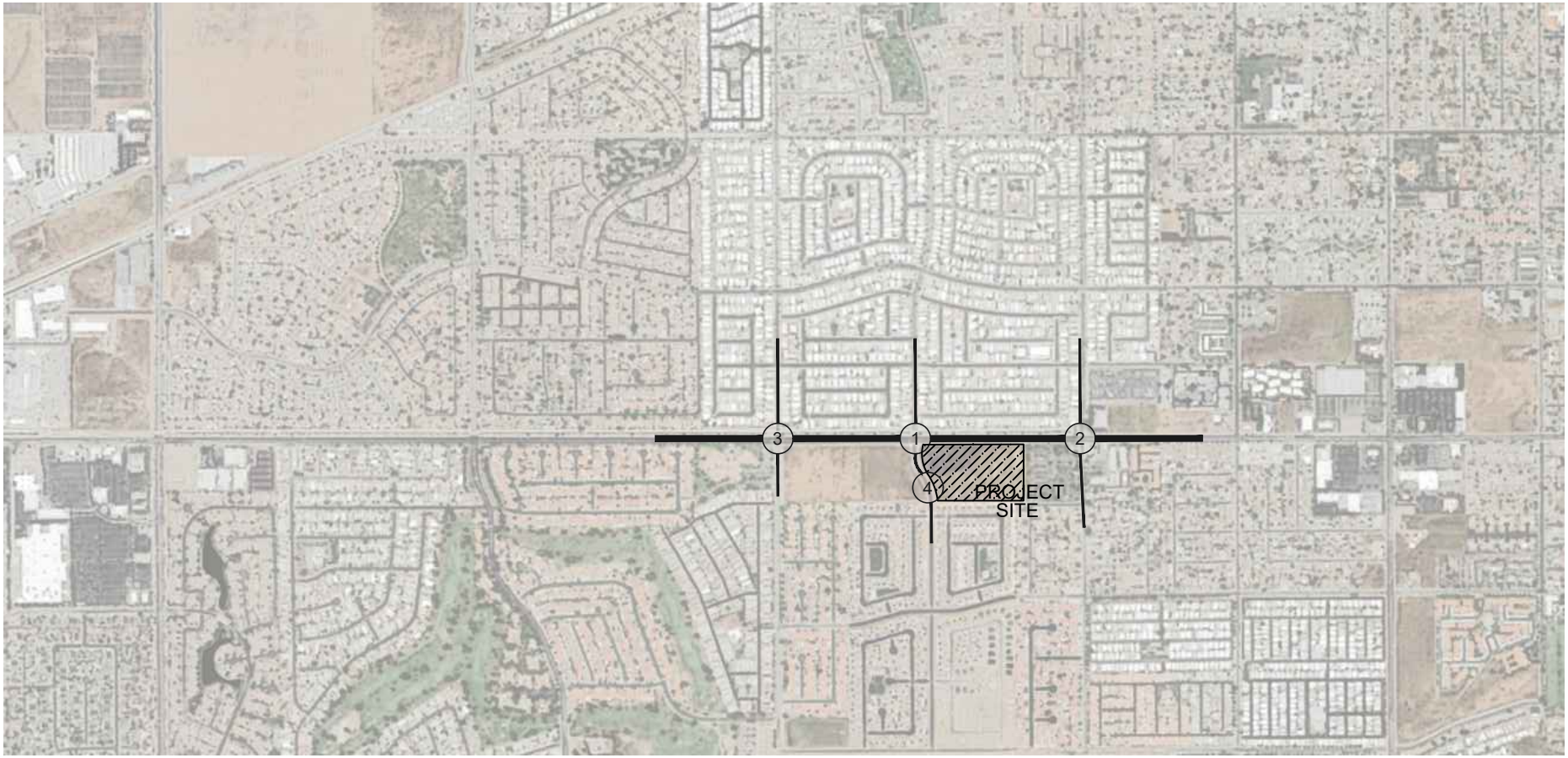
TJW Engineering, Inc.
Traffic Engineering & Transportation Planning Consultants

Exhibit 12: Opening Year Cumulative with Project AM Peak Hour Volumes

SEC STETSON AVENUE AND ELK STREET

BAW-23-003

Not to Scale



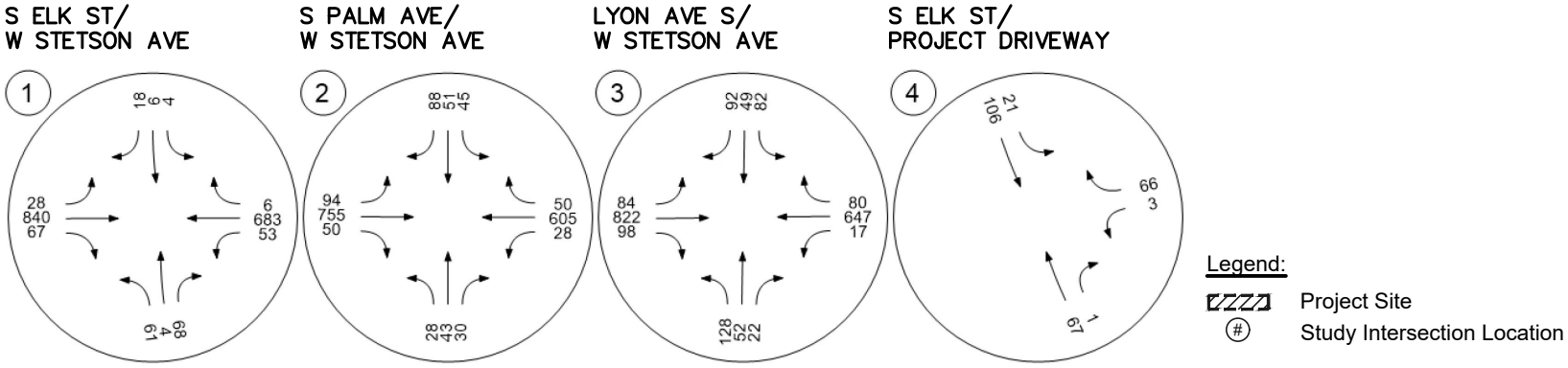


Exhibit 13: Opening Year Cumulative with Project PM Peak Hour Volumes

Not to Scale

APPENDIX

Appendix A: Scoping Agreement and City Documents
Appendix B: Existing Traffic Counts and Model Volumes
Appendix C: HCM Analysis Sheets

APPENDIX A

SCOPING AGREEMENT AND CITY DOCUMENTS

January 18, 2024

TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

Cassandra Silva
ENGINEERING RESOURCES OF SOUTHERN CALIFORNIA, INC.
1861 W. Redlands Blvd
Redlands, CA 92373

Subject: Elk and Stetson Residential Traffic Analysis Scoping Agreement

TJW ENGINEERING, INC. (TJW) is pleased to submit this Traffic Analysis (TA) scoping agreement for the Elk and Stetson Residential project, which is located on the southeast corner of Elk Street and Stetson Avenue in the City of Hemet. The proposed project consists of 228 multifamily units. A site plan is attached for reference.

Scope of Services

Trip Generation and Trip Distribution

Trip generation for the project has been developed using rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). As shown in the attached table, the project is anticipated to generate 1,537 daily trips, 91 AM peak hour trips, and 116 PM peak hour trips.

The anticipated travel patterns to and from the project site are shown in the attached exhibit.

Study Area

The study area shall include intersections and roadway segments in which the proposed project may create a significant impact. As such, TJW proposes to include the following intersections:

1. Elk Street / Stetson Avenue
2. Palm Avenue / Stetson Avenue
3. Lyon Avenue / Stetson Avenue
4. Elk Street / Project Driveway
5. Project Driveway / Stetson Avenue

Analysis Methodology and Scenarios

Methodology for the transportation study will be based on the County of Riverside *Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled* (December 2020). The analysis of traffic and level

of service will be provided for the following scenarios and will include an assessment of traffic mitigation measures if any are required:

1. Existing Conditions
2. Project Completion (2028) Conditions (Existing plus Ambient Growth plus Project)
3. Cumulative (2028) Conditions (Existing plus Ambient Growth plus Project plus Cumulative Projects)

List of cumulative projects are to be provided by the City.

Intersection level of service will be calculated using the Highway Capacity Manual 7th Edition analysis methodologies. The TIA will analyze study intersections during the following time periods:

- Weekday AM Peak Hour (7:00 AM to 9:00 AM)
- Weekday PM Peak Hour (4:00 PM to 6:00 PM)

Sight Distance Analysis

A sight distance analysis will be conducted for the project driveways.

Volume Development

Traffic volumes for existing year traffic conditions will be based on newly collected existing traffic counts for the study intersections identified previously. Project Completion conditions volumes will be developed by applying a 2.0% annual ambient growth rate (per the Riverside County *Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled*) to existing traffic volumes and adding project traffic. Cumulative conditions volumes will be developed by adding traffic from all developments within the study area for which an application has been submitted to Project Completion conditions volumes.

Vehicle Miles Traveled (VMT) Screening

The project screens from VMT analysis as it is located within a low VMT generating traffic analysis zone (TAZ), therefore meeting the City of Hemet Traffic Impact Analysis Guidelines for CEQA and VMT screening criteria. No further analysis is required. A memo outlining the project, the City guidelines, and the screening process will be provided.

Conclusion

Please contact us at (949) 878-3509 if you have any questions regarding this scoping agreement.

Sincerely,

Gene Kim, PE, TE
Principal Engineer

David Chew, PTP
Transportation Planner

Registered Civil Engineer *#83175*
Registered Traffic Engineer *#2684*

Approved by:

_____ _____

City of Hemet Staff Date

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY
LEVEL OF SERVICE

This letter acknowledges the Riverside County Transportation Department requirements for traffic impact analysis of the following project. The analysis must follow the Riverside County Transportation Department Traffic Study Guidelines dated February 2005.

Case No. _____
Related Cases -
SP No. _____
EIR No. _____
GPA No. _____
CZ No. _____
Project Name: Elk and Stetson Residential
Project Address: Southeast corner of South Elk Street and West Stetson Avenue in the City of Hemet
Project Description: 228 Multifamily Units (22.6 du/ac)

	Consultant	Developer
Name:	TJW Engineering, Inc.	City of Hemet, Monique Alaniz-Flejter
Address:	9841 Irvine Center Drive, Suite 200 Irvine, CA 92618	445 East Florida Avenue Hemet, CA 92543
Telephone:	949-878-3509	
Fax:		

A. Trip Generation Source: ITE Trip Generation Manual, 11th Edition (2021)

Current GP Land Use: High Density Residential (18.1 - 30.0 du/ac)
Proposed Land Use: High Density Residential (18.1 - 30.0 du/ac)
Current Zoning: R-3 Multiple Family Residential
Proposed Zoning: R-3 Multiple Family Residential

	Current Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				22	69	91
PM Trips				73	43	116

Internal Trip Allowance ☐ Yes ☐ No (_____ % Trip Discount)
Pass-By Trip Allowance ☐ Yes ☐ No (_____ % Trip Discount)

A passby trip discount of 25% is allowed for appropriate land uses. The passby trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

B. Trip Geographic Distribution: N 60 % S 5 % E 20 % W 15 %
(attach exhibit for detailed assignment)

C. Background Traffic

Project Build-out Year: 2028
Annual Ambient Growth Rate: 2 %

Phase Year(s) _____
Other area projects to be analyzed: _____

Model/Forecast methodology _____

D. Study intersections: *(NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)*

1. South Elk Street/West Stetson Avenue
2. South Palm Avenue/West Stetson Avennue
3. South Lyon Avenue/West Stetson Avenue
4. South Elk Street/Project Driveway
5. Project Driveway/West Stetson Avenue
6. _____
7. _____
8. _____
9. _____
10. _____

E. Study Roadway Segments: *(NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)*

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

E. Other Jurisdictional Impacts

Is this project within a City's Sphere of Influence or one-mile radius of City boundaries? ☐ Yes ☒ No

If so, name of City Jurisdiction: _____

F. Site Plan (please attach reduced copy)

G. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by Transportation Department)
(NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted," or similar statement) at an existing unsignalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.)
Site distance analysis at project driveways. Level of Service analysis for existing conditions, project completion conditions (existing + ambient growth + project), and cumulative conditions (project completion + cumulative projects).

H. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.
Date of counts_____

***NOTE* Traffic Study Submittal Form and appropriate fee must be submitted with, or prior to submittal of this form. Transportation Department staff will not process the Scoping Agreement prior to receipt of the fee.**

Recommended by:

David Chew _____ 1/18/24 _____
Consultant's Representative — Date

Scoping Agreement Submitted on 1/18/24

Revised on _____

Approved Scoping Agreement:

_____ _____
Riverside County Transportation Department — Date

Project Scoping Form for VMT

This scoping form shall be submitted to the Lead Agency to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Elk and Stetson Residential
Project Address:	Southeast corner of Elk Street and Stetson Avenue in the City of Hemet
Project Opening Year:	2028
Project Description:	228 Multifamily Units (22.6 du/ac)

	Consultant:	**Developer:**
Name:	TJW Engineering, Inc.	Monique Alaniz-Flejter
		City of Hemet
Address:	9841 Irvine Center Drive, Suite 200	445 East Florida Avenue
	Irvine, CA 92618	Hemet, CA 92543
Telephone:	949-878-3509	
Fax/Email:		MFlejter@hemetca.gov

Trip Generation Information:

Trip Generation Data Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (2021)

Current General Plan Land Use:

High Density Residential (18.1 - 30.0 du/ac)

Proposed General Plan Land Use:

High Density Residential (18.1 - 30.0 du/ac)

Current Zoning:

R-3 Multiple Family Residential (max 30 du/ac)

Proposed Zoning:

R-3 Multiple Family Residential (max 30 du/ac)

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				22	69	91
PM Trips				73	43	116

Trip Internalization: ☐ Yes ☐ No (_____% Trip Discount)

Pass-By Allowance: ☐ Yes ☐ No (_____% Trip Discount)

Potential VMT Screening Checks

Is your project screened from specific analyses (see Page 11 of the guidelines related to LOS assessment and Pages 24-26). This requirement is for project's requiring VMT assessment for CEQA only.

Is the project screened from VMT assessment? ☒ Yes ☐ No

VMT screening justification (see Pages 24-26 of the guidelines): The project screens from VMT analysis as it is located in a low VMT generating traffic analysis zone (TAZ), thereby meeting the City of Hemet Traffic Impact Analysis Guidelines for CEQA & VMT screening criteria.

VMT Analysis Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used _____
- Attach WRCOG Screening VMT Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

Signatures

TIA Preparer: _____ City (Approved by): _____

Table 1

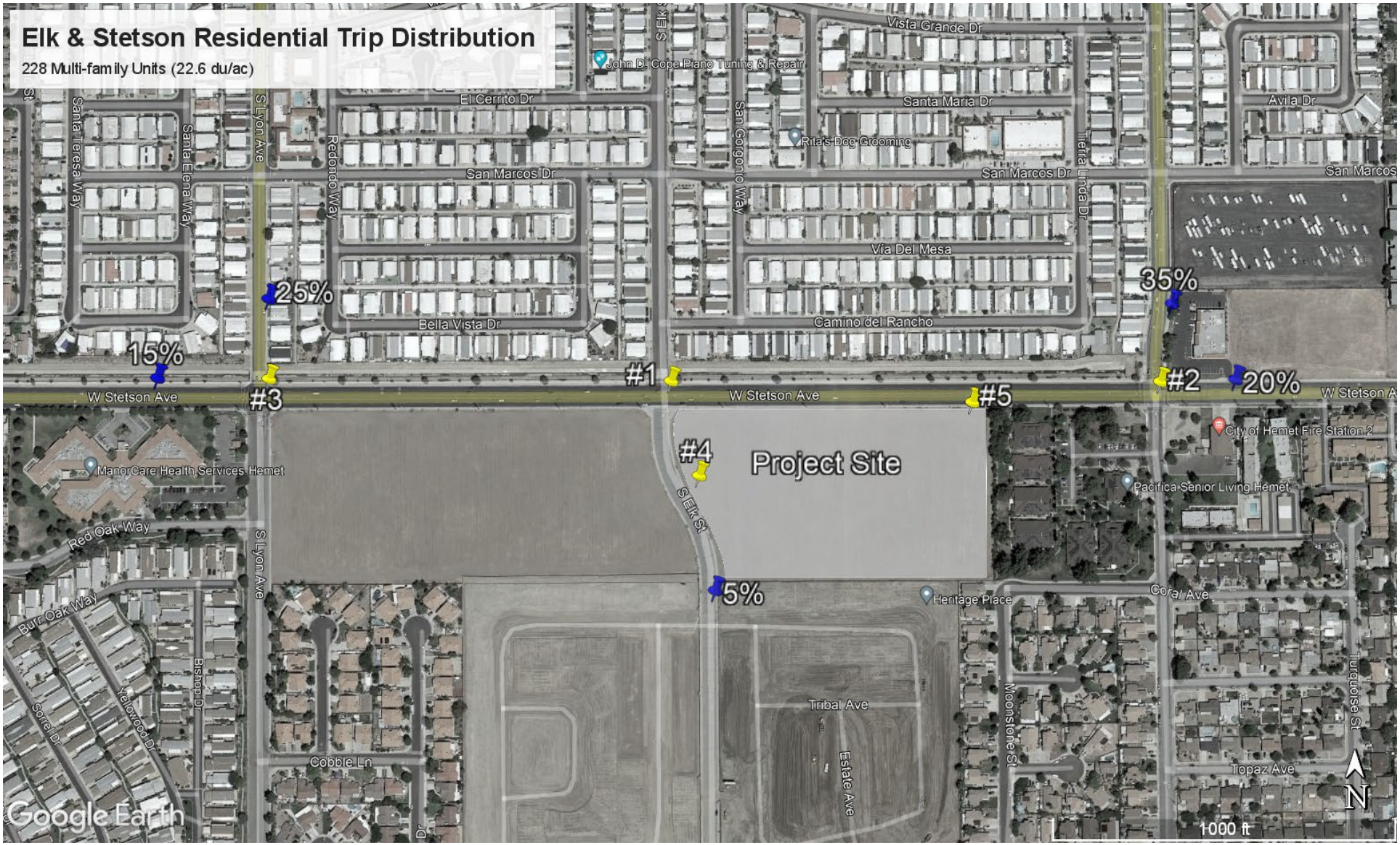
Project Trip Generation

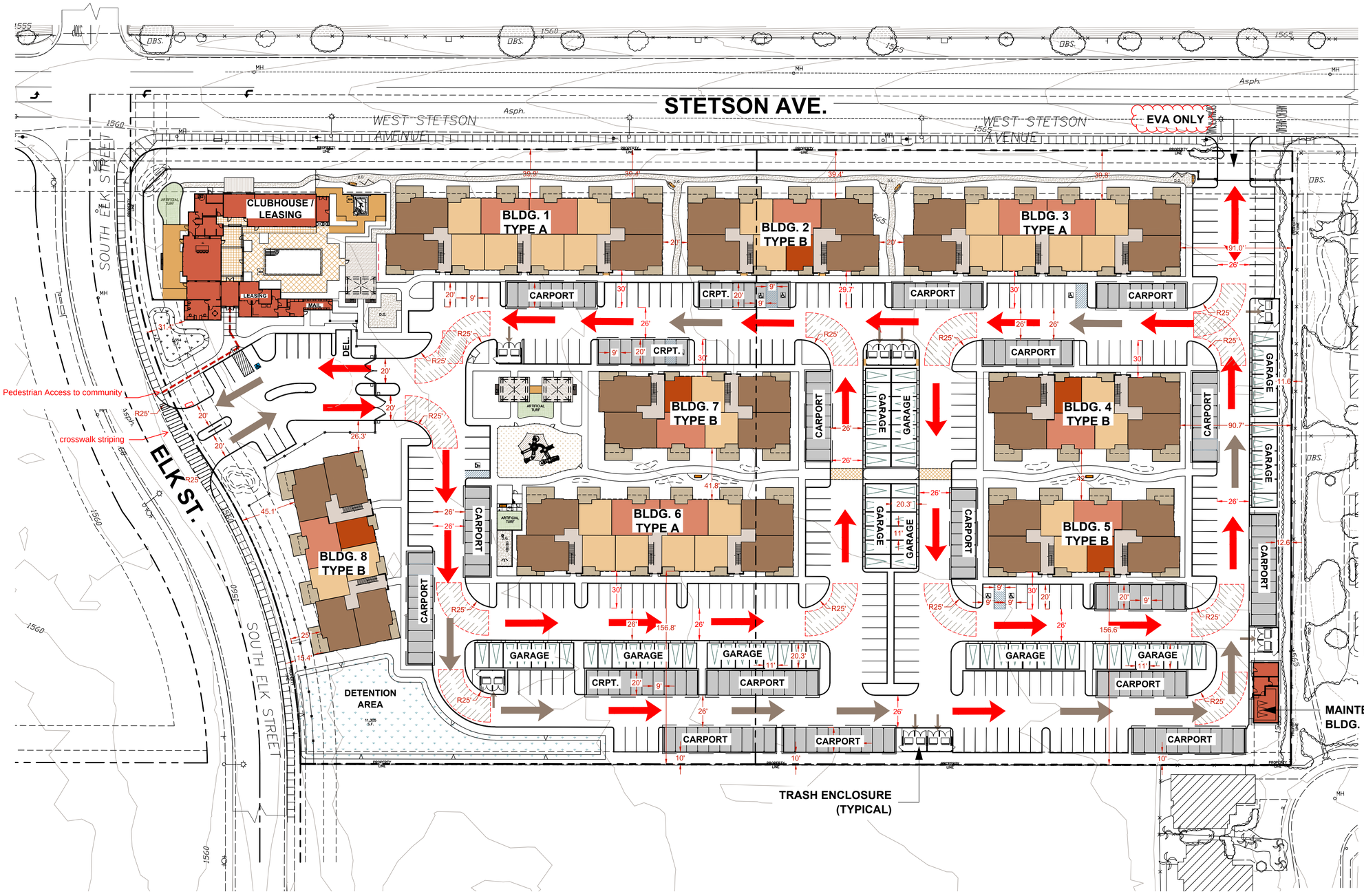
Proposed Land Use[1]	ITE Code[2]	Qty	Unit[3]	Daily		AM Peak Hour					PM Peak Hour				
				Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume		
								In	Out	Total			In	Out	Total
Multifamily Housing (Low-Rise), Not Close to Rail Transit	220(1)	228	DU	6.74	1,537	0.4	24:76	22	69	91	0.51	63:37	73	43	116

1: Trip generation and pass-by rates from ITE Trip Generation (11th Edition, 2021).

2: Parentheses reflect subcategory of land use code. For example, 220(1) is only multifamily housing (low-rise) not located near rail transit.

3: DU = Dwelling Units.


Elk & Stetson Residential Trip Distribution
228 Multi-family Units (22.6 du/ac)
Vista Grande Dr
John D. Copa Piano Tuning & Repair
El Cerrito Dr
Santa Maria Dr
Avila Dr
Santa Teresa Way
Santa Elena Way
S Lyon Ave
Redondo Way
San Gorgonio Way
Rita's Dog Grooming
Tierra Linda Dr
San Marcos Dr
San Marcos
Vía Del Mesa
25%
35%
Bella Vista Dr
Camino del Rancho
15%
#1
#2
20%
W Stetson Ave
#3
#5
W Stetson Ave
City of Hemet Fire Station 2
#4
Project Site
ManorCare Health Services Hemet
Pacifica Senior Living Hemet
S Elk St
Red Oak Way
S Lyon Ave
5%
Heritage Place
Coral Ave
Burr Oak Way
Bishop Dr
Yellowood Dr
Sorrel Dr
Tribal Ave
Moonstone St
Turquoise St
Cobble Ln
Estate Ave
Topaz Ave
Google Earth
N
1000 ft



ASTER SUMMARY

TOTAL GROSS AREA	10.07 ACRES
TOTAL UNITS	228 UNITS
GROSS DENSITY	22.6 DU/AC

RESIDENTIAL SUMMARY (TOTAL UNIT LIVING AREAS)

UNIT PLAN	BD / BA	SQ. FT. (PER UNIT)	PATIO / DECK SQ. FT. (PER UNIT)	# UNITS	% MIX	TOTAL RENTABLE S.F. (W/OUT PATIOS)
PS - A	STUDIO	599	63	15	7%	8,985
P1 - A	1BD / 1BA	726	85	73	32%	52,998
P1 - A (1st floor w/extended patio)	1BD / 1BA	726	206	11	5%	7,986
P2 - A	2BD / 2BA	1,119	88	80	35%	89,520
P2 - A (1st floor w/extended patio)	2BD / 2BA	1,119	243	16	7%	17,904
P2 - B	2BD / 2BA	1,050	83	22	10%	23,100
P2 - B (1st floor w/extended patio)	2BD / 2BA	1,050	200	11	5%	11,550
TOTAL			106 (AVG.)	**228**	**100%**	**212,043**

TOTAL PARKING

REQUIRED (CITY STANDARDS)		PROVIDED	
1.5 sp / Studio greater than 500 sf	23	OPEN STALLS	199
1.5 sp / 1 bdrm. unit greater than 700 sf	110	REMOTE GARAGES	77
2.0 sp / 2 bdrm. Unit	204	CARPORTS	164
GUEST = 0.2 sp / unit	46	LEASING OFFICE	12
TOTAL	**382**		**452**

SITE COVERAGE

COVERAGE TYPE	SQ. FT.	ACRES	% OF NET SITE AREA
BUILDINGS (INCL. CLUBHOUSE & GARAGES)	112,761	2.59	26%
COMMOM OPEN SPACE* (LANDSCAPE & HARDSCAPE)	61,291	1.41	14%
RESIDUAL LANDSCAPING (PARKING & BLDG. ADJACENT)	89,957	2.07	20%
DETENTION AREA	11,300	0.26	3%
PARKING AND ROADS	163,520	3.75	37%
TOTAL	**438,829**	**10.07**	**100%**

COMMON OPEN SPACE

REQUIRED (PER SPECIFIC PLAN)	REQUIRED SQ. FT.	PROVIDED SQ. FT.
250 sf PER UNIT	**57,000**	**61,291**

BUILDING AREA SUMMARY

BUILDING TYPE	GROSS SQ. FT. PER BLDG (Incl.balcony & stair)	NUMBER OF BUILDINGS	GROSS SQ. FT. TOTAL (Incl.balcony & stair)	NET SQ. FT. PER BLDG (without balcony & stair)	NUMBER OF BUILDINGS	NET SQ. FT. TOTAL (without balcony & stair)
BLDG - A	40,182	3	120,546	32,961	3	98,883
BLDG - B	27,847	5	139,235	22,843	5	114,215
RESIDENTIAL TOTAL			**259,781**			**213,098**
6 CAR GARAGE	1,453	2	2,906	-		-
7 CAR GARAGE	1,694	1	1,694	-		-
8 CAR GARAGE	1,944	4	7,776	-		-
12 CAR GARAGE	2,907	1	2,907	-		-
14 CAR GARAGE	3,388	1	3,388	-		-
CLUBHOUSE	6,724		6,724	6,404		6,404
MAINTENANCE	1,035		1,035	-		-
NON-RESIDENTIAL TOTAL			**26,430**			**26,110**
GRAND TOTAL			**286,211**			**239,208**

N

0 40' 80'

ASTER- RIVER OAKS

HIGHPOINTE COMMUNITIES

HEMET, CA

CONCEPTUAL SITE PLAN

22098.00 2023-08-01 SITE PLAN

DANIELIAN ASSOCIATES

architects ■ planners

AB 32 makes the California Air Resources Board (CARB) responsible for monitoring and reducing GHG emissions and continues the existing Climate Action Team to coordinate statewide efforts. This landmark legislation calls for a reduction of the state's greenhouse gas emissions to 1990 levels by 2020 and will require the state to cut emissions by 30 percent over projected levels. Reduction measures proposed to meet the 2020 target levels are to be adopted by the start of 2011.

The Circulation Plan defines a network of bicycle routes, transit, neighborhood electric vehicle (NEV) and pedestrian accommodations that encourages Hemet residents to utilize modes of transportation other than the automobile. The Plan provides a network to connect to regional bicycle and pedestrian trails from the Western Riverside County Non-Motorized Transportation Plan (Urban Crossroads, Inc., June 2010). The Non-Motorized Transportation Plan evaluates demand for such facilities. The Circulation Element also describes public transit, and NEV connectivity to major employment and activity centers to facilitate access to these destinations without the use of an automobile.

California SB 375 (2008)
SB 375 requires the California Air Resources Board (CARB) to set regional targets for years 2020 and 2035 to reduce greenhouse gas emissions from passenger vehicles. The targets apply to regions in the state covered by the 18 metropolitan planning organizations (MPOs)—SCAG is the MPO that represents the City of Hemet and other parts of western Riverside County. SB 375 provides emissions-reducing goals regions can plan for, integrates planning activities, and provides incentives for local governments and developers to follow new, conscientiously planned growth patterns. Reducing the number of vehicle miles traveled (VMT) is one strategy MPOs can employ to achieve these targets.

The intent of SB 375 is to reduce VMT by reshaping the face of California's communities into more sustainable, walkable environments with alternative transportation options and increased quality of life. SB 375 provides incentives for creating attractive, walkable, sustainable communities and revitalized existing ones. It also encourages the development of more alternative transportation options, including well-planned and -maintained pedestrian and bicycle routes.

The Circulation Plan provides a framework for key routes and alternative transportation facilities that will enhance connectivity within the City of Hemet and between nearby jurisdictions. The proposed plan enables travel by various modes to major activity areas and large employment centers. It also serves existing and future planned transit facilities, including potential future Metrolink stations.

4.4 ROADWAY CIRCULATION

4.4.1 MEASURING TRAFFIC FLOW

Roadway networks must be regularly evaluated to ensure they are moving vehicles efficiently and maintaining adequate capacity to support future growth. Evaluating the ability of the circulation system to serve residents

and businesses in Hemet requires establishing performance criteria. Performance criteria have a policy component that establishes a desired Level of Service (LOS), and a technical component that specifies how traffic forecast data can be used to measure criteria achievement. Within the Circulation Element, Volume-to-capacity (V/C) ratios are used to establish LOS categories describing the performance of roadways and access points throughout the community.

Volume-to-Capacity Ratio This ratio (i.e., a ratio between traffic volume and theoretical capacity of the roadway) is used to measure the performance of roadway facilities. Volume is established either by a traffic count (in the case of current volumes) or by a forecast for a future point in time. Capacity refers to the vehicle carrying ability of a roadway at free-flow speed and is a critical component of roadway design. For example, a roadway that carries 16,000 vehicles per day, with the capacity to accommodate 20,000 vehicles per day at free-flow speed, has a V/C of 0.80.

Level of Service LOS describes the efficiency and quality of traffic operations. LOS is a tool used to describe the operating characteristics of the street system in terms of the level of congestion or delay experienced by vehicles. Service levels range from A through F, with each level defined by a range of V/C ratios, as shown in Table 4.1. LOS A, B, and C are considered good operating conditions, with only minor delays being experienced by motorists. LOS D represents operating conditions where drivers occasionally have to wait through more than one signal cycle to proceed through the intersection. LOS E is considered a near-capacity condition, and LOS F represents an oversaturated condition with long delays.

Table 4.1
Level of Service Definitions for Intersections

Level of Service	Volume-to-Capacity Ratio	Description
A	0.00-0.60	Free Flow/Insignificant Delays: No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.
B	0.61-0.70	Stable Operation/Minimal Delays: An occasional approach phase is fully utilized. Many drivers feel somewhat restricted within platoons of vehicles.
C	0.71-0.80	Stable Operation/Acceptable Delays: Major approach phases fully utilized. Most drivers feel somewhat restricted.
D	0.81-0.90	Approaching Unstable/Tolerable Delays: Drivers may have to wait through more than one red signal indication. Queues may develop but dissipate rapidly, without excessive delays.
E	0.91-1.00	Unstable Operation/Significant Delays: Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection.
F	N/A	Forced Flow/Excessive Delays: Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.

Source: *Highway Capacity Manual*, Transportation Research Board, Special Report No. 209, Washington DC, 2000.

Level of Service Standards Various LOS policy standards have been established to evaluate observed traffic conditions, future development plans, and circulation system modifications. At the local level, the City of Hemet has established LOS D as the lowest acceptable LOS for *peak-hour intersection movements* and LOS C as the lowest acceptable LOS for *roadway segment operations*. The City has not adopted an LOS standard for unsignalized intersections. Performance of unsignalized intersections is evaluated on a case-by-case basis. At the regional planning level, Riverside County's congestion management plan (CMP) specifies LOS E as the operating standard for roadways and intersections on the CMP highway system.

The City has also established additional thresholds for project impacts that go beyond acceptable operational LOS to address direct project impacts on roadway capacity. For purposes of compliance with the California Environmental Quality Act (CEQA), projects that increase V/C by .01 or more on affected roadway segments at intersections already experiencing or projected to experience LOS E or F conditions are considered to create potentially significant impacts, and a traffic analysis report and mitigation measures are required. This requirement is designed to reduce the occurrence of both roadway congestion and underfunded improvements.

The City accepts a Level of Service below "D" for roadways and intersections at Florida and Sanderson Avenues, and at Devonshire and Sanderson Avenues, where Level of Service is affected by delays at Florida and Sanderson Avenues. The City has recognized that certain segments and intersections would exceed Level of Service "D" as early as 1992 during a comprehensive General Plan update. These segments included portions of Florida Avenue, Stetson Avenue, and Sanderson Avenue. Measure C incorporated these problematic roads in the measure language, and portions of Florida, Sanderson and Stetson do not need to comply with Measure C's standard. The land uses and circulation system in this General Plan have resolved the service level problems identified for Stetson Avenue; however, Florida Avenue and Sanderson Avenue would still operate below Level of Service "D" with implementation of the General Plan.

The primary reasons for exceeding level of service "D" in the vicinity of Florida Avenue and Sanderson Avenue include closely-spaced traffic signals along Florida Avenue, through-traffic slowed by left turns into commercial driveways on Florida Avenue, and a lack of available right-of-way to widen streets. Over the years, businesses have been built along Florida Avenue, limiting the possibility for roadway widening. Widening could only occur if those businesses are acquired through imminent domain and demolished. The City believes that the costs of imminent domain and demolition of existing business exceeds the benefits of slightly better capacity at these few select intersections.

4.4.2 IMPROVEMENTS TO TRAFFIC FLOW

To maximize the efficiency of its circulation system, the City has determined where physical improvements to the circulation infrastructure can be made to expand capacity and increase traffic flow. There are three basic methods to reduce traffic congestion: reduce traffic demand, increase

Within Hemet, progress toward a su stainable transportation system can be advanced by focusing on the following objectives, as stated in the General Plan traffic analysis by Urban Crossroads (2011):

- Network Connectivity (more than one route between land uses and a mixture of low speed and high speed road connections wherever possible)
- Operational Balance (flexibility to achieve community objectives and place making without sacrificing safety and mobility)
- Emissions Reduction / Energy Efficiency (prioritize designs which minimize idling times and vehicle miles traveled, help conserve resources and minimize waste)
- Pedestrian and Bicycle Accommodations (walkways and bikeways fully integrated)
- Transit Readiness (access to transit stops and effective interface of modes
- Neighborhood Electric Vehicle Facilities (system of NEV provisions: paths, lanes, charging stations, etc.)
- Quality Public Space (roadways spatially defined with structures and landscaping).

4.4.6 ROADWAY CLASSIFICATIONS

Circulation plan roadways in Hemet are defined using a hierarchical classification system. Each type of roadway is described by size, function, and capacity. The circulation plan establishes eight types of roadways, ranging from six-lane highways to two-lane roadways. The circulation plan does not describe SR 79 (which will be a Caltrans facility) or local streets. Although there are numerous local streets serving individual neighborhoods, and these streets feed into the larger roadway network, they are not considered master-planned streets that are part of the circulation network. The design of the local streets is still subject to the City's engineering and subdivision Street Standards. The realigned SR 79, west of Warren Road, is being designed to expressway standards. Design is undertaken by Caltrans, with primary overview by RCTC. SR 79 is anticipated to be constructed in phases, with the first phase to include fewer lanes and at-grade crossings, with additional lanes, interchanges, and overpasses added later.

City roadways consist of both divided and undivided roadways. Divided roadways generally contain a physical barrier or buffer, such as a curbed median or a continuous two-way left-turn lane, between each direction of travel. Divided roadways remove vehicles making a left turn from the travel lanes to keep slowing vehicles from impeding through traffic and constricting roadway capacity. Undivided roadways do not contain a buffer between each direction of travel and, therefore, left-turning traffic can

impede through traffic. Undivided roadways may widen to provide turn movement pockets at intersections.

The standard roadway classifications are listed in Table 4.3 and described in the paragraphs that follow. The descriptions relate to segment design, and illustrate the configuration at midblock. Typical nonintersection cross-sections are illustrated in Figure 4.2.

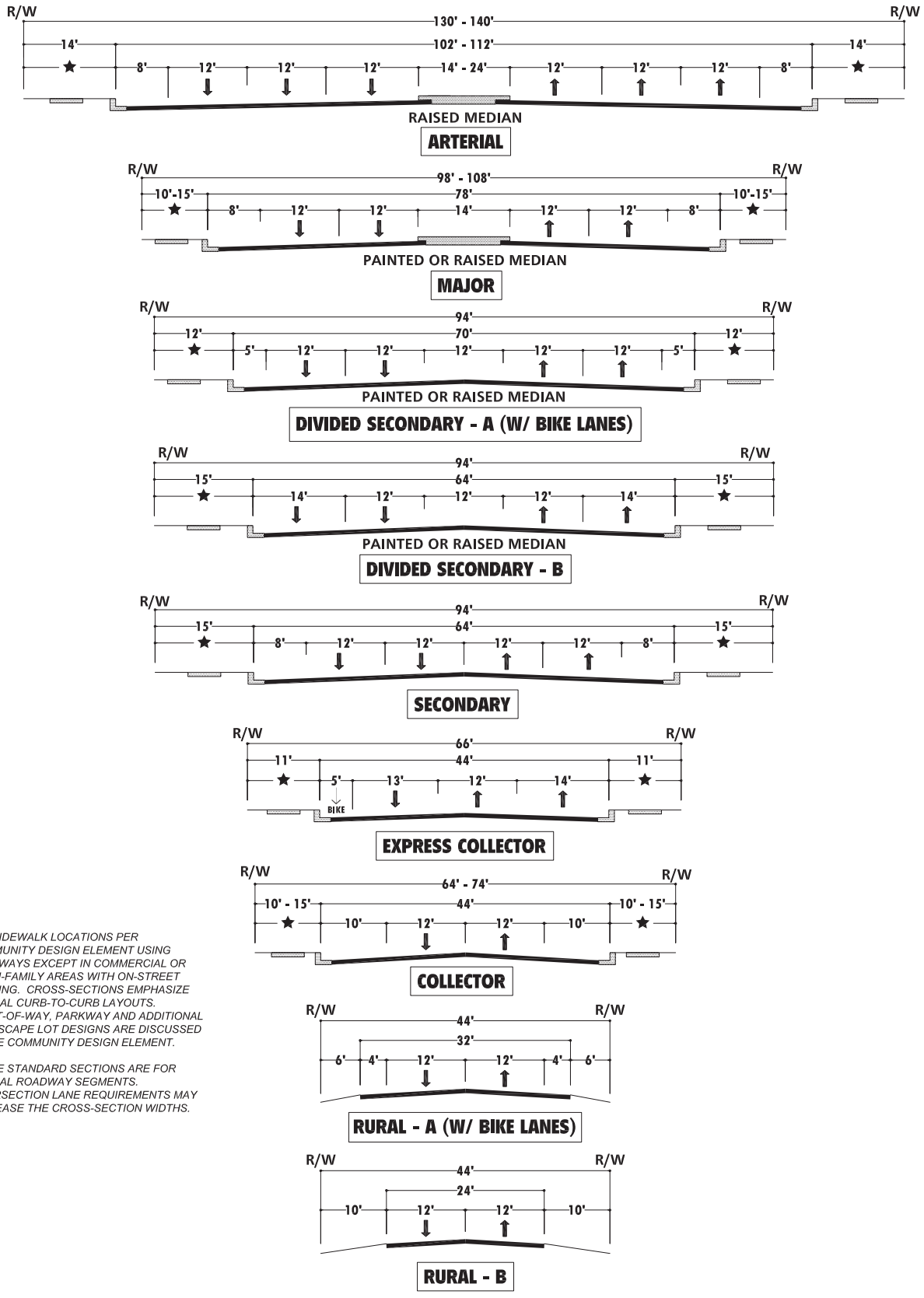
Additional rights-of-way (beyond the standard width) may be required at higher volume intersections to provide for safe turning movements. The standard roadway classifications are described in the table and paragraphs below.

Table 4.3
Roadway Classifications

Classification	# of Lanes	Raised Median	ROW Width (ft.)	Curb-to-Curb Width (ft.)
Arterial	6	Yes	130–140	102–112
Major	4	Yes	98–108	78
Divided Secondary—A	4	Yes	94	70
Divided Secondary—B	4	Yes	94	64
Secondary	4	No	94	64
Express Collector	3	No	66	44
Collector	2	No	66–74	44
Rural Collector	2	No	44	32
Local Rural	2	No	44	24

Arterial—An Arterial is a six-lane road with a median and is intended to have a somewhat limited amount of access. Typically, Arterials have at-grade intersections with other roads, with separations of at least one-quarter mile between intersection crossings and very limited driveway access points. Intersections are at grade, with signalization of crossings. Some intersections may only permit right-turn access. On-street parking is not permitted. Medians are raised, with landscaping and/or hardscaping (e.g., decorative paving or features). Median widths vary between 14 and 24 feet and account for variable rights-of-way and curb-to-curb widths. Two existing or planned roads, Domenigoni Parkway and the Ramona Expressway, have unique designs that include greater median widths and parkways, and greater separations between access points.

Major—A Major street is a four-lane street with a landscaped median. Under unique circumstances related to neighborhood traffic needs, painted medians can be considered by decision makers. On-street parking is not permitted. Major streets are intended to have design speeds based on greater sight distance, curves that are less acute, restricted access, and



★ *ALL SIDEWALK LOCATIONS PER COMMUNITY DESIGN ELEMENT USING PARKWAYS EXCEPT IN COMMERCIAL OR MULTI-FAMILY AREAS WITH ON-STREET PARKING. CROSS-SECTIONS EMPHASIZE TYPICAL CURB-TO-CURB LAYOUTS. RIGHT-OF-WAY, PARKWAY AND ADDITIONAL LANDSCAPE LOT DESIGNS ARE DISCUSSED IN THE COMMUNITY DESIGN ELEMENT.*

THESE STANDARD SECTIONS ARE FOR TYPICAL ROADWAY SEGMENTS. INTERSECTION LANE REQUIREMENTS MAY INCREASE THE CROSS-SECTION WIDTHS.

G 06268298.09 009 1/24/2012

Source:
Urban Crossroads 2010

Figure 4.2

Roadway Classification Cross-Sections

Hemet General Plan

greater distance between intersection crossings. At intersections, the street can be altered to allow acceleration, deceleration, and turn lanes. Parkways will vary between 10 and 15 feet wide, and right-of-way widths will vary accordingly. It is assumed that areas with extensive existing development will have the narrower rights-of-way, while newly developing areas will have the wider rights-of-way.

Divided Secondary A—A Divided Secondary street is a four-lane street, but differs from Secondary Streets in that they have a landscaped median. Under unique circumstances related to community design issues, painted medians can be considered by decision makers. Divided Secondary streets are likely to have speeds that accommodate roadway constraints and community design issues. Bike lanes are accommodated, which results in narrower Parkways than those on Divided Secondary B streets.

Divided Secondary B—A Divided Secondary B street is similar to the Divided Secondary A street described above; however, the Divided Secondary B street does not provide for bike lanes, resulting in a smaller curb-to-curb footprint than the Divided Secondary A street.

Secondary—A Secondary street is a four-lane street with a painted centerline and no median. Parking is not accommodated but bike lanes may be accommodated. Intersection designs may allow special turning opportunities.

Express Collector—Express Collectors accommodate heavier traffic flow in one direction, providing additional capacity to guide traffic toward signalized intersections with appropriate capacity and turning movement facilities. Between intersections, the Express Collector cross-section includes two lanes in one direction and one lane in the opposite direction. A single bicycle lane is accommodated between the single opposing lane and the curb. Parking is not accommodated. At signal-controlled intersections, the right-of-way is intended to be widened to allow left-turning lanes.

Collector—A Collector is a two-lane roadway with full shoulders within a 66-foot right-of-way within already developed areas and within a 74-foot right-of-way in newly developing areas. The additional right-of-way provides for additional parkway improvements and fence or wall setbacks. Collectors provide access from local streets to the highway system. Collectors are intended to serve intensive residential land uses and multiple-family dwellings or to convey traffic through an area to roads of equal or similar classification or higher. In newly developing areas, residences will not be permitted to have individual driveways onto the street, and parking may not be accommodated to allow space for bicycles, NEV lanes, or other improvements.

Rural Collector—A Rural Collector is a two-lane road that serves very low volumes of traffic in areas with little or no development, or very low density development. These roads typically occur in very rural or hillside areas, such as Avery Canyon or where Sage Road is located. Curbs and gutters are not

nodes, NEV lanes, and pervious pavement or bioswales, will add to the street's value and multi-purpose use. While not all streets need be developed as complete streets, determining key locations and accompanying design standards are recommended implementation programs to foster complete streets within the City.

The General Plan meets the goals and policies of the Complete Streets Act in several ways. First, the General Plan fundamentally increases the range of transportation options for circulation within the City of Hemet and to adjacent western Riverside County jurisdictions by identifying a backbone network of bicycle and pedestrian routes. This on- and off-street network of routes improves safety for pedestrians and cyclists by providing dedicated facilities apart from vehicles. The General Plan also addresses ancillary facilities that are necessary to make a complete street work: the General Plan establishes preferred or "typical" design standards for route classifications and discusses the need for bicycle accommodations. Lastly, the General Plan specifically includes facilities consistent with the recently completed *Western Riverside County Non-Motorized Transportation Plan*.

4.5 NEIGHBORHOOD ELECTRIC VEHICLES

NEVs are a street legal, low cost, energy efficient, zero emissions mode of local travel that is currently available—but current impediments to widespread usage include lack of interconnected low-speed routes and driver confusion regarding where these vehicles can safely be operated. These problems can be addressed in Hemet by implementing an integrated local NEV plan that overcomes connection issues, identifies safe routes, and enables clear communication about where residents can go in low-speed vehicles.

The unintended consequence of providing a high level of mobility on our roadways includes high-speed auto-oriented patterns that sometimes inhibit the operation of low-speed vehicles and other modes of transportation. Drivers are gradually becoming aware of the official low-speed vehicle classification, commonly described as NEVs, which are already approved at federal and state levels for use on public streets. With their emphasis on short trips and speed capabilities capped at 25 miles per hour (mph), NEVs are generally restricted to streets with posted speed limits of 35 mph or less.

Accommodating a Low-Speed-Travel Culture in Hemet

Accommodating low-speed vehicles with zero emissions is a potent strategy to reduce greenhouse gas (GHG) emissions while encouraging a healthier level of community interaction. Although some level of NEV ownership and operation will occur regardless of the city's attention to the matter, Hemet can proactively address conflicting mode issues and encourage safe NEV operations by:

- identifying the suitable NEV backbone routes as potentially shown in Figure 4.3,
- implementing street signage and striping of lanes for appropriate operation of low-speed vehicles,

generally used and shoulders are typically unimproved (dirt). Bike lanes are provided on Rural Collectors.

Local Rural—Similar to the Rural Collector, a local rural street serves a small area of homes or businesses in a rural or mountainous setting. Pavement width is smaller than a Rural Collector because bike lanes are not provided.

Additional design considerations based on specific projects may also be approved at the discretion of the public works director when based on specific design constraints or modified roadway sections in specific plans.

4.4.7 COMPLETE STREETS

AB 1358, the Complete Streets Act, requires cities and counties to identify how the jurisdiction will provide for the routine accommodation of all users of the roadway. Planning and implementing "complete streets" is one way cities and counties can meet this requirement.

A complete street is a transportation facility that is planned, designed, operated, and maintained to enable safe access for all roadway users. Pedestrians, bicyclists, motorists, and transit riders of all ages and abilities must be able to safely move along and across a complete street. Complete streets help facilitate a variety of important community benefits. Some of these benefits are described in the following list:

- Complete streets provide safe travel choices and give people the option to avoid traffic jams while increasing the overall capacity of the transportation network.
- Complete streets encourage healthy physical activity. Public health experts promote walking and bicycling to combat obesity, especially in children.
- Planning for complete streets cuts costs. Integrating sidewalks, bike lanes, transit amenities, and safe crossings into the initial design of a project is more cost-effective than making retrofits later.
- Complete streets can lead to economic revitalization by reducing transportation costs and travel time while increasing property values and job growth in communities.
- Thoughtful design and accommodations for bicyclists and pedestrians reduces the incidence of crashes and improves safety for all transportation users.
- Complete streets foster strong communities where all people feel safe and welcome on the roadways and where walking and bicycling are an essential part of improving public transportation and creating friendly, walkable neighborhoods.

Identifying opportunities for select roadways to become complete streets that include such elements as pedestrian travel, canopy shade trees, activity

- Provide amenities for transit users such as benches, shade, lighting, shelters, and bicycle racks, where appropriate.
- Ensure that transit stops meet Americans with Disabilities Act (ADA) requirements by providing a continuous paved connection to and from the stop.

Paratransit Options

Several paratransit options exist for senior citizens that are not able to drive, or would rather not drive. RTA's Dial-A-Ride program provides general advanced reservation service, Senior/Disabled service, and Priority Service for persons certified under the Americans with Disabilities Act. Care-A-Van service is also offered within the City of Hemet for seniors and disabled travelers that qualify as low income. Hemet Valley Medical Center offers patient transportation to and from the hospital.

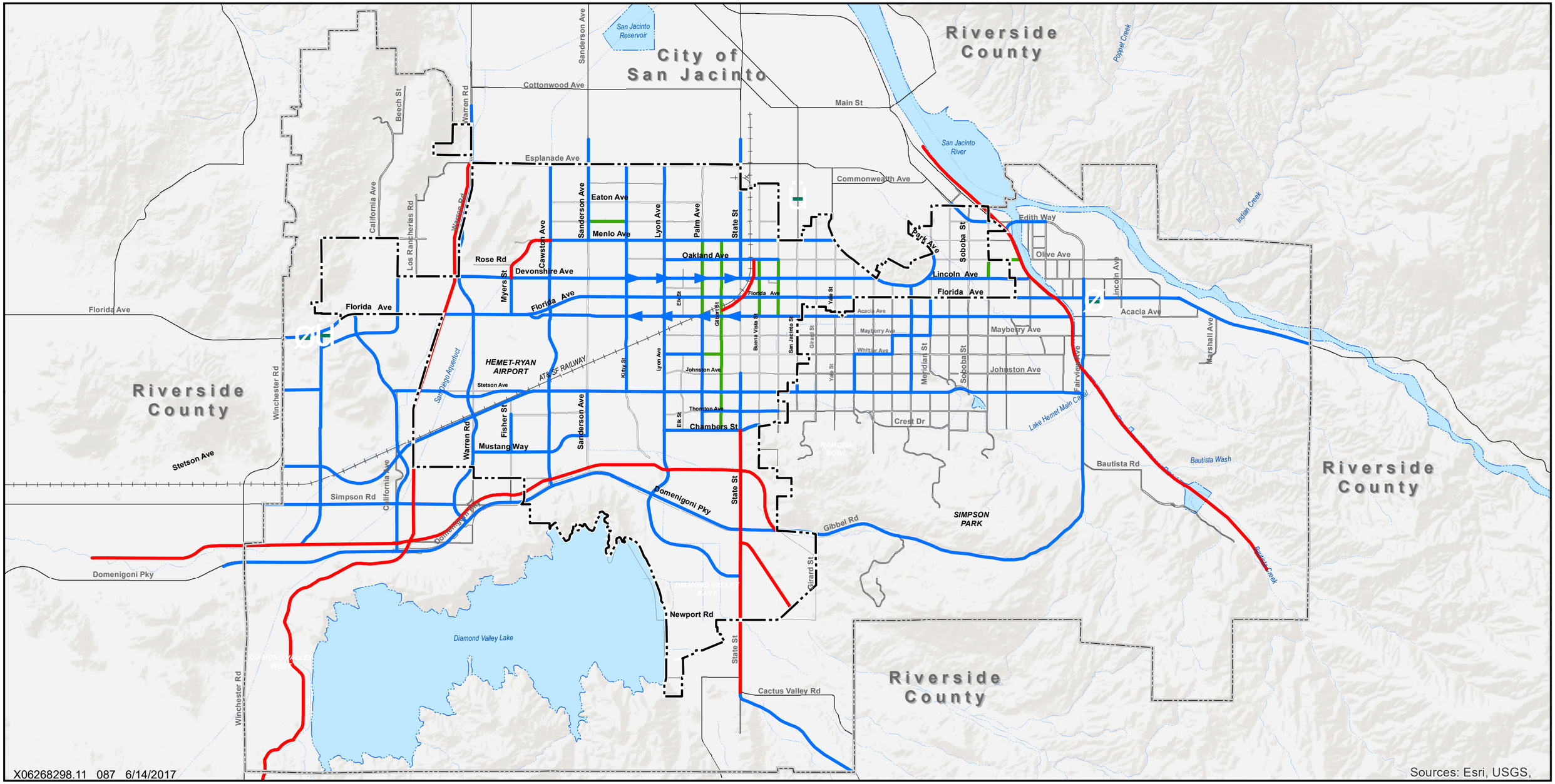
4.7 BICYCLE AND PEDESTRIAN CIRCULATION

Bicycling promotes the neighborhood character and community feel of Hemet by allowing for a low-impact, convenient, and healthy transportation option. Reducing short commute and utilitarian vehicle trips can promote healthier living, and encourage residents to interact with their local neighborhood by patronizing local business and socializing with neighbors. An effective bicycle transportation plan promotes bicycling as both a viable transportation alternative and an enjoyable recreational pastime.

A comprehensive bicycle network, including bicycle routes, convenient bicycle parking facilities, and overall street designs that make the roadway network more hospitable to cycling, will make cycling competitive with the private automobile for short trips. Implementing a bicycle network helps to achieve the balance in the transportation network by providing an affordable alternative to the private automobile, and provides better transportation options for people who cannot drive.

The Circulation Element identifies a master plan for bicycle and pedestrian trail systems throughout the City and Planning Area, allowing residents to travel from neighborhoods to key destinations like schools, parks, shopping and employment centers. The Bikeway Circulation Plan is provided in Figure 4.5. Additional off-road bike trails for recreational users is discussed in Chapter 8 (Recreation and Trails) and shown in Figure 8.3.

In addition to offering recreational and public health benefits, nonvehicular modes of transportation offer options for both commuting and convenience trips around the City. Also, the mixed-use environments advocated by Land Use Element policies will encourage increased pedestrian activity on City sidewalks for both business and pleasure. Finally, an equestrian network in selected areas will offer recreational benefits, although it will be limited to nontraffic areas to avoid conflicts between horses and traffic. An effective bicycle, pedestrian, and equestrian network must be safe and accessible and must connect key activity centers within the City with each other and with the regional trail system. Hemet's current bike trail system includes Class 1 bike paths, Class 2 bike lanes, and Class 3 bike routes. Recreational trails such as mixed-use trails and trails for equestrian and hiking only are discussed in the Recreation and Trails



N

Sources:
Census Tiger Line Data 2005
Urban Crossroads 2011
ESRI 2010

1 0.5 0 1 2 Miles

LEGEND

Bikeways

- Class 1 (Off Road)
- Class 2 (On Road, Two Way Striped Lanes)
- Class 2 (On Road, One Way Striped Lane)
- Class 3 (On Road, Designated Shared Use)

- Hemet City Boundary
- Planning Area
- River/Lake
- Creek/Canal
- Street
- Railroad

Last Update:
4/11/2017
GPA 16-001

Figure 4.5
BIKEWAY CIRCULATION PLAN
Hemet General Plan

Back side of Figure 4.5

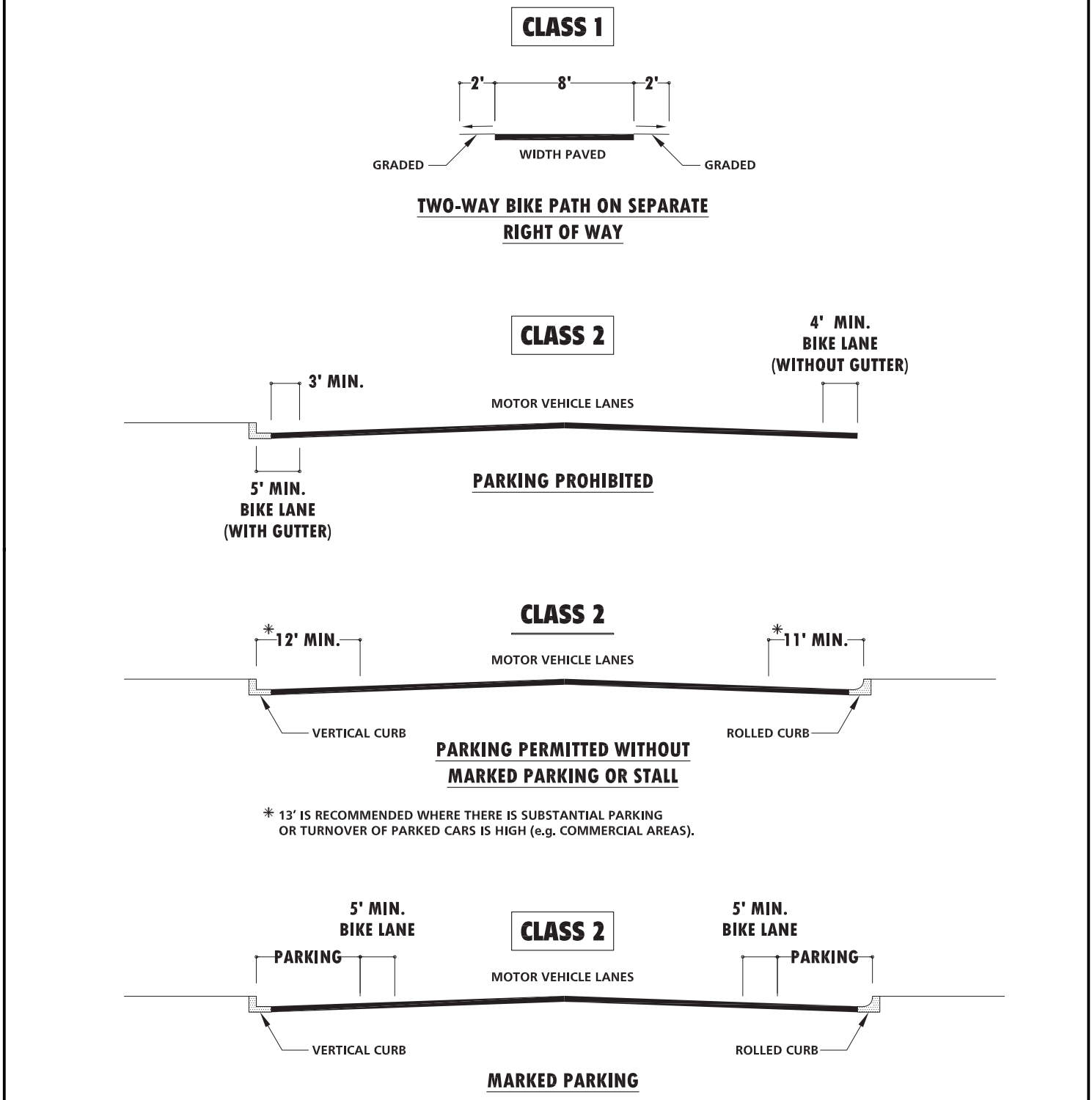
Element (Chapter 8). Opportunities for Class 3 bike routes exist along many of the City's collector streets and sometimes secondary streets, typically following quarter-mile grids. Designated Scenic Highways have a design requirement for wide multiple-use paseos that accommodate pedestrians, joggers, and bicyclists, and wider sections already exist on Sanderson and Florida Avenues. While these multiple-use paseos do not meet the formal Class 1, 2, or 3 definitions of bikeways, they nevertheless provide a valuable resource for users.

Currently, opportunities for bicycling or walking as viable transportation options vary in different parts of the City. In the older, central portion of the City, designated bike routes are constrained by street widths that typically do not accommodate designated lanes. This is particularly true on collector streets where the typical widths allow only either on-street parking, designated bike lanes, or medians. However, the central portion of the City often has sidewalks, and the grid system provides flexibility for bicycle riders on side streets. Newer portions of the City typically have a larger grid system that may or may not include sidewalks or bike paths, although some of the more recently developed areas often include mixed-use pathways, particularly in areas developed under specific plan entitlements. As development occurs, particularly at the subdivision level, improvements to pedestrian and bicycle access are required. In the more rural edges of the City, these improvements have also included equestrian facilities where practical connections exist to rural equestrian-oriented areas. Existing trail systems within the City usually are not well connected to other trails or common uses. The City will continue to develop and maintain a comprehensive network of on-street bicycle lanes, off-street bicycle paths, sidewalks, and trails. The City will work to increase the safety and utility of the system, with a particular focus on sidewalk-deficient residential and industrial areas.

Bikeway Circulation Plan

The bikeway circulation system envisioned within this element is shown in Figure 4.5 and uses three classes of bikeways, with cross-sections shown in Figure 4.6. These classes are similar to those used by Caltrans and the WRCOG Non-Motorized Transportation Plan. The circulation system is intended to serve both local and regional bicycle trips. The bikeway circulation system follows a hierarchy serving individual homes and destinations (nondesignated routes and Class 3), feeding into a wider circulation system (Class 2), and augmented by a separate through system that provides regional connections (Class 1).

Class 3 bikeways (bike routes) are suitable as shared routes with regard to size and traffic, are continuous or connect to Class I or Class II bikeways. Normally, bike routes are shared with motor vehicles and look like an ordinary street, but have signs designating the street as a "Bike Route" (serving to inform bicyclists and remind motorists of the presence of bicyclists). A summary of the bikeway classifications is provided in Table 4.4.



G 06268298.09 010 1/24/2012

Source:
Urban Crossroads 2010

Figure 4.6
Bikeway Cross-Sections
Hemet General Plan

Table 4.4 Descriptions of Bikeway Classifications	
Class 1 bikeway (bike path)	Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with minimized cross-flow by motorists
Class 2 bikeway (bike lane)	Provides a striped lane for one-way bike travel on a street
Class 3 bikeway (bike route)	Provides for shared use with pedestrian or motor-vehicle traffic

Although not recognized as formal bikeways, ordinary side streets also serve to feed bicycle traffic to formal bikeways and to provide bicyclists with routes for short convenience trips. This is particularly true in the central portion of the City, with its closely spaced grid of streets. Additionally, residential neighborhood sidewalks provide places for children to ride bicycles. Finally, paseos along Scenic Highways provide similar opportunities.

Bicyclists vary significantly in their skill level, reasons for bicycling, and common destinations. All of these factors can affect what facilities a cyclist will use and value, and how a cyclist will use those facilities. The following definitions (Urban Crossroads, 2011) help to describe and assess the different needs of the City of Hemet's cycling public:

Casual Bicyclist Includes those who feel less comfortable negotiating traffic, often bicycle shorter distances than experiences riders, and may be unfamiliar with many of the rules of the road. Casual bicyclists benefit from route markers and wayfinding signage, bicycle lanes, wider curbs, and educational programs.

Commuter Bicyclist-Employee Bicycle commuters who ride to work, marking their entire commute by bicycle or by using their bicycle to link with other modes of transportation including buses, trains, or carpools and rideshares. Commuter bicyclists value direct routes between residential and employment areas, safe and secure bicycle parking facilities, and locer and shower facilities at their place of employment.

Commuter Bicyclist-Student Bicyclists who travel between their home and their school. Grade school bicycle commuters typically commute less than five miles to school, cross few arterials, and often use the sidewalk. College and university students are likely to bicycle less than five miles as well, but may travel as long as ten to fifteen miles. Like employee commuters, student commuters are likely to value direct routes, and may be more likely than employee commuters to prefer routes with less traffic and arterial crossings.

Experienced Bicyclist Includes those who prefer the most direct route between origin and destination and prefer riding within or near the vehicle

APPENDIX B

EXISTING TRAFFIC COUNTS AND MODEL VOLUMES

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Palm Avenue
E/W: Stetson Avenue
Weather: Clear

File Name : 01_HEM_Palm_Stet AM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 1

Groups Printed- Total Volume

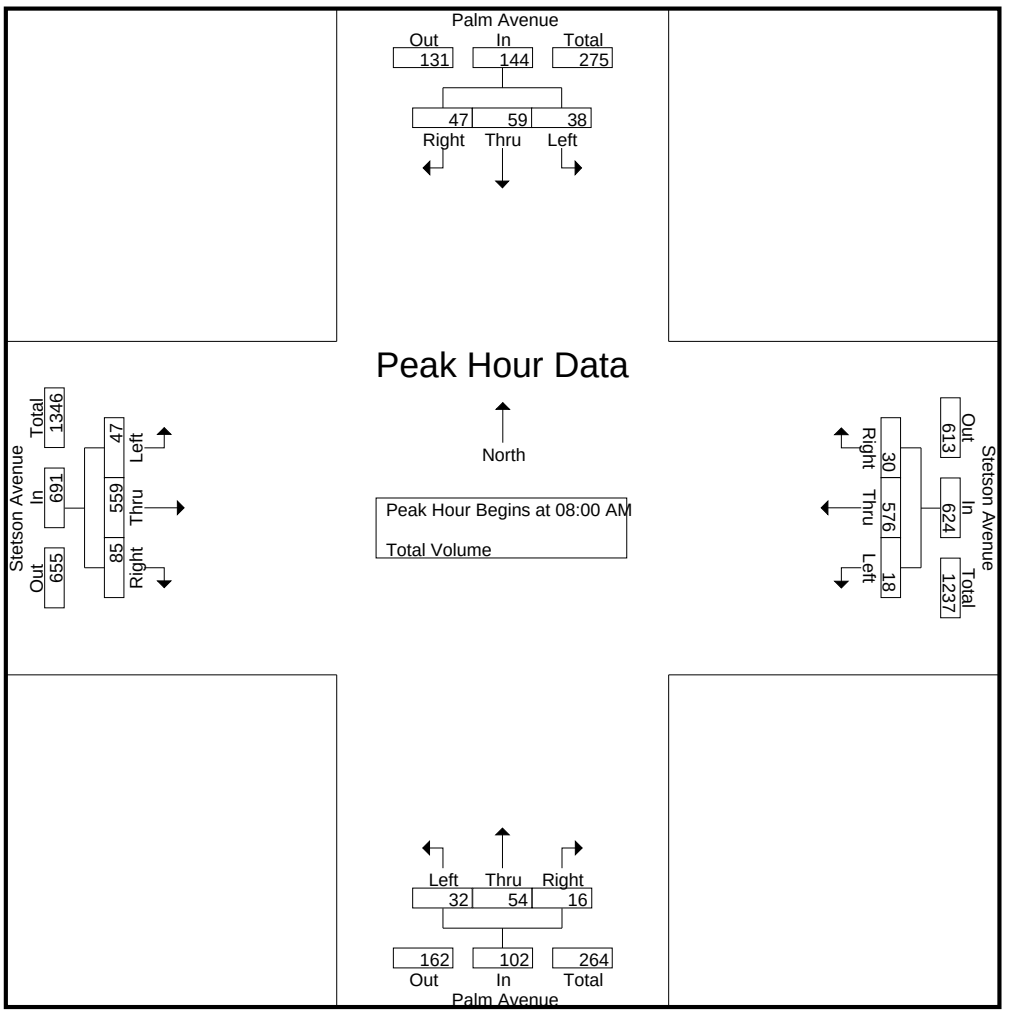
	Palm Avenue Southbound				Stetson Avenue Westbound				Palm Avenue Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	11	8	20	3	94	1	98	7	6	5	18	12	90	14	116	252
07:15 AM	4	14	13	31	4	97	7	108	6	11	7	24	14	80	10	104	267
07:30 AM	8	3	20	31	5	124	6	135	7	9	6	22	10	102	8	120	308
07:45 AM	12	7	17	36	4	123	10	137	11	10	7	28	10	98	13	121	322
Total	25	35	58	118	16	438	24	478	31	36	25	92	46	370	45	461	1149
08:00 AM	10	10	20	40	7	143	6	156	11	18	2	31	12	121	7	140	367
08:15 AM	6	10	13	29	4	148	7	159	5	9	7	21	14	168	25	207	416
08:30 AM	17	22	8	47	2	143	10	155	6	9	4	19	13	142	31	186	407
08:45 AM	5	17	6	28	5	142	7	154	10	18	3	31	8	128	22	158	371
Total	38	59	47	144	18	576	30	624	32	54	16	102	47	559	85	691	1561
Grand Total	63	94	105	262	34	1014	54	1102	63	90	41	194	93	929	130	1152	2710
Apprch %	24	35.9	40.1		3.1	92	4.9		32.5	46.4	21.1		8.1	80.6	11.3		
Total %	2.3	3.5	3.9	9.7	1.3	37.4	2	40.7	2.3	3.3	1.5	7.2	3.4	34.3	4.8	42.5	

	Palm Avenue Southbound				Stetson Avenue Westbound				Palm Avenue Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	10	10	**20**	40	**7**	143	6	156	**11**	**18**	2	**31**	12	121	7	140	367
08:15 AM	6	10	13	29	4	**148**	7	**159**	5	9	**7**	21	**14**	**168**	25	**207**	**416**
08:30 AM	**17**	**22**	8	**47**	2	143	**10**	155	6	9	4	19	13	142	**31**	186	407
08:45 AM	5	17	6	28	5	142	7	154	10	18	3	31	8	128	22	158	371
Total Volume	38	59	47	144	18	576	30	624	32	54	16	102	47	559	85	691	1561
% App. Total	26.4	41	32.6		2.9	92.3	4.8		31.4	52.9	15.7		6.8	80.9	12.3		
PHF	.559	.670	.588	.766	.643	.973	.750	.981	.727	.750	.571	.823	.839	.832	.685	.835	.938

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Palm Avenue
E/W: Stetson Avenue
Weather: Clear

File Name : 01_HEM_Palm_Stet AM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				07:15 AM				08:00 AM			
+0 mins.	12	7	17	36	**7**	143	6	156	6	11	**7**	24	12	121	7	140
+15 mins.	10	10	**20**	40	4	**148**	7	**159**	7	9	6	22	**14**	**168**	25	**207**
+30 mins.	6	10	13	29	2	143	**10**	155	**11**	10	7	28	13	142	**31**	186
+45 mins.	**17**	**22**	8	**47**	5	142	7	154	11	**18**	2	**31**	8	128	22	158
Total Volume	45	49	58	152	18	576	30	624	35	48	22	105	47	559	85	691
% App. Total	29.6	32.2	38.2		2.9	92.3	4.8		33.3	45.7	21		6.8	80.9	12.3	
PHF	.662	.557	.725	.809	.643	.973	.750	.981	.795	.667	.786	.847	.839	.832	.685	.835

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Palm Avenue
E/W: Stetson Avenue
Weather: Clear

File Name : 01_HEM_Palm_Stet PM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 1

Groups Printed- Total Volume

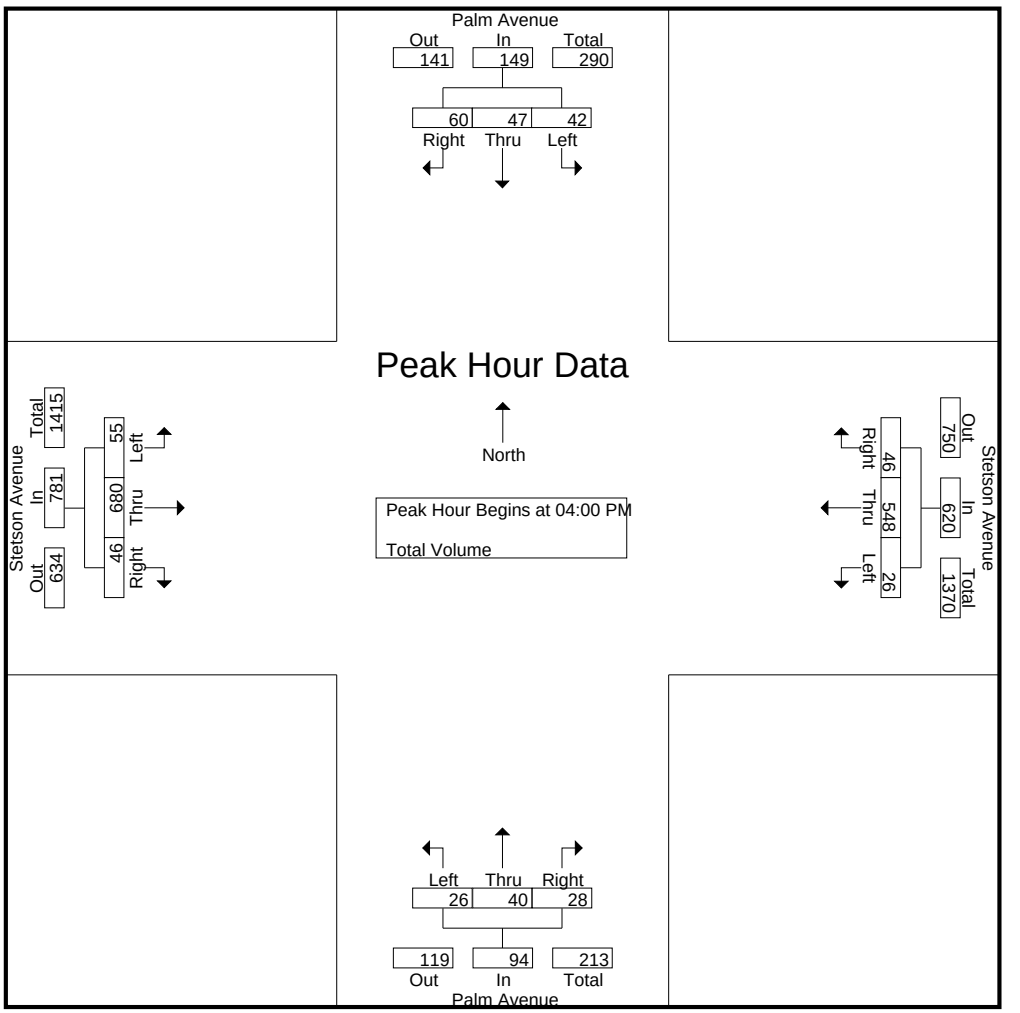
	Palm Avenue Southbound				Stetson Avenue Westbound				Palm Avenue Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	10	13	15	38	5	149	21	175	12	15	8	35	14	153	8	175	423
04:15 PM	10	9	17	36	8	138	13	159	5	12	6	23	15	181	11	207	425
04:30 PM	10	13	14	37	8	124	9	141	3	7	9	19	15	178	12	205	402
04:45 PM	12	12	14	38	5	137	3	145	6	6	5	17	11	168	15	194	394
Total	42	47	60	149	26	548	46	620	26	40	28	94	55	680	46	781	1644
05:00 PM	9	9	11	29	10	140	12	162	6	6	4	16	19	166	12	197	404
05:15 PM	7	15	14	36	4	129	8	141	5	15	3	23	12	153	20	185	385
05:30 PM	6	7	13	26	12	127	7	146	8	7	4	19	19	150	14	183	374
05:45 PM	8	6	14	28	1	103	6	110	8	8	8	24	18	156	13	187	349
Total	30	37	52	119	27	499	33	559	27	36	19	82	68	625	59	752	1512
Grand Total	72	84	112	268	53	1047	79	1179	53	76	47	176	123	1305	105	1533	3156
Apprch %	26.9	31.3	41.8		4.5	88.8	6.7		30.1	43.2	26.7		8	85.1	6.8		
Total %	2.3	2.7	3.5	8.5	1.7	33.2	2.5	37.4	1.7	2.4	1.5	5.6	3.9	41.3	3.3	48.6	

	Palm Avenue Southbound				Stetson Avenue Westbound				Palm Avenue Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	10	**13**	15	**38**	5	**149**	**21**	**175**	**12**	**15**	8	**35**	14	153	8	175	423
04:15 PM	10	9	**17**	36	**8**	138	13	159	5	12	6	23	**15**	**181**	11	**207**	**425**
04:30 PM	10	13	14	37	8	124	9	141	3	7	**9**	19	15	178	12	205	402
04:45 PM	**12**	12	14	38	5	137	3	145	6	6	5	17	11	168	**15**	194	394
Total Volume	42	47	60	149	26	548	46	620	26	40	28	94	55	680	46	781	1644
% App. Total	28.2	31.5	40.3		4.2	88.4	7.4		27.7	42.6	29.8		7	87.1	5.9		
PHF	.875	.904	.882	.980	.813	.919	.548	.886	.542	.667	.778	.671	.917	.939	.767	.943	.967

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Palm Avenue
E/W: Stetson Avenue
Weather: Clear

File Name : 01_HEM_Palm_Stet PM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:15 PM			
+0 mins.	10	**13**	15	**38**	5	**149**	**21**	**175**	**12**	**15**	8	**35**	15	**181**	11	**207**
+15 mins.	10	9	**17**	36	**8**	138	13	159	5	12	6	23	15	178	12	205
+30 mins.	10	13	14	37	8	124	9	141	3	7	**9**	19	11	168	**15**	194
+45 mins.	**12**	12	14	38	5	137	3	145	6	6	5	17	**19**	166	12	197
Total Volume	42	47	60	149	26	548	46	620	26	40	28	94	60	693	50	803
% App. Total	28.2	31.5	40.3		4.2	88.4	7.4		27.7	42.6	29.8		7.5	86.3	6.2	
PHF	.875	.904	.882	.980	.813	.919	.548	.886	.542	.667	.778	.671	.789	.957	.833	.970

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Elk Street
E/W: Stetson Avenue
Weather: Clear

File Name : 02_HEM_Elk_Stet AM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 1

Groups Printed- Total Volume

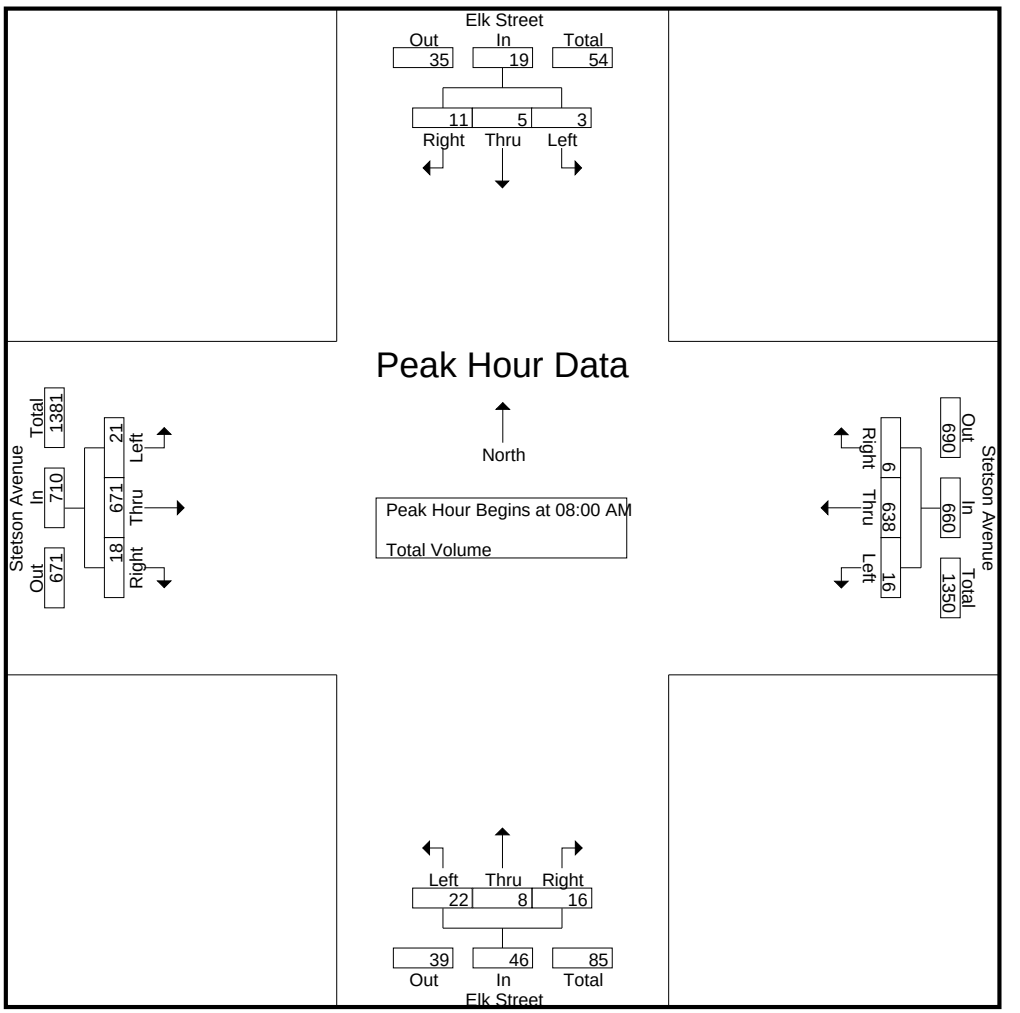
	Elk Street Southbound				Stetson Avenue Westbound				Elk Street Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	5	5	2	118	0	120	5	0	6	11	5	113	5	123	259
07:15 AM	0	1	2	3	3	115	0	118	6	0	8	14	2	96	2	100	235
07:30 AM	1	0	2	3	5	143	1	149	4	1	2	7	3	117	2	122	281
07:45 AM	2	0	2	4	1	147	3	151	3	3	1	7	5	120	5	130	292
Total	3	1	11	15	11	523	4	538	18	4	17	39	15	446	14	475	1067
08:00 AM	0	1	4	5	7	171	0	178	10	2	8	20	3	143	5	151	354
08:15 AM	1	2	3	6	2	153	1	156	6	3	5	14	6	187	3	196	372
08:30 AM	1	0	3	4	2	151	3	156	3	2	1	6	5	193	6	204	370
08:45 AM	1	2	1	4	5	163	2	170	3	1	2	6	7	148	4	159	339
Total	3	5	11	19	16	638	6	660	22	8	16	46	21	671	18	710	1435
Grand Total	6	6	22	34	27	1161	10	1198	40	12	33	85	36	1117	32	1185	2502
Apprch %	17.6	17.6	64.7		2.3	96.9	0.8		47.1	14.1	38.8		3	94.3	2.7		
Total %	0.2	0.2	0.9	1.4	1.1	46.4	0.4	47.9	1.6	0.5	1.3	3.4	1.4	44.6	1.3	47.4	

	Elk Street Southbound				Stetson Avenue Westbound				Elk Street Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	1	**4**	5	**7**	**171**	0	**178**	**10**	2	**8**	**20**	3	143	5	151	354
08:15 AM	**1**	**2**	3	**6**	2	153	1	156	6	**3**	5	14	6	187	3	196	**372**
08:30 AM	1	0	3	4	2	151	**3**	156	3	2	1	6	5	**193**	**6**	**204**	370
08:45 AM	1	2	1	4	5	163	2	170	3	1	2	6	**7**	148	4	159	339
Total Volume	3	5	11	19	16	638	6	660	22	8	16	46	21	671	18	710	1435
% App. Total	15.8	26.3	57.9		2.4	96.7	0.9		47.8	17.4	34.8		3	94.5	2.5		
PHF	.750	.625	.688	.792	.571	.933	.500	.927	.550	.667	.500	.575	.750	.869	.750	.870	.964

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Elk Street
E/W: Stetson Avenue
Weather: Clear

File Name : 02_HEM_Elk_Stet AM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				07:15 AM				08:00 AM			
+0 mins.	**2**	0	2	4	**7**	**171**	0	**178**	6	0	**8**	14	3	143	5	151
+15 mins.	0	1	**4**	5	2	153	1	156	4	1	2	7	6	187	3	196
+30 mins.	1	**2**	3	**6**	2	151	**3**	156	3	**3**	1	7	5	**193**	**6**	**204**
+45 mins.	1	0	3	4	5	163	2	170	**10**	2	8	**20**	**7**	148	4	159
Total Volume	4	3	12	19	16	638	6	660	23	6	19	48	21	671	18	710
% App. Total	21.1	15.8	63.2		2.4	96.7	0.9		47.9	12.5	39.6		3	94.5	2.5	
PHF	.500	.375	.750	.792	.571	.933	.500	.927	.575	.500	.594	.600	.750	.869	.750	.870

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Elk Street
E/W: Stetson Avenue
Weather: Clear

File Name : 02_HEM_Elk_Stet PM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 1

Groups Printed- Total Volume

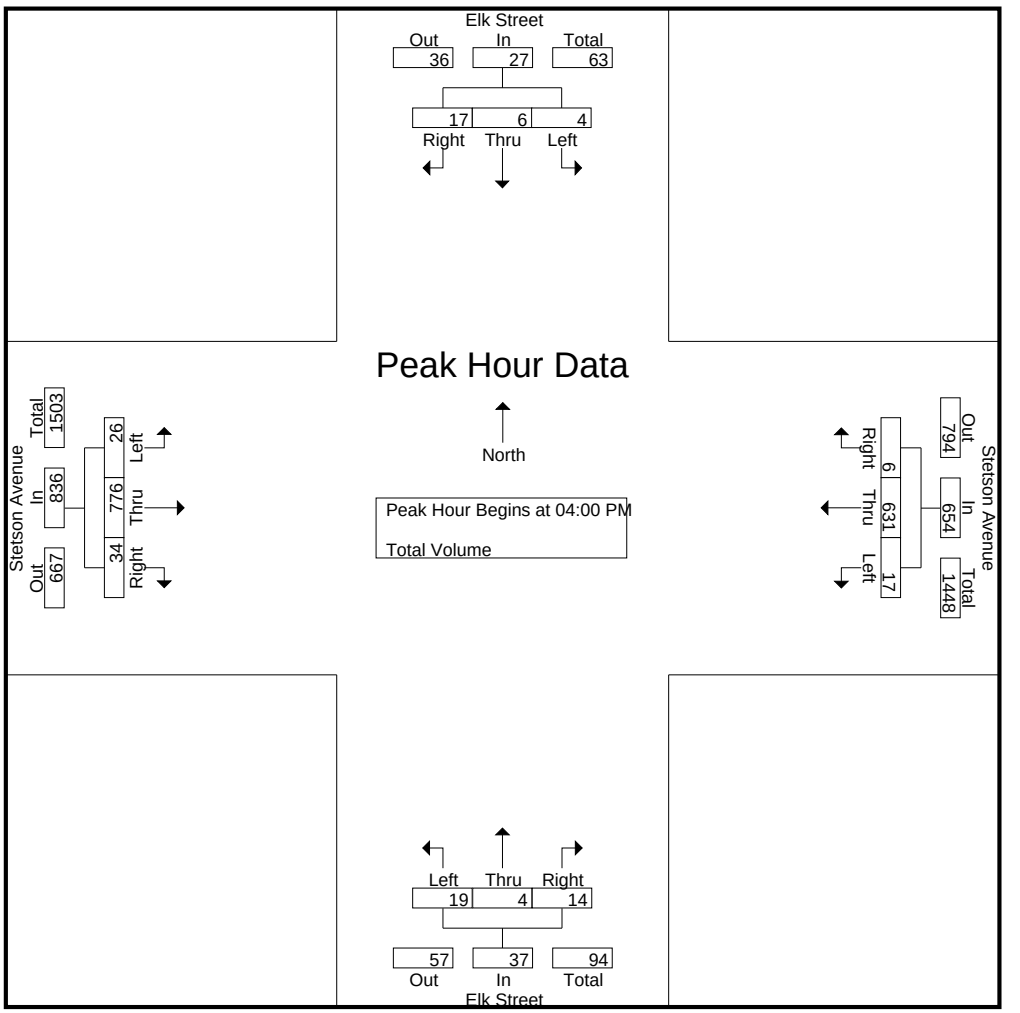
	Elk Street Southbound				Stetson Avenue Westbound				Elk Street Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	7	8	4	187	1	192	5	1	3	9	5	192	4	201	410
04:15 PM	3	2	4	9	7	147	1	155	3	1	0	4	6	192	6	204	372
04:30 PM	0	1	4	5	2	144	0	146	6	1	6	13	7	203	11	221	385
04:45 PM	1	2	2	5	4	153	4	161	5	1	5	11	8	189	13	210	387
Total	4	6	17	27	17	631	6	654	19	4	14	37	26	776	34	836	1554
05:00 PM	3	0	5	8	3	148	3	154	5	0	1	6	9	188	9	206	374
05:15 PM	3	2	4	9	4	143	2	149	9	1	3	13	11	189	8	208	379
05:30 PM	0	1	3	4	6	140	3	149	4	1	5	10	5	165	5	175	338
05:45 PM	1	0	2	3	15	109	6	130	4	1	3	8	3	184	6	193	334
Total	7	3	14	24	28	540	14	582	22	3	12	37	28	726	28	782	1425
Grand Total	11	9	31	51	45	1171	20	1236	41	7	26	74	54	1502	62	1618	2979
Apprch %	21.6	17.6	60.8		3.6	94.7	1.6		55.4	9.5	35.1		3.3	92.8	3.8		
Total %	0.4	0.3	1	1.7	1.5	39.3	0.7	41.5	1.4	0.2	0.9	2.5	1.8	50.4	2.1	54.3	

	Elk Street Southbound				Stetson Avenue Westbound				Elk Street Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	**7**	8	4	**187**	1	**192**	5	**1**	3	9	5	192	4	201	**410**
04:15 PM	**3**	**2**	4	**9**	**7**	147	1	155	3	1	0	4	6	192	6	204	372
04:30 PM	0	1	4	5	2	144	0	146	**6**	1	**6**	**13**	7	**203**	11	**221**	385
04:45 PM	1	2	2	5	4	153	**4**	161	5	1	5	11	**8**	189	**13**	210	387
Total Volume	4	6	17	27	17	631	6	654	19	4	14	37	26	776	34	836	1554
% App. Total	14.8	22.2	63		2.6	96.5	0.9		51.4	10.8	37.8		3.1	92.8	4.1		
PHF	.333	.750	.607	.750	.607	.844	.375	.852	.792	1.00	.583	.712	.813	.956	.654	.946	.948

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Elk Street
E/W: Stetson Avenue
Weather: Clear

File Name : 02_HEM_Elk_Stet PM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:30 PM				04:30 PM			
+0 mins.	0	1	**7**	8	4	**187**	1	**192**	6	**1**	**6**	**13**	7	**203**	11	**221**
+15 mins.	**3**	**2**	4	**9**	**7**	147	1	155	5	1	5	11	8	189	**13**	210
+30 mins.	0	1	4	5	2	144	0	146	5	0	1	6	9	188	9	206
+45 mins.	1	2	2	5	4	153	**4**	161	**9**	1	3	13	**11**	189	8	208
Total Volume	4	6	17	27	17	631	6	654	25	3	15	43	35	769	41	845
% App. Total	14.8	22.2	63		2.6	96.5	0.9		58.1	7	34.9		4.1	91	4.9	
PHF	.333	.750	.607	.750	.607	.844	.375	.852	.694	.750	.625	.827	.795	.947	.788	.956

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Lyon Avenue
E/W: Stetson Avenue
Weather: Clear

File Name : 03_HEM_Lyon_Stet AM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 1

Groups Printed- Total Volume

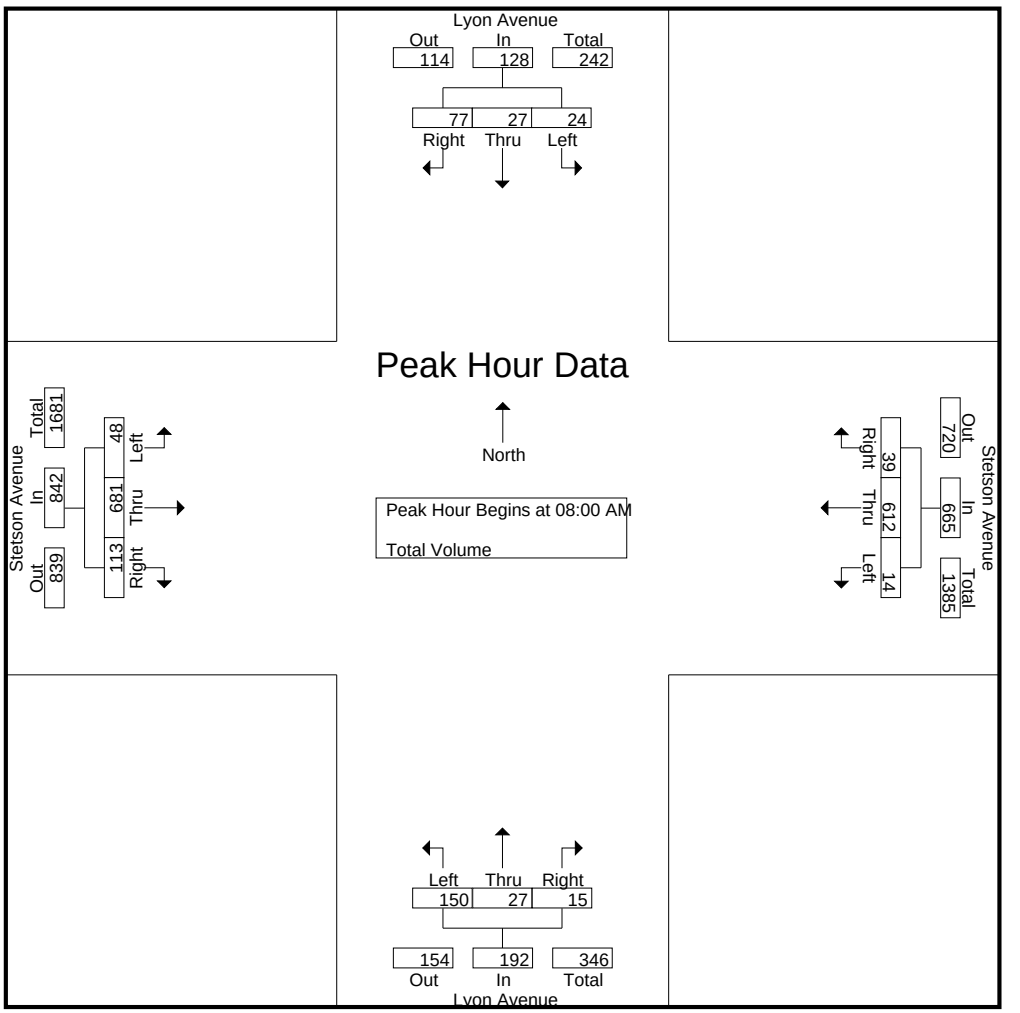
	Lyon Avenue Southbound				Stetson Avenue Westbound				Lyon Avenue Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	3	13	20	1	112	9	122	23	13	2	38	7	119	8	134	314
07:15 AM	5	10	9	24	0	108	9	117	34	14	1	49	12	101	9	122	312
07:30 AM	5	5	17	27	0	141	6	147	28	7	1	36	13	110	15	138	348
07:45 AM	1	11	17	29	3	144	8	155	36	11	7	54	16	129	9	154	392
Total	15	29	56	100	4	505	32	541	121	45	11	177	48	459	41	548	1366
08:00 AM	7	7	23	37	3	168	7	178	39	2	8	49	9	140	14	163	427
08:15 AM	9	2	20	31	4	162	11	177	27	4	1	32	14	191	27	232	472
08:30 AM	6	11	19	36	1	143	7	151	36	9	3	48	13	198	44	255	490
08:45 AM	2	7	15	24	6	139	14	159	48	12	3	63	12	152	28	192	438
Total	24	27	77	128	14	612	39	665	150	27	15	192	48	681	113	842	1827
Grand Total	39	56	133	228	18	1117	71	1206	271	72	26	369	96	1140	154	1390	3193
Apprch %	17.1	24.6	58.3		1.5	92.6	5.9		73.4	19.5	7		6.9	82	11.1		
Total %	1.2	1.8	4.2	7.1	0.6	35	2.2	37.8	8.5	2.3	0.8	11.6	3	35.7	4.8	43.5	

	Lyon Avenue Southbound				Stetson Avenue Westbound				Lyon Avenue Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	7	7	**23**	**37**	3	**168**	7	**178**	39	2	**8**	49	9	140	14	163	427
08:15 AM	**9**	2	20	31	4	162	11	177	27	4	1	32	**14**	191	27	232	472
08:30 AM	6	**11**	19	36	1	143	7	151	36	9	3	48	13	**198**	**44**	**255**	**490**
08:45 AM	2	7	15	24	**6**	139	**14**	159	**48**	**12**	3	**63**	12	152	28	192	438
Total Volume	24	27	77	128	14	612	39	665	150	27	15	192	48	681	113	842	1827
% App. Total	18.8	21.1	60.2		2.1	92	5.9		78.1	14.1	7.8		5.7	80.9	13.4		
PHF	.667	.614	.837	.865	.583	.911	.696	.934	.781	.563	.469	.762	.857	.860	.642	.825	.932

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Lyon Avenue
E/W: Stetson Avenue
Weather: Clear

File Name : 03_HEM_Lyon_Stet AM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	1	**11**	17	29	3	**168**	7	**178**	39	2	**8**	49	9	140	14	163
+15 mins.	7	7	**23**	**37**	4	162	11	177	27	4	1	32	**14**	191	27	232
+30 mins.	**9**	2	20	31	1	143	7	151	36	9	3	48	13	**198**	**44**	**255**
+45 mins.	6	11	19	36	**6**	139	**14**	159	**48**	**12**	3	**63**	12	152	28	192
Total Volume	23	31	79	133	14	612	39	665	150	27	15	192	48	681	113	842
% App. Total	17.3	23.3	59.4		2.1	92	5.9		78.1	14.1	7.8		5.7	80.9	13.4	
PHF	.639	.705	.859	.899	.583	.911	.696	.934	.781	.563	.469	.762	.857	.860	.642	.825

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Lyon Avenue
E/W: Stetson Avenue
Weather: Clear

File Name : 03_HEM_Lyon_Stet PM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 1

Groups Printed- Total Volume

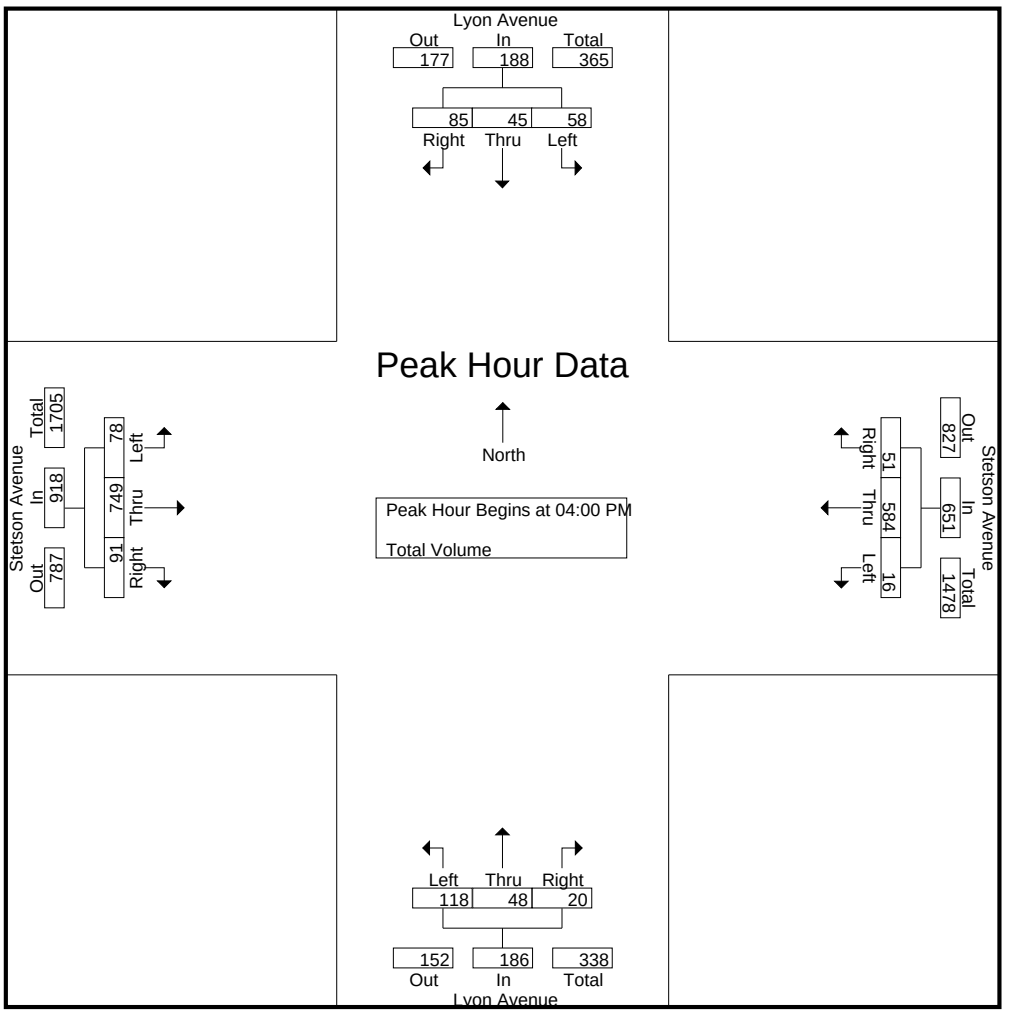
	Lyon Avenue Southbound				Stetson Avenue Westbound				Lyon Avenue Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	8	12	31	51	5	166	14	185	57	21	8	86	19	175	23	217	539
04:15 PM	15	15	16	46	4	139	15	158	21	6	2	29	22	199	27	248	481
04:30 PM	18	10	22	50	3	132	10	145	16	11	5	32	20	187	17	224	451
04:45 PM	17	8	16	41	4	147	12	163	24	10	5	39	17	188	24	229	472
Total	58	45	85	188	16	584	51	651	118	48	20	186	78	749	91	918	1943
05:00 PM	15	14	22	51	3	137	15	155	20	5	5	30	18	184	27	229	465
05:15 PM	5	5	16	26	1	148	14	163	27	18	6	51	13	203	21	237	477
05:30 PM	12	9	20	41	2	130	9	141	21	8	3	32	13	152	25	190	404
05:45 PM	12	4	15	31	4	104	8	116	17	5	1	23	15	191	28	234	404
Total	44	32	73	149	10	519	46	575	85	36	15	136	59	730	101	890	1750
Grand Total	102	77	158	337	26	1103	97	1226	203	84	35	322	137	1479	192	1808	3693
Apprch %	30.3	22.8	46.9		2.1	90	7.9		63	26.1	10.9		7.6	81.8	10.6		
Total %	2.8	2.1	4.3	9.1	0.7	29.9	2.6	33.2	5.5	2.3	0.9	8.7	3.7	40	5.2	49	

	Lyon Avenue Southbound				Stetson Avenue Westbound				Lyon Avenue Northbound				Stetson Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	8	12	**31**	**51**	**5**	**166**	14	**185**	**57**	**21**	**8**	**86**	19	175	23	217	**539**
04:15 PM	15	**15**	16	46	4	139	**15**	158	21	6	2	29	**22**	**199**	**27**	**248**	481
04:30 PM	**18**	10	22	50	3	132	10	145	16	11	5	32	20	187	17	224	451
04:45 PM	17	8	16	41	4	147	12	163	24	10	5	39	17	188	24	229	472
Total Volume	58	45	85	188	16	584	51	651	118	48	20	186	78	749	91	918	1943
% App. Total	30.9	23.9	45.2		2.5	89.7	7.8		63.4	25.8	10.8		8.5	81.6	9.9		
PHF	.806	.750	.685	.922	.800	.880	.850	.880	.518	.571	.625	.541	.886	.941	.843	.925	.901

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Lyon Avenue
E/W: Stetson Avenue
Weather: Clear

File Name : 03_HEM_Lyon_Stet PM
Site Code : 23624110
Start Date : 2/8/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:15 PM			
+0 mins.	8	12	**31**	**51**	**5**	**166**	14	**185**	**57**	**21**	**8**	**86**	**22**	**199**	**27**	**248**
+15 mins.	15	**15**	16	46	4	139	**15**	158	21	6	2	29	20	187	17	224
+30 mins.	**18**	10	22	50	3	132	10	145	16	11	5	32	17	188	24	229
+45 mins.	17	8	16	41	4	147	12	163	24	10	5	39	18	184	27	229
Total Volume	58	45	85	188	16	584	51	651	118	48	20	186	77	758	95	930
% App. Total	30.9	23.9	45.2		2.5	89.7	7.8		63.4	25.8	10.8		8.3	81.5	10.2	
PHF	.806	.750	.685	.922	.800	.880	.850	.880	.518	.571	.625	.541	.875	.952	.880	.938

APPENDIX C

HCM ANALYSIS WORKSHEETS

EXISTING TRAFFIC CONDITION

Vistro File: C:\...\BAW23003 Vistro.vistro
Report File: C:\...\E AM.pdf

Scenario 1 E AM
2/28/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	S Elk St/WStetson Ave	Signalized	HCM 7th Edition	SB Left	0.318	7.6	A
2	S Palm Ave/W Stetson Ave	Signalized	HCM 7th Edition	WB Left	0.406	14.3	B
3	Lyon Ave S/W Stetson Ave	Signalized	HCM 7th Edition	EB Left	0.523	20.0	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: S Elk St/WStetson Ave

Control Type:	Signalized	Delay (sec / veh):	7.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.318

Intersection Setup

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	75.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	22	8	16	3	5	11	21	671	18	16	638	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	8	16	3	5	11	21	671	18	16	638	6
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	2	4	1	1	3	5	174	5	4	165	2
Total Analysis Volume [veh/h]	23	8	17	3	5	11	22	696	19	17	662	6
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	10	26	0	10	26	0	9	25	0	9	25	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	4	0	3	2	48	48	1	48	48
g / C, Green / Cycle	0.03	0.06	0.00	0.04	0.03	0.68	0.68	0.02	0.68	0.68
(v / s)_i Volume / Saturation Flow Rate	0.01	0.02	0.00	0.01	0.01	0.21	0.21	0.01	0.20	0.20
s, saturation flow rate [veh/h]	1629	1527	1629	1525	1629	1710	1694	1629	1710	1705
c, Capacity [veh/h]	45	95	9	61	44	1167	1156	36	1158	1155
d1, Uniform Delay [s]	33.68	31.41	34.79	32.70	33.72	4.49	4.49	33.95	4.54	4.54
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.59	1.46	18.20	2.22	8.68	0.68	0.69	9.37	0.63	0.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.51	0.26	0.32	0.26	0.50	0.31	0.31	0.47	0.29	0.29
d, Delay for Lane Group [s/veh]	42.28	32.87	52.99	34.92	42.40	5.17	5.18	43.32	5.17	5.18
Lane Group LOS	D	C	D	C	D	A	A	D	A	A
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.48	0.43	0.10	0.30	0.45	1.39	1.38	0.37	1.60	1.59
50th-Percentile Queue Length [ft/ln]	12.07	10.75	2.45	7.44	11.23	34.84	34.59	9.29	39.91	39.81
95th-Percentile Queue Length [veh/ln]	0.87	0.77	0.18	0.54	0.81	2.51	2.49	0.67	2.87	2.87
95th-Percentile Queue Length [ft/ln]	21.73	19.35	4.41	13.39	20.21	62.70	62.26	16.72	71.83	71.66

Movement, Approach, & Intersection Results

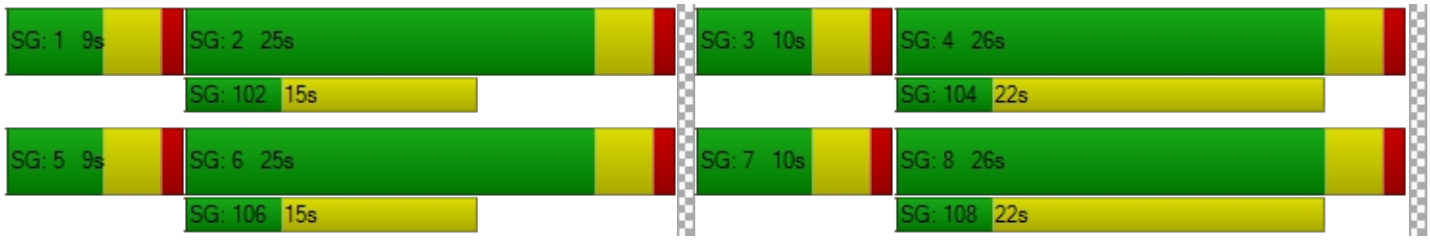
d_M, Delay for Movement [s/veh]	42.28	32.87	32.87	52.99	34.92	34.92	42.40	5.18	5.18	43.32	5.17	5.18
Movement LOS	D	C	C	D	C	C	D	A	A	D	A	A
d_A, Approach Delay [s/veh]	37.38			37.77			6.29			6.12		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	7.62											
Intersection LOS	A											
Intersection V/C	0.318											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	1.958	1.944	2.708	2.562
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	627	627	599	599
d_b, Bicycle Delay [s]	16.52	16.52	17.21	17.21
l_b,int, Bicycle LOS Score for Intersection	1.639	1.591	2.168	2.125
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: S Palm Ave/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	14.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.406

Intersection Setup

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	32	54	16	38	59	47	47	559	85	18	576	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	54	16	38	59	47	47	559	85	18	576	30
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	14	4	10	16	13	13	149	23	5	154	8
Total Analysis Volume [veh/h]	34	58	17	41	63	50	50	596	91	19	614	32
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	9	25	0	10	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	9	3	9	3	41	41	2	39	39
g / C, Green / Cycle	0.04	0.12	0.04	0.13	0.05	0.59	0.59	0.02	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.02	0.05	0.03	0.07	0.03	0.21	0.21	0.01	0.19	0.19
s, saturation flow rate [veh/h]	1629	1644	1629	1586	1629	1710	1632	1629	1710	1680
c, Capacity [veh/h]	60	203	67	203	76	998	953	39	960	943
d1, Uniform Delay [s]	33.30	28.29	33.13	28.76	32.96	7.66	7.67	33.86	8.35	8.35
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.34	1.12	8.65	2.38	9.49	0.98	1.03	9.03	0.96	0.98
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.57	0.37	0.61	0.56	0.66	0.35	0.35	0.49	0.34	0.34
d, Delay for Lane Group [s/veh]	41.64	29.41	41.77	31.14	42.45	8.64	8.69	42.89	9.31	9.33
Lane Group LOS	D	C	D	C	D	A	A	D	A	A
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.70	1.20	0.83	1.85	0.99	2.36	2.27	0.40	2.33	2.30
50th-Percentile Queue Length [ft/ln]	17.45	29.93	20.66	46.27	24.65	59.05	56.86	10.00	58.37	57.59
95th-Percentile Queue Length [veh/ln]	1.26	2.15	1.49	3.33	1.78	4.25	4.09	0.72	4.20	4.15
95th-Percentile Queue Length [ft/ln]	31.41	53.87	37.18	83.29	44.38	106.29	102.34	17.99	105.06	103.67

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.64	29.41	29.41	41.77	31.14	31.14	42.45	8.66	8.69	42.89	9.32	9.33
Movement LOS	D	C	C	D	C	C	D	A	A	D	A	A
d_A, Approach Delay [s/veh]	33.22			33.97			10.96			10.28		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	14.27											
Intersection LOS	B											
Intersection V/C	0.406											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	2.006	2.025	2.662	2.632
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	627	627	599	627
d_b, Bicycle Delay [s]	16.52	16.52	17.21	16.52
l_b,int, Bicycle LOS Score for Intersection	1.739	1.814	2.168	2.108
Bicycle LOS	A	A	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 3: Lyon Ave S/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	20.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.523

Intersection Setup

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	60.00	100.00	60.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			25.00			45.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	150	27	15	24	27	77	48	681	113	14	612	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	27	15	24	27	77	48	681	113	14	612	39
Peak Hour Factor	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	7	4	6	7	21	13	183	30	4	164	10
Total Analysis Volume [veh/h]	161	29	16	26	29	83	52	731	121	15	657	42
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	22	29	0	9	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	11	10	4	52	52	2	49	49
g / C, Green / Cycle	0.12	0.12	0.12	0.11	0.04	0.57	0.57	0.02	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.10	0.02	0.01	0.09	0.03	0.26	0.26	0.01	0.21	0.21
s, saturation flow rate [veh/h]	1629	1710	1454	1533	1629	1710	1626	1629	1710	1674
c, Capacity [veh/h]	201	211	179	169	67	977	929	29	937	918
d1, Uniform Delay [s]	38.43	35.23	35.02	39.21	42.78	11.12	11.12	43.83	11.59	11.59
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.30	0.29	0.21	9.35	17.25	1.48	1.56	12.95	1.15	1.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.14	0.09	0.82	0.78	0.45	0.45	0.51	0.38	0.38
d, Delay for Lane Group [s/veh]	45.73	35.53	35.23	48.56	60.03	12.60	12.68	56.78	12.74	12.77
Lane Group LOS	D	D	D	D	E	B	B	E	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.73	0.57	0.31	3.41	1.42	4.59	4.38	0.43	3.83	3.77
50th-Percentile Queue Length [ft/ln]	93.25	14.15	7.79	85.30	35.45	114.66	109.58	10.68	95.81	94.13
95th-Percentile Queue Length [veh/ln]	6.71	1.02	0.56	6.14	2.55	8.10	7.82	0.77	6.90	6.78
95th-Percentile Queue Length [ft/ln]	167.85	25.47	14.02	153.54	63.81	202.47	195.42	19.23	172.45	169.44

Movement, Approach, & Intersection Results

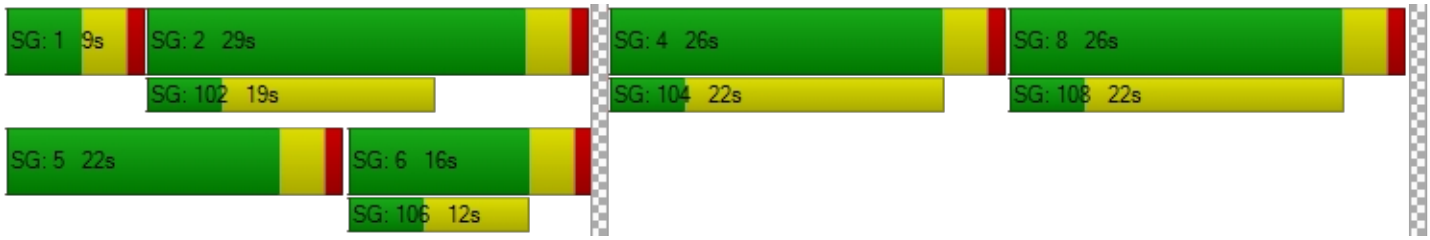
d_M, Delay for Movement [s/veh]	45.73	35.53	35.23	48.56	48.56	48.56	60.03	12.63	12.68	56.78	12.76	12.77
Movement LOS	D	D	D	D	D	D	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	43.48			48.56			15.37			13.68		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	20.04											
Intersection LOS	C											
Intersection V/C	0.523											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.47	36.47	36.47	36.47
l_p,int, Pedestrian LOS Score for Intersectio	2.253	1.822	2.829	2.688
Crosswalk LOS	B	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	489	555	267
d_b, Bicycle Delay [s]	25.71	25.71	23.49	33.82
l_b,int, Bicycle LOS Score for Intersection	1.900	1.787	2.305	2.149
Bicycle LOS	A	A	B	B

Sequence

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



Vistro File: C:\...\BAW23003 Vistro.vistro
Report File: C:\...\E PM.pdf

Scenario 2 E PM
2/28/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	S Elk St/WStetson Ave	Signalized	HCM 7th Edition	SB Left	0.364	8.2	A
2	S Palm Ave/W Stetson Ave	Signalized	HCM 7th Edition	EB Left	0.423	14.4	B
3	Lyon Ave S/W Stetson Ave	Signalized	HCM 7th Edition	WB Left	0.580	23.2	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: S Elk St/WStetson Ave

Control Type:	Signalized	Delay (sec / veh):	8.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.364

Intersection Setup

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	75.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	19	4	14	4	6	17	26	776	34	17	631	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	4	14	4	6	17	26	776	34	17	631	6
Peak Hour Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	1	4	1	2	4	7	205	9	4	166	2
Total Analysis Volume [veh/h]	20	4	15	4	6	18	27	819	36	18	666	6
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	10	26	0	10	26	0	9	35	0	9	35	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	6	0	4	2	56	56	2	56	56
g / C, Green / Cycle	0.02	0.07	0.01	0.05	0.03	0.70	0.70	0.02	0.70	0.70
(v / s)_i Volume / Saturation Flow Rate	0.01	0.01	0.00	0.02	0.02	0.25	0.25	0.01	0.20	0.20
s, saturation flow rate [veh/h]	1629	1501	1629	1510	1629	1710	1685	1629	1710	1705
c, Capacity [veh/h]	39	106	11	81	49	1199	1181	36	1186	1182
d1, Uniform Delay [s]	38.68	35.09	39.66	36.53	38.39	4.80	4.80	38.77	4.70	4.70
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.89	0.80	18.40	2.04	9.53	0.84	0.85	10.15	0.60	0.60
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.51	0.18	0.36	0.30	0.56	0.36	0.36	0.50	0.28	0.28
d, Delay for Lane Group [s/veh]	48.57	35.90	58.06	38.57	47.92	5.64	5.65	48.92	5.30	5.30
Lane Group LOS	D	D	E	D	D	A	A	D	A	A
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.49	0.37	0.13	0.49	0.62	2.03	2.01	0.45	1.83	1.82
50th-Percentile Queue Length [ft/ln]	12.23	9.16	3.37	12.37	15.60	50.79	50.15	11.15	45.73	45.61
95th-Percentile Queue Length [veh/ln]	0.88	0.66	0.24	0.89	1.12	3.66	3.61	0.80	3.29	3.28
95th-Percentile Queue Length [ft/ln]	22.02	16.49	6.07	22.27	28.08	91.42	90.28	20.07	82.31	82.10

Movement, Approach, & Intersection Results

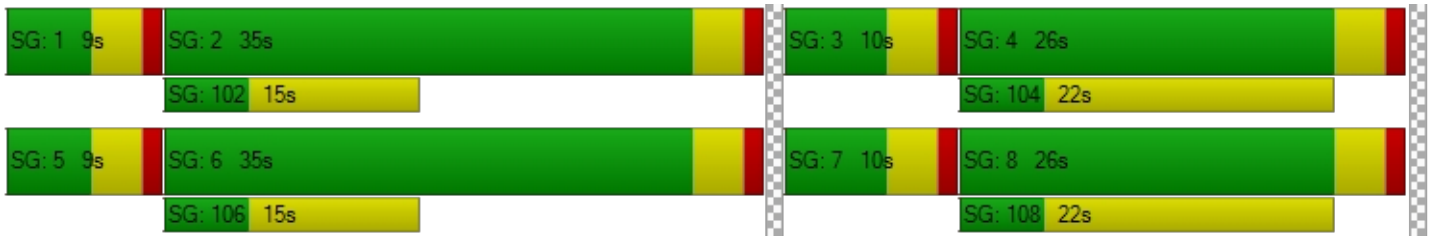
d_M, Delay for Movement [s/veh]	48.57	35.90	35.90	58.06	38.57	38.57	47.92	5.64	5.65	48.92	5.30	5.30
Movement LOS	D	D	D	E	D	D	D	A	A	D	A	A
d_A, Approach Delay [s/veh]	42.39			41.35			6.94			6.44		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	8.16											
Intersection LOS	A											
Intersection V/C	0.364											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	31.56	31.56	31.56	31.56
l_p,int, Pedestrian LOS Score for Intersectio	1.968	1.954	2.759	2.594
Crosswalk LOS	A	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	549	549	774	774
d_b, Bicycle Delay [s]	21.08	21.08	15.05	15.05
l_b,int, Bicycle LOS Score for Intersection	1.624	1.606	2.287	2.129
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: S Palm Ave/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	14.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.423

Intersection Setup

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	26	40	28	42	47	60	55	680	46	26	548	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	40	28	42	47	60	55	680	46	26	548	46
Peak Hour Factor	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	10	7	11	12	16	14	176	12	7	142	12
Total Analysis Volume [veh/h]	27	41	29	43	49	62	57	703	48	27	567	48
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	16	23	0	12	19	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	8	3	9	3	41	41	2	40	40
g / C, Green / Cycle	0.03	0.12	0.04	0.13	0.05	0.58	0.58	0.03	0.57	0.57
(v / s)_i Volume / Saturation Flow Rate	0.02	0.04	0.03	0.07	0.04	0.22	0.22	0.02	0.18	0.18
s, saturation flow rate [veh/h]	1629	1594	1629	1557	1629	1710	1672	1629	1710	1664
c, Capacity [veh/h]	51	185	69	198	81	996	974	51	964	938
d1, Uniform Delay [s]	33.53	28.70	33.08	28.80	32.87	7.87	7.87	33.53	8.17	8.17
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.37	1.27	8.79	2.46	10.52	1.11	1.13	8.37	0.89	0.92
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.53	0.38	0.62	0.56	0.70	0.38	0.38	0.53	0.32	0.32
d, Delay for Lane Group [s/veh]	41.90	29.98	41.87	31.26	43.38	8.98	9.01	41.90	9.06	9.09
Lane Group LOS	D	C	D	C	D	A	A	D	A	A
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.56	1.13	0.87	1.82	1.13	2.63	2.58	0.55	2.19	2.14
50th-Percentile Queue Length [ft/ln]	14.09	28.30	21.65	45.59	28.35	65.70	64.46	13.63	54.65	53.54
95th-Percentile Queue Length [veh/ln]	1.01	2.04	1.56	3.28	2.04	4.73	4.64	0.98	3.93	3.85
95th-Percentile Queue Length [ft/ln]	25.37	50.95	38.98	82.06	51.04	118.25	116.02	24.53	98.37	96.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.90	29.98	29.98	41.87	31.26	31.26	43.38	8.99	9.01	41.90	9.07	9.09
Movement LOS	D	C	C	D	C	C	D	A	A	D	A	A
d_A, Approach Delay [s/veh]	33.30			34.22			11.42			10.45		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	14.37											
Intersection LOS	B											
Intersection V/C	0.423											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	1.989	2.027	2.669	2.657
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	627	627	542	428
d_b, Bicycle Delay [s]	16.52	16.52	18.64	21.67
l_b,int, Bicycle LOS Score for Intersection	1.720	1.814	2.226	2.089
Bicycle LOS	A	A	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 3: Lyon Ave S/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	23.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.580

Intersection Setup

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	60.00	100.00	60.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			25.00			45.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	118	48	20	58	45	85	78	749	91	16	584	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	118	48	20	58	45	85	78	749	91	16	584	51
Peak Hour Factor	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	13	6	16	12	24	22	208	25	4	162	14
Total Analysis Volume [veh/h]	131	53	22	64	50	94	87	831	101	18	648	57
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	22	28	0	10	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	10	10	14	6	48	48	2	44	44
g / C, Green / Cycle	0.11	0.11	0.11	0.16	0.07	0.54	0.54	0.02	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.08	0.03	0.02	0.13	0.05	0.28	0.28	0.01	0.21	0.21
s, saturation flow rate [veh/h]	1629	1710	1454	1561	1629	1710	1646	1629	1710	1662
c, Capacity [veh/h]	181	190	162	244	112	913	879	35	832	809
d1, Uniform Delay [s]	38.74	36.76	36.17	37.06	41.31	13.56	13.56	43.65	15.02	15.02
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.38	0.79	0.38	8.30	10.94	2.12	2.20	11.13	1.62	1.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.72	0.28	0.14	0.85	0.78	0.52	0.52	0.51	0.43	0.43
d, Delay for Lane Group [s/veh]	44.12	37.55	36.55	45.36	52.25	15.68	15.76	54.78	16.63	16.69
Lane Group LOS	D	D	D	D	D	B	B	D	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.97	1.08	0.44	5.00	2.16	5.84	5.64	0.49	4.65	4.54
50th-Percentile Queue Length [ft/ln]	74.13	26.90	10.99	124.89	53.90	145.95	140.98	12.34	116.25	113.52
95th-Percentile Queue Length [veh/ln]	5.34	1.94	0.79	8.66	3.88	9.80	9.53	0.89	8.19	8.04
95th-Percentile Queue Length [ft/ln]	133.44	48.43	19.78	216.53	97.02	245.01	238.35	22.22	204.66	200.89

Movement, Approach, & Intersection Results

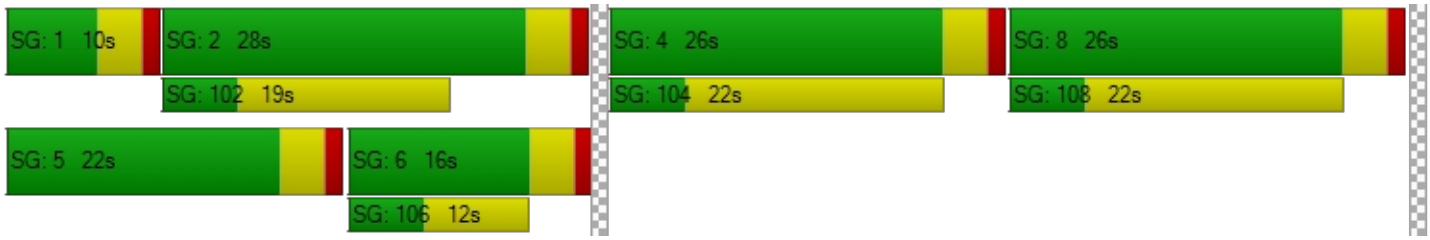
d_M, Delay for Movement [s/veh]	44.12	37.55	36.55	45.36	45.36	45.36	52.25	15.72	15.76	54.78	16.66	16.69
Movement LOS	D	D	D	D	D	D	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	41.62			45.36			18.84			17.61		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	23.16											
Intersection LOS	C											
Intersection V/C	0.580											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.49	36.49	36.49	36.49
l_p,int, Pedestrian LOS Score for Intersectio	2.255	1.881	2.855	2.728
Crosswalk LOS	B	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	488	488	533	266
d_b, Bicycle Delay [s]	25.73	25.73	24.24	33.84
l_b,int, Bicycle LOS Score for Intersection	1.900	1.903	2.400	2.156
Bicycle LOS	A	A	B	B

Sequence

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



OPENING YEAR WITH PROJECT TRAFFIC CONDITIONS (OYP)

Vistro File: C:\...\BAW23003 Vistro.vistro
Report File: C:\...\OYP AM.pdf

Scenario 3 OYP AM
3/7/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	S Elk St/W Stetson Ave	Signalized	HCM 7th Edition	SB Left	0.383	10.6	B
2	S Palm Ave/W Stetson Ave	Signalized	HCM 7th Edition	EB Left	0.470	15.6	B
3	Lyon Ave S/W Stetson Ave	Signalized	HCM 7th Edition	EB Left	0.570	21.4	C
4	S Elk St/Project Driveway	Two-way stop	HCM 7th Edition	WB Left	0.004	9.5	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: S Elk St/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	10.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.383

Intersection Setup

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	75.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	22	8	16	3	5	11	21	671	18	16	638	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	27	0	39	0	0	0	0	0	9	12	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	9	56	3	5	12	23	726	28	29	691	6
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	2	15	1	1	3	6	188	7	8	179	2
Total Analysis Volume [veh/h]	53	9	58	3	5	12	24	753	29	30	717	6
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	10	26	0	9	25	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	7	0	4	2	44	44	2	44	44
g / C, Green / Cycle	0.05	0.11	0.00	0.06	0.03	0.63	0.63	0.03	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.00	0.01	0.01	0.23	0.23	0.02	0.21	0.21
s, saturation flow rate [veh/h]	1629	1483	1629	1521	1629	1710	1688	1629	1710	1705
c, Capacity [veh/h]	78	157	9	97	47	1072	1058	55	1081	1078
d1, Uniform Delay [s]	32.92	29.41	34.79	31.14	33.64	6.35	6.35	33.43	6.04	6.04
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.89	1.83	18.20	0.85	8.52	0.97	0.98	8.31	0.84	0.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.43	0.32	0.18	0.51	0.37	0.37	0.55	0.33	0.34
d, Delay for Lane Group [s/veh]	42.81	31.24	52.99	31.99	42.16	7.32	7.33	41.73	6.87	6.87
Lane Group LOS	D	C	D	C	D	A	A	D	A	A
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.07	1.10	0.10	0.29	0.48	2.16	2.13	0.61	2.20	2.19
50th-Percentile Queue Length [ft/ln]	26.83	27.52	2.45	7.28	12.12	53.95	53.37	15.35	54.97	54.84
95th-Percentile Queue Length [veh/ln]	1.93	1.98	0.18	0.52	0.87	3.88	3.84	1.11	3.96	3.95
95th-Percentile Queue Length [ft/ln]	48.30	49.53	4.41	13.10	21.82	97.11	96.06	27.63	98.95	98.71

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	42.81	31.24	31.24	52.99	31.99	31.99	42.16	7.32	7.33	41.73	6.87	6.87
Movement LOS	D	C	C	D	C	C	D	A	A	D	A	A
d_A, Approach Delay [s/veh]	36.35			35.14			8.36			8.26		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	10.61											
Intersection LOS	B											
Intersection V/C	0.383											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	1.989	1.945	2.753	2.594
Crosswalk LOS	A	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	627	627	627	599
d_b, Bicycle Delay [s]	16.52	16.52	16.52	17.21
l_b,int, Bicycle LOS Score for Intersection	1.758	1.593	2.225	2.181
Bicycle LOS	A	A	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 2: S Palm Ave/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	15.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.470

Intersection Setup

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	32	54	16	38	59	47	47	559	85	18	576	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	8	25	14	0	0	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	35	58	17	41	64	59	76	619	92	19	627	32
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	15	5	11	17	16	20	165	25	5	167	9
Total Analysis Volume [veh/h]	37	62	18	44	68	63	81	660	98	20	668	34
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	16	26	0	9	19	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	9	3	9	4	41	41	2	38	38
g / C, Green / Cycle	0.04	0.13	0.04	0.13	0.06	0.58	0.58	0.02	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.02	0.05	0.03	0.08	0.05	0.23	0.23	0.01	0.21	0.21
s, saturation flow rate [veh/h]	1629	1645	1629	1576	1629	1710	1634	1629	1710	1681
c, Capacity [veh/h]	63	211	70	209	105	985	941	41	918	902
d1, Uniform Delay [s]	33.22	28.07	33.06	28.83	32.35	8.16	8.16	33.81	9.51	9.52
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.43	1.13	8.87	3.08	11.19	1.18	1.24	8.90	1.23	1.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.38	0.63	0.63	0.77	0.39	0.39	0.49	0.39	0.39
d, Delay for Lane Group [s/veh]	41.65	29.20	41.93	31.91	43.54	9.34	9.40	42.71	10.74	10.76
Lane Group LOS	D	C	D	C	D	A	A	D	B	B
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.76	1.27	0.89	2.18	1.60	2.77	2.66	0.42	2.83	2.79
50th-Percentile Queue Length [ft/ln]	18.91	31.78	22.16	54.55	39.94	69.23	66.58	10.45	70.84	69.87
95th-Percentile Queue Length [veh/ln]	1.36	2.29	1.60	3.93	2.88	4.98	4.79	0.75	5.10	5.03
95th-Percentile Queue Length [ft/ln]	34.04	57.21	39.88	98.19	71.88	124.61	119.84	18.81	127.51	125.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.65	29.20	29.20	41.93	31.91	31.91	43.54	9.36	9.40	42.71	10.75	10.76
Movement LOS	D	C	C	D	C	C	D	A	A	D	B	B
d_A, Approach Delay [s/veh]	33.14			34.43			12.67			11.64		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	15.61											
Intersection LOS	B											
Intersection V/C	0.470											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	2.011	2.044	2.707	2.664
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	627	627	627	428
d_b, Bicycle Delay [s]	16.52	16.52	16.52	21.67
l_b,int, Bicycle LOS Score for Intersection	1.753	1.848	2.252	2.155
Bicycle LOS	A	A	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 3: Lyon Ave S/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	21.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.570

Intersection Setup

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	60.00	100.00	60.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			25.00			45.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	150	27	15	24	27	77	48	681	113	14	612	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	6	0	0	0	3	0	0	10	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	162	29	16	32	29	83	52	740	122	15	672	59
Peak Hour Factor	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	43	8	4	9	8	22	14	198	33	4	180	16
Total Analysis Volume [veh/h]	174	31	17	34	31	89	56	794	131	16	721	63
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	22	29	0	9	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12	11	4	50	50	2	47	47
g / C, Green / Cycle	0.13	0.13	0.13	0.12	0.04	0.55	0.55	0.02	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.11	0.02	0.01	0.10	0.03	0.28	0.28	0.01	0.23	0.23
s, saturation flow rate [veh/h]	1629	1710	1454	1536	1629	1710	1627	1629	1710	1662
c, Capacity [veh/h]	214	225	191	186	71	942	896	31	900	875
d1, Uniform Delay [s]	38.05	34.61	34.39	38.68	42.67	12.57	12.57	43.78	13.17	13.17
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.28	0.28	0.20	9.02	17.22	1.92	2.02	12.66	1.57	1.62
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.14	0.09	0.83	0.79	0.50	0.50	0.52	0.44	0.44
d, Delay for Lane Group [s/veh]	45.33	34.89	34.59	47.70	59.89	14.49	14.58	56.44	14.74	14.79
Lane Group LOS	D	C	C	D	E	B	B	E	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.02	0.60	0.33	3.78	1.52	5.52	5.27	0.45	4.79	4.67
50th-Percentile Queue Length [ft/ln]	100.41	14.95	8.17	94.38	38.03	137.91	131.79	11.29	119.67	116.74
95th-Percentile Queue Length [veh/ln]	7.23	1.08	0.59	6.80	2.74	9.37	9.04	0.81	8.37	8.21
95th-Percentile Queue Length [ft/ln]	180.74	26.91	14.71	169.89	68.45	234.20	225.93	20.32	209.37	205.33

Movement, Approach, & Intersection Results

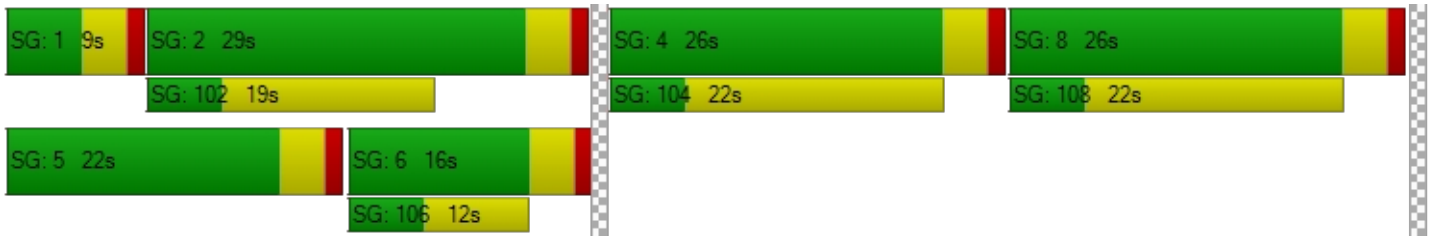
d_M, Delay for Movement [s/veh]	45.33	34.89	34.59	47.70	47.70	47.70	59.89	14.53	14.58	56.44	14.76	14.79
Movement LOS	D	C	C	D	D	D	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	43.05			47.70			17.12			15.60		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	21.41											
Intersection LOS	C											
Intersection V/C	0.570											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.47	36.47	36.47	36.47
l_p,int, Pedestrian LOS Score for Intersectio	2.263	1.840	2.876	2.729
Crosswalk LOS	B	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	489	555	267
d_b, Bicycle Delay [s]	25.71	25.71	23.49	33.82
l_b,int, Bicycle LOS Score for Intersection	1.926	1.814	2.369	2.220
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: S Elk St/Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	South Elk Street		South Elk Street		Project Driveway	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	South Elk Street		South Elk Street		Project Driveway	
Base Volume Input [veh/h]	46	0	0	39	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	21	0	3	66
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	1	21	42	3	66
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	0	5	11	1	17
Total Analysis Volume [veh/h]	50	1	21	42	3	66
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.32	0.00	9.48	8.78
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.04	0.04	0.22	0.22
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.89	0.89	5.46	5.46
d_A, Approach Delay [s/veh]	0.00		2.44		8.81	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.16					
Intersection LOS	A					

Vistro File: C:\...\BAW23003 Vistro.vistro
Report File: C:\...\OYP PM.pdf

Scenario 4 OYP PM
3/7/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	S Elk St/W Stetson Ave	Signalized	HCM 7th Edition	SB Left	0.469	11.1	B
2	S Palm Ave/W Stetson Ave	Signalized	HCM 7th Edition	EB Left	0.485	15.8	B
3	Lyon Ave S/W Stetson Ave	Signalized	HCM 7th Edition	WB Left	0.646	25.5	C
4	S Elk St/Project Driveway	Two-way stop	HCM 7th Edition	WB Left	0.003	10.2	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: S Elk St/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	11.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.469

Intersection Setup

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	75.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	19	4	14	4	6	17	26	776	34	17	631	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	0	24	0	0	0	0	0	29	41	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	4	39	4	6	18	28	840	66	59	683	6
Peak Hour Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	1	10	1	2	5	7	222	17	16	180	2
Total Analysis Volume [veh/h]	40	4	41	4	6	19	30	886	70	62	720	6
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	10	26	0	10	26	0	9	19	0	15	25	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	6	0	4	2	44	44	4	45	45
g / C, Green / Cycle	0.04	0.09	0.01	0.06	0.03	0.62	0.62	0.05	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate	0.02	0.03	0.00	0.02	0.02	0.28	0.28	0.04	0.21	0.21
s, saturation flow rate [veh/h]	1629	1473	1629	1508	1629	1710	1666	1629	1710	1705
c, Capacity [veh/h]	66	133	12	86	55	1065	1037	85	1096	1093
d1, Uniform Delay [s]	33.15	29.97	34.72	31.76	33.43	6.98	6.98	32.82	5.75	5.75
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.58	1.47	16.81	1.84	8.31	1.40	1.44	11.47	0.81	0.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.60	0.34	0.35	0.29	0.55	0.45	0.45	0.73	0.33	0.33
d, Delay for Lane Group [s/veh]	41.73	31.44	51.52	33.60	41.73	8.38	8.42	44.29	6.56	6.57
Lane Group LOS	D	C	D	C	D	A	A	D	A	A
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.81	0.74	0.12	0.44	0.59	2.94	2.88	1.28	2.12	2.12
50th-Percentile Queue Length [ft/ln]	20.16	18.60	3.02	11.10	14.83	73.52	71.91	31.88	53.06	52.93
95th-Percentile Queue Length [veh/ln]	1.45	1.34	0.22	0.80	1.07	5.29	5.18	2.30	3.82	3.81
95th-Percentile Queue Length [ft/ln]	36.30	33.48	5.44	19.97	26.69	132.34	129.43	57.39	95.51	95.28

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.73	31.44	31.44	51.52	33.60	33.60	41.73	8.40	8.42	44.29	6.56	6.57
Movement LOS	D	C	C	D	C	C	D	A	A	D	A	A
d_A, Approach Delay [s/veh]	36.28			36.07			9.42			9.53		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	11.08											
Intersection LOS	B											
Intersection V/C	0.469											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	2.002	1.948	2.805	2.624
Crosswalk LOS	B	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	627	627	428	599
d_b, Bicycle Delay [s]	16.52	16.52	21.67	17.21
l_b,int, Bicycle LOS Score for Intersection	1.700	1.607	2.373	2.210
Bicycle LOS	A	A	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 2: S Palm Ave/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	15.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.485

Intersection Setup

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	26	40	28	42	47	60	55	680	46	26	548	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	26	15	9	0	0	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	43	30	45	51	91	75	745	50	28	608	50
Peak Hour Factor	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	11	8	12	13	24	19	193	13	7	157	13
Total Analysis Volume [veh/h]	29	44	31	47	53	94	78	770	52	29	629	52
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	16	23	0	12	19	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	9	3	9	4	40	40	2	38	38
g / C, Green / Cycle	0.03	0.12	0.04	0.14	0.06	0.57	0.57	0.03	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.02	0.05	0.03	0.10	0.05	0.24	0.24	0.02	0.20	0.20
s, saturation flow rate [veh/h]	1629	1594	1629	1537	1629	1710	1672	1629	1710	1665
c, Capacity [veh/h]	53	197	73	208	101	977	955	53	927	902
d1, Uniform Delay [s]	33.46	28.32	33.01	29.03	32.45	8.53	8.53	33.46	9.24	9.24
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.32	1.21	9.15	4.35	11.59	1.36	1.39	8.32	1.15	1.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.54	0.38	0.64	0.71	0.77	0.43	0.43	0.54	0.37	0.37
d, Delay for Lane Group [s/veh]	41.78	29.53	42.16	33.38	44.05	9.89	9.92	41.78	10.38	10.42
Lane Group LOS	D	C	D	C	D	A	A	D	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.60	1.20	0.95	2.52	1.55	3.10	3.04	0.58	2.69	2.63
50th-Percentile Queue Length [ft/ln]	15.04	30.04	23.68	63.03	38.78	77.54	76.04	14.54	67.28	65.85
95th-Percentile Queue Length [veh/ln]	1.08	2.16	1.71	4.54	2.79	5.58	5.48	1.05	4.84	4.74
95th-Percentile Queue Length [ft/ln]	27.08	54.06	42.63	113.46	69.80	139.57	136.88	26.18	121.10	118.53

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.78	29.53	29.53	42.16	33.38	33.38	44.05	9.90	9.92	41.78	10.40	10.42
Movement LOS	D	C	C	D	C	C	D	A	A	D	B	B
d_A, Approach Delay [s/veh]	32.95			35.51			12.86			11.68		
Approach LOS	C			D			B			B		
d_I, Intersection Delay [s/veh]	15.82											
Intersection LOS	B											
Intersection V/C	0.485											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	1.994	2.049	2.718	2.694
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	627	627	542	428
d_b, Bicycle Delay [s]	16.52	16.52	18.64	21.67
l_b,int, Bicycle LOS Score for Intersection	1.731	1.880	2.302	2.145
Bicycle LOS	A	A	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 3: Lyon Ave S/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	25.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.646

Intersection Setup

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	60.00	100.00	60.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			25.00			45.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	118	48	20	58	45	85	78	749	91	16	584	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	18	0	0	0	11	0	0	6	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	128	52	22	81	49	92	84	822	98	17	638	66
Peak Hour Factor	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	14	6	22	14	26	23	228	27	5	177	18
Total Analysis Volume [veh/h]	142	58	24	90	54	102	93	912	109	19	708	73
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	22	29	0	9	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	10	10	16	7	46	46	2	41	41
g / C, Green / Cycle	0.11	0.11	0.11	0.18	0.07	0.51	0.51	0.02	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.09	0.03	0.02	0.16	0.06	0.30	0.30	0.01	0.23	0.23
s, saturation flow rate [veh/h]	1629	1710	1454	1567	1629	1710	1647	1629	1710	1655
c, Capacity [veh/h]	183	192	163	281	118	871	839	35	784	759
d1, Uniform Delay [s]	38.90	36.76	36.11	36.01	41.09	15.57	15.58	43.62	17.19	17.20
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.96	0.88	0.41	8.54	10.92	3.01	3.13	12.05	2.33	2.41
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.30	0.15	0.88	0.79	0.60	0.60	0.54	0.51	0.51
d, Delay for Lane Group [s/veh]	45.87	37.63	36.52	44.55	52.01	18.58	18.71	55.67	19.52	19.60
Lane Group LOS	D	D	D	D	D	B	B	E	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.29	1.18	0.48	5.88	2.30	7.21	6.98	0.52	5.77	5.60
50th-Percentile Queue Length [ft/ln]	82.25	29.50	11.98	147.11	57.39	180.36	174.56	13.12	144.16	140.08
95th-Percentile Queue Length [veh/ln]	5.92	2.12	0.86	9.86	4.13	11.62	11.32	0.94	9.70	9.49
95th-Percentile Queue Length [ft/ln]	148.05	53.10	21.57	246.57	103.30	290.48	282.90	23.62	242.61	237.14

Movement, Approach, & Intersection Results

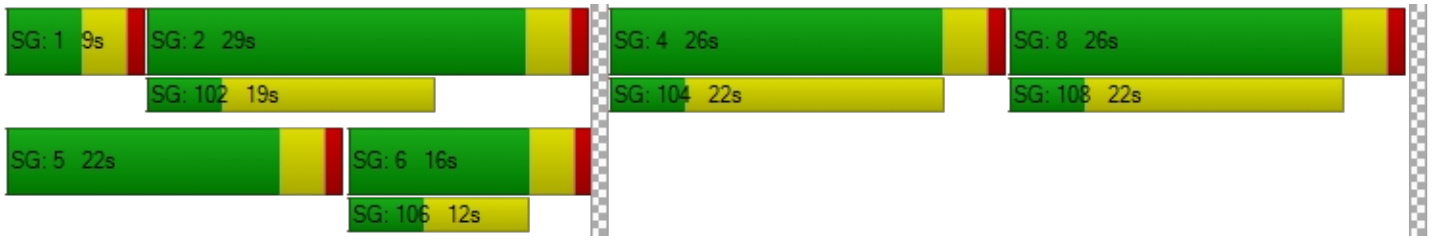
d_M, Delay for Movement [s/veh]	45.87	37.63	36.52	44.55	44.55	44.55	52.01	18.64	18.71	55.67	19.55	19.60
Movement LOS	D	D	D	D	D	D	D	B	B	E	B	B
d_A, Approach Delay [s/veh]	42.73			44.55			21.43			20.42		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	25.48											
Intersection LOS	C											
Intersection V/C	0.646											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.47	36.47	36.47	36.47
l_p,int, Pedestrian LOS Score for Intersectio	2.265	1.907	2.906	2.776
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	489	555	267
d_b, Bicycle Delay [s]	25.71	25.71	23.49	33.82
l_b,int, Bicycle LOS Score for Intersection	1.929	1.966	2.479	2.220
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: S Elk St/Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	South Elk Street		South Elk Street		Project Driveway	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	South Elk Street		South Elk Street		Project Driveway	
Base Volume Input [veh/h]	37	0	0	57	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	70	0	2	41
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	4	70	62	2	41
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	1	18	16	1	10
Total Analysis Volume [veh/h]	40	4	70	62	2	41
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.00	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	7.36	0.00	10.20	8.64
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.12	0.12	0.13	0.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.03	3.03	3.32	3.32
d_A, Approach Delay [s/veh]	0.00		3.90		8.71	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.06					
Intersection LOS	B					

OPENING YEAR CUMULATIVE WITH PROJECT TRAFFIC CONDITIONS (OYCP)

Vistro File: C:\...\BAW23003 Vistro.vistro
Report File: C:\...\OYCP AM.pdf

Scenario 5 OYCP AM
3/7/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	S Elk St/W Stetson Ave	Signalized	HCM 7th Edition	SB Left	0.410	11.9	B
2	S Palm Ave/W Stetson Ave	Signalized	HCM 7th Edition	WB Left	0.487	16.0	B
3	Lyon Ave S/W Stetson Ave	Signalized	HCM 7th Edition	EB Left	0.574	21.6	C
4	S Elk St/Project Driveway	Two-way stop	HCM 7th Edition	WB Left	0.004	9.8	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: S Elk St/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	11.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.410

Intersection Setup

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	75.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	22	8	16	3	5	11	21	671	18	16	638	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	45	0	59	0	0	0	0	0	15	19	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	9	76	3	5	12	23	726	34	36	691	6
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	2	20	1	1	3	6	188	9	9	179	2
Total Analysis Volume [veh/h]	72	9	79	3	5	12	24	753	35	37	717	6
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	16	32	0	10	26	0	9	19	0	9	19	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	8	0	5	2	43	43	3	44	44
g / C, Green / Cycle	0.06	0.12	0.00	0.07	0.03	0.61	0.61	0.04	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.04	0.06	0.00	0.01	0.01	0.23	0.23	0.02	0.21	0.21
s, saturation flow rate [veh/h]	1629	1476	1629	1521	1629	1710	1683	1629	1710	1705
c, Capacity [veh/h]	93	175	9	102	47	1042	1025	63	1059	1056
d1, Uniform Delay [s]	32.66	29.01	34.79	30.91	33.64	6.99	6.99	33.22	6.47	6.47
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.52	2.21	18.20	0.76	8.52	1.06	1.08	8.43	0.88	0.88
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.50	0.32	0.17	0.51	0.38	0.38	0.59	0.34	0.34
d, Delay for Lane Group [s/veh]	45.18	31.23	52.99	31.67	42.16	8.05	8.07	41.65	7.35	7.35
Lane Group LOS	D	C	D	C	D	A	A	D	A	A
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.49	1.45	0.10	0.29	0.48	2.38	2.35	0.75	2.32	2.32
50th-Percentile Queue Length [ft/ln]	37.31	36.15	2.45	7.21	12.12	59.48	58.70	18.70	58.06	57.92
95th-Percentile Queue Length [veh/ln]	2.69	2.60	0.18	0.52	0.87	4.28	4.23	1.35	4.18	4.17
95th-Percentile Queue Length [ft/ln]	67.15	65.06	4.41	12.98	21.82	107.06	105.67	33.66	104.52	104.26

Movement, Approach, & Intersection Results

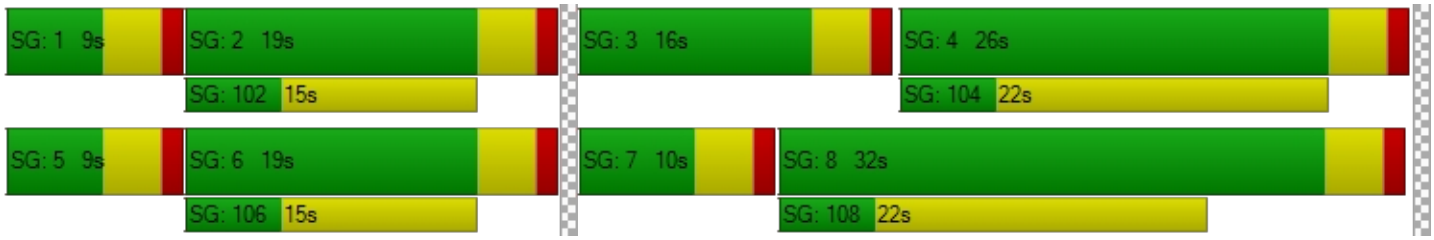
d_M, Delay for Movement [s/veh]	45.18	31.23	31.23	52.99	31.67	31.67	42.16	8.06	8.07	41.65	7.35	7.35
Movement LOS	D	C	C	D	C	C	D	A	A	D	A	A
d_A, Approach Delay [s/veh]	37.51			34.87			9.07			9.02		
Approach LOS	D			C			A			A		
d_I, Intersection Delay [s/veh]	11.94											
Intersection LOS	B											
Intersection V/C	0.410											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	2.006	1.945	2.761	2.600
Crosswalk LOS	B	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	799	627	428	428
d_b, Bicycle Delay [s]	12.65	16.52	21.67	21.67
l_b,int, Bicycle LOS Score for Intersection	1.824	1.593	2.230	2.187
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: S Palm Ave/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	16.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.487

Intersection Setup

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	32	54	16	38	59	47	47	559	85	18	576	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	13	38	21	0	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	35	58	17	41	64	64	89	626	92	19	629	32
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	15	5	11	17	17	24	167	25	5	168	9
Total Analysis Volume [veh/h]	37	62	18	44	68	68	95	667	98	20	671	34
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	16	25	0	10	19	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	9	3	9	5	40	40	2	37	37
g / C, Green / Cycle	0.04	0.13	0.04	0.13	0.07	0.58	0.58	0.02	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.02	0.05	0.03	0.09	0.06	0.23	0.23	0.01	0.21	0.21
s, saturation flow rate [veh/h]	1629	1645	1629	1571	1629	1710	1634	1629	1710	1681
c, Capacity [veh/h]	63	212	70	210	123	983	940	41	897	882
d1, Uniform Delay [s]	33.22	28.01	33.06	28.87	31.88	8.22	8.22	33.81	10.03	10.03
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.43	1.10	8.87	3.35	9.74	1.20	1.26	8.90	1.31	1.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.38	0.63	0.65	0.77	0.40	0.40	0.49	0.40	0.40
d, Delay for Lane Group [s/veh]	41.65	29.11	41.93	32.22	41.61	9.42	9.48	42.71	11.34	11.36
Lane Group LOS	D	C	D	C	D	A	A	D	B	B
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.76	1.27	0.89	2.28	1.82	2.81	2.71	0.42	2.97	2.93
50th-Percentile Queue Length [ft/ln]	18.91	31.72	22.16	56.99	45.38	70.35	67.66	10.45	74.16	73.15
95th-Percentile Queue Length [veh/ln]	1.36	2.28	1.60	4.10	3.27	5.07	4.87	0.75	5.34	5.27
95th-Percentile Queue Length [ft/ln]	34.04	57.09	39.88	102.59	81.68	126.64	121.79	18.81	133.50	131.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.65	29.11	29.11	41.93	32.22	32.22	41.61	9.45	9.48	42.71	11.35	11.36
Movement LOS	D	C	C	D	C	C	D	A	A	D	B	B
d_A, Approach Delay [s/veh]	33.08			34.60			13.00			12.21		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	16.01											
Intersection LOS	B											
Intersection V/C	0.487											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	2.011	2.050	2.714	2.667
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	627	627	599	428
d_b, Bicycle Delay [s]	16.52	16.52	17.21	21.67
l_b,int, Bicycle LOS Score for Intersection	1.753	1.857	2.269	2.158
Bicycle LOS	A	A	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 3: Lyon Ave S/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	21.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.574

Intersection Setup

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	60.00	100.00	60.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			25.00			45.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	150	27	15	24	27	77	48	681	113	14	612	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	10	0	0	0	5	0	0	17	28
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	162	29	16	36	29	83	52	742	122	15	679	70
Peak Hour Factor	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	43	8	4	10	8	22	14	199	33	4	182	19
Total Analysis Volume [veh/h]	174	31	17	39	31	89	56	796	131	16	729	75
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	22	29	0	9	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12	11	4	49	49	2	47	47
g / C, Green / Cycle	0.13	0.13	0.13	0.12	0.04	0.55	0.55	0.02	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate	0.11	0.02	0.01	0.10	0.03	0.28	0.28	0.01	0.24	0.24
s, saturation flow rate [veh/h]	1629	1710	1454	1539	1629	1710	1627	1629	1710	1655
c, Capacity [veh/h]	214	225	191	191	71	936	891	31	894	865
d1, Uniform Delay [s]	38.05	34.61	34.39	38.52	42.67	12.76	12.76	43.78	13.46	13.47
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.29	0.28	0.20	8.93	17.22	1.96	2.06	12.66	1.68	1.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.14	0.09	0.83	0.79	0.51	0.51	0.52	0.46	0.46
d, Delay for Lane Group [s/veh]	45.34	34.89	34.59	47.45	59.89	14.72	14.82	56.44	15.14	15.20
Lane Group LOS	D	C	C	D	E	B	B	E	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.02	0.60	0.33	3.89	1.52	5.59	5.35	0.45	5.02	4.87
50th-Percentile Queue Length [ft/ln]	100.42	14.95	8.17	97.22	38.03	139.82	133.64	11.29	125.40	121.81
95th-Percentile Queue Length [veh/ln]	7.23	1.08	0.59	7.00	2.74	9.47	9.14	0.81	8.69	8.49
95th-Percentile Queue Length [ft/ln]	180.76	26.91	14.71	174.99	68.45	236.79	228.43	20.32	217.23	212.31

Movement, Approach, & Intersection Results

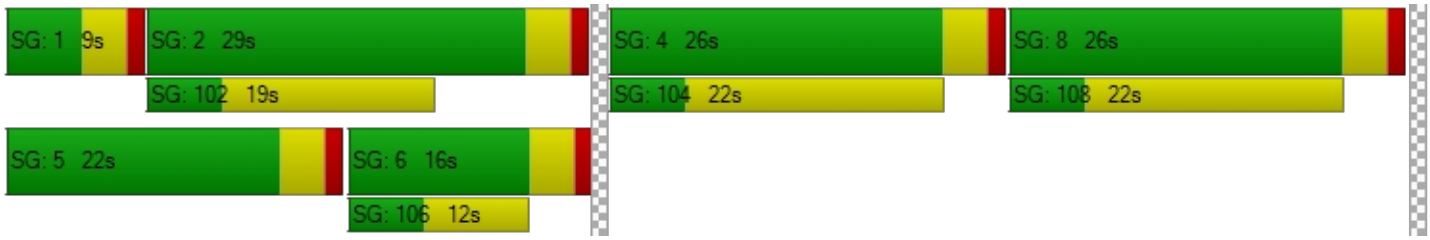
d_M, Delay for Movement [s/veh]	45.34	34.89	34.59	47.45	47.45	47.45	59.89	14.76	14.82	56.44	15.17	15.20
Movement LOS	D	C	C	D	D	D	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	43.06			47.45			17.34			15.98		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	21.64											
Intersection LOS	C											
Intersection V/C	0.574											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.47	36.47	36.47	36.47
l_p,int, Pedestrian LOS Score for Intersectio	2.263	1.847	2.879	2.736
Crosswalk LOS	B	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	489	555	267
d_b, Bicycle Delay [s]	25.71	25.71	23.49	33.82
l_b,int, Bicycle LOS Score for Intersection	1.926	1.822	2.371	2.236
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: S Elk St/Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	South Elk Street		South Elk Street		Project Driveway	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	South Elk Street		South Elk Street		Project Driveway	
Base Volume Input [veh/h]	46	0	0	39	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	38	1	21	13	3	66
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	1	21	55	3	66
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	0	5	14	1	17
Total Analysis Volume [veh/h]	88	1	21	55	3	66
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	7.39	0.00	9.80	8.98
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.04	0.04	0.23	0.23
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.89	0.89	5.76	5.76
d_A, Approach Delay [s/veh]	0.00		2.04		9.01	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.32					
Intersection LOS	A					

Vistro File: C:\...\BAW23003 Vistro.vistro
Report File: C:\...\OYCP PM.pdf

Scenario 6 OYCP PM
3/7/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	S Elk St/W Stetson Ave	Signalized	HCM 7th Edition	SB Left	0.484	12.4	B
2	S Palm Ave/W Stetson Ave	Signalized	HCM 7th Edition	SB Left	0.486	16.1	B
3	Lyon Ave S/W Stetson Ave	Signalized	HCM 7th Edition	WB Left	0.647	25.6	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: S Elk St/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	12.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.484

Intersection Setup

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	75.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Elk Street			South Elk Street			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	19	4	14	4	6	17	26	776	34	17	631	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	40	0	53	0	0	0	0	0	30	35	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	4	68	4	6	18	28	840	67	53	683	6
Peak Hour Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	1	18	1	2	5	7	222	18	14	180	2
Total Analysis Volume [veh/h]	64	4	72	4	6	19	30	886	71	56	720	6
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	12	28	0	10	26	0	9	19	0	13	23	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	8	0	5	2	42	42	3	44	44
g / C, Green / Cycle	0.05	0.11	0.01	0.07	0.03	0.61	0.61	0.05	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.04	0.05	0.00	0.02	0.02	0.28	0.28	0.03	0.21	0.21
s, saturation flow rate [veh/h]	1629	1465	1629	1508	1629	1710	1666	1629	1710	1705
c, Capacity [veh/h]	86	164	12	100	55	1033	1006	80	1059	1056
d1, Uniform Delay [s]	32.81	29.22	34.72	31.14	33.43	7.70	7.70	32.88	6.46	6.46
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.91	2.03	16.81	1.29	8.31	1.53	1.57	10.35	0.88	0.89
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.46	0.35	0.25	0.55	0.47	0.47	0.70	0.34	0.34
d, Delay for Lane Group [s/veh]	44.72	31.24	51.52	32.43	41.73	9.23	9.27	43.23	7.34	7.34
Lane Group LOS	D	C	D	C	D	A	A	D	A	A
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.32	1.25	0.12	0.43	0.59	3.22	3.15	1.14	2.33	2.32
50th-Percentile Queue Length [ft/ln]	33.07	31.23	3.02	10.78	14.83	80.52	78.72	28.47	58.26	58.12
95th-Percentile Queue Length [veh/ln]	2.38	2.25	0.22	0.78	1.07	5.80	5.67	2.05	4.19	4.18
95th-Percentile Queue Length [ft/ln]	59.53	56.21	5.44	19.40	26.69	144.94	141.70	51.24	104.87	104.61

Movement, Approach, & Intersection Results

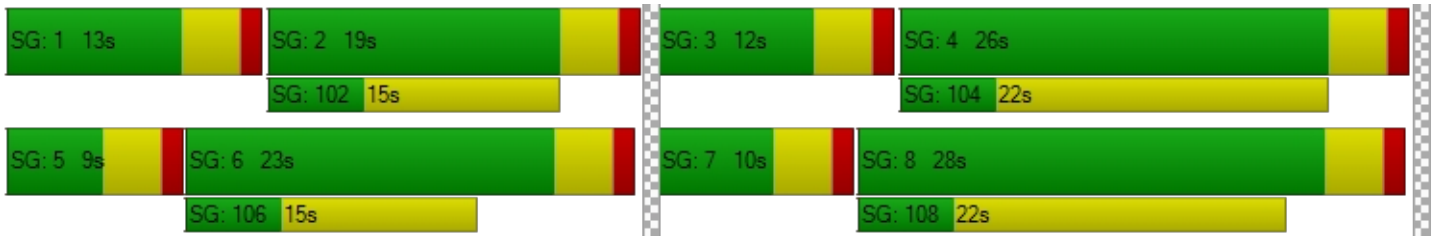
d_M, Delay for Movement [s/veh]	44.72	31.24	31.24	51.52	32.43	32.43	41.73	9.25	9.27	43.23	7.34	7.34
Movement LOS	D	C	C	D	C	C	D	A	A	D	A	A
d_A, Approach Delay [s/veh]	37.40			35.07			10.24			9.91		
Approach LOS	D			D			B			A		
d_I, Intersection Delay [s/veh]	12.44											
Intersection LOS	B											
Intersection V/C	0.484											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	2.018	1.948	2.812	2.629
Crosswalk LOS	B	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	684	627	428	542
d_b, Bicycle Delay [s]	15.17	16.52	21.67	18.64
l_b,int, Bicycle LOS Score for Intersection	1.791	1.607	2.374	2.205
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: S Palm Ave/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	16.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.486

Intersection Setup

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Palm Avenue			South Palm Avenue			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	26	40	28	42	47	60	55	680	46	26	548	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	23	34	19	0	0	12	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	43	30	45	51	88	94	755	50	28	605	50
Peak Hour Factor	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	11	8	12	13	23	24	195	13	7	156	13
Total Analysis Volume [veh/h]	29	44	31	47	53	91	97	781	52	29	626	52
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	10	27	0	15	23	0	11	19	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	9	3	9	5	40	40	2	37	37
g / C, Green / Cycle	0.03	0.12	0.04	0.13	0.08	0.57	0.57	0.03	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.02	0.05	0.03	0.09	0.06	0.25	0.25	0.02	0.20	0.20
s, saturation flow rate [veh/h]	1629	1594	1629	1538	1629	1710	1673	1629	1710	1664
c, Capacity [veh/h]	53	196	73	208	125	978	956	53	902	878
d1, Uniform Delay [s]	33.46	28.35	33.01	29.00	31.82	8.55	8.55	33.46	9.82	9.82
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.32	1.22	9.15	4.11	9.64	1.39	1.42	8.32	1.22	1.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.54	0.38	0.64	0.69	0.77	0.43	0.43	0.54	0.38	0.38
d, Delay for Lane Group [s/veh]	41.78	29.57	42.16	33.11	41.46	9.94	9.97	41.78	11.04	11.08
Lane Group LOS	D	C	D	C	D	A	A	D	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.60	1.20	0.95	2.46	1.85	3.15	3.09	0.58	2.81	2.75
50th-Percentile Queue Length [ft/ln]	15.04	30.06	23.68	61.43	46.21	78.81	77.30	14.54	70.23	68.74
95th-Percentile Queue Length [veh/ln]	1.08	2.16	1.71	4.42	3.33	5.67	5.57	1.05	5.06	4.95
95th-Percentile Queue Length [ft/ln]	27.08	54.12	42.63	110.57	83.19	141.86	139.15	26.18	126.41	123.72

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.78	29.57	29.57	42.16	33.11	33.11	41.46	9.95	9.97	41.78	11.06	11.08
Movement LOS	D	C	C	D	C	C	D	A	A	D	B	B
d_A, Approach Delay [s/veh]	32.98			35.34			13.24			12.32		
Approach LOS	C			D			B			B		
d_I, Intersection Delay [s/veh]	16.15											
Intersection LOS	B											
Intersection V/C	0.486											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.64	26.64	26.64	26.64
l_p,int, Pedestrian LOS Score for Intersectio	1.994	2.054	2.725	2.696
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	627	656	542	428
d_b, Bicycle Delay [s]	16.52	15.84	18.64	21.67
l_b,int, Bicycle LOS Score for Intersection	1.731	1.875	2.327	2.143
Bicycle LOS	A	A	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 3: Lyon Ave S/W Stetson Ave

Control Type:	Signalized	Delay (sec / veh):	25.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.647

Intersection Setup

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	60.00	100.00	60.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			25.00			45.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lyon Avenue South			Lyon Avenue South			West Stetson Avenue			West Stetson Avenue		
Base Volume Input [veh/h]	118	48	20	58	45	85	78	749	91	16	584	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824	1.0824
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	19	0	0	0	11	0	0	15	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	128	52	22	82	49	92	84	822	98	17	647	80
Peak Hour Factor	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	14	6	23	14	26	23	228	27	5	180	22
Total Analysis Volume [veh/h]	142	58	24	91	54	102	93	912	109	19	718	89
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	22	29	0	9	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	10	10	16	7	46	46	2	41	41
g / C, Green / Cycle	0.11	0.11	0.11	0.18	0.07	0.51	0.51	0.02	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.09	0.03	0.02	0.16	0.06	0.30	0.30	0.01	0.24	0.24
s, saturation flow rate [veh/h]	1629	1710	1454	1567	1629	1710	1647	1629	1710	1645
c, Capacity [veh/h]	183	192	163	282	118	870	838	35	783	753
d1, Uniform Delay [s]	38.90	36.76	36.11	35.98	41.09	15.61	15.62	43.62	17.42	17.43
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.97	0.88	0.41	8.54	10.92	3.02	3.14	12.05	2.51	2.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.30	0.15	0.88	0.79	0.60	0.60	0.54	0.52	0.53
d, Delay for Lane Group [s/veh]	45.87	37.63	36.52	44.53	52.01	18.63	18.76	55.67	19.93	20.04
Lane Group LOS	D	D	D	D	D	B	B	E	B	C
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.29	1.18	0.48	5.91	2.30	7.23	7.00	0.52	6.07	5.86
50th-Percentile Queue Length [ft/ln]	82.25	29.50	11.98	147.69	57.39	180.69	174.88	13.12	151.65	146.55
95th-Percentile Queue Length [veh/ln]	5.92	2.12	0.86	9.89	4.13	11.64	11.33	0.94	10.11	9.83
95th-Percentile Queue Length [ft/ln]	148.05	53.10	21.57	247.34	103.30	290.91	283.32	23.62	252.63	245.82

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.87	37.63	36.52	44.53	44.53	44.53	52.01	18.69	18.76	55.67	19.98	20.04
Movement LOS	D	D	D	D	D	D	D	B	B	E	B	C
d_A, Approach Delay [s/veh]	42.73			44.53			21.48			20.80		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	25.58											
Intersection LOS	C											
Intersection V/C	0.647											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.47	36.47	36.47	36.47
l_p,int, Pedestrian LOS Score for Intersectio	2.265	1.914	2.909	2.783
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	489	555	267
d_b, Bicycle Delay [s]	25.71	25.71	23.49	33.82
l_b,int, Bicycle LOS Score for Intersection	1.929	1.967	2.479	2.241
Bicycle LOS	A	A	B	B

Sequence

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