Appendix I
Park Lane Homes Phase Traffic Analysis
(Available on the city website)

URBAN | CROSSROADS

ABODE PARK LANE HOMES

TRAFFIC ANALYSIS

PREPARED BY: Janette Cachola | jcachola@urbanxroads.com
Marlie Whiteman, P.E. | mwhiteman@urbanxroads.com
John Kain, AICP | jkain@urbanxroads.com

Reference Number	Agency	Date
16155-03 TA Report.docx	City of Desert Hot Springs	March 12, 2025

TABLE OF CONTENTS

APPENDICES

LIST OF EXHIBITS

LIST OF TABLES

LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CAMUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CVAG	Coachella Valley Association of Governments
DU	Dwelling Units
EAP	Existing Plus Ambient Plus Project
EAPC	Existing Plus Ambient Plus Project Plus Cumulative
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
PHF	Peak Hour Factor
Project	Abode Park Lane Homes
sf	Square Feet
TA	Traffic Analysis
tsf	Thousand Square Feet
TUMF	Transportation Uniform Mitigation Fee
v/c	Volume to Capacity

This page intentionally left blank

1 INTRODUCTION

This report presents the results of the traffic analysis (TA) for Abode Park Lane Homes ("Project"), located north of Park Lane and east of Palm Drive in the City of Desert Hot Springs. The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project and recommend improvements to achieve acceptable circulation system operational conditions. This TA has been prepared based in accordance with the County of Riverside's Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (December 2020). (1)

To ensure that this TA satisfies the City of Desert Hot Springs's traffic study requirements, Urban Crossroads, Inc., prepared a traffic study scoping package for review by City staff prior to the preparation of this report. The Agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The Agreement approved by the City is included in Appendix 1.1.

1.1 PROJECT OVERVIEW

A preliminary site plan for the proposed Project is shown on Exhibit 1-1. The Project consists of 167 affordable dwelling units and an early childcare center accommodating 66 students.

The estimated Project trip generation is 937 external vehicle trip-ends per day with 85 external AM peak hour trips and 103 external PM peak hour trips.

Access to the Project will be provided via full access intersections along Park Lane (2 driveways). There is also a potential Emergency Vehicle Access (EVA) driveway connection to the adjacent commercial service drive north of the site. The Project site is located in the City of Desert Hot Springs Mixed-Use Corridor (MU-C) zone.

1.3 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2025) Conditions
- Existing plus Ambient Growth plus Project (EAP) (2027) Conditions
- Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2027) Conditions

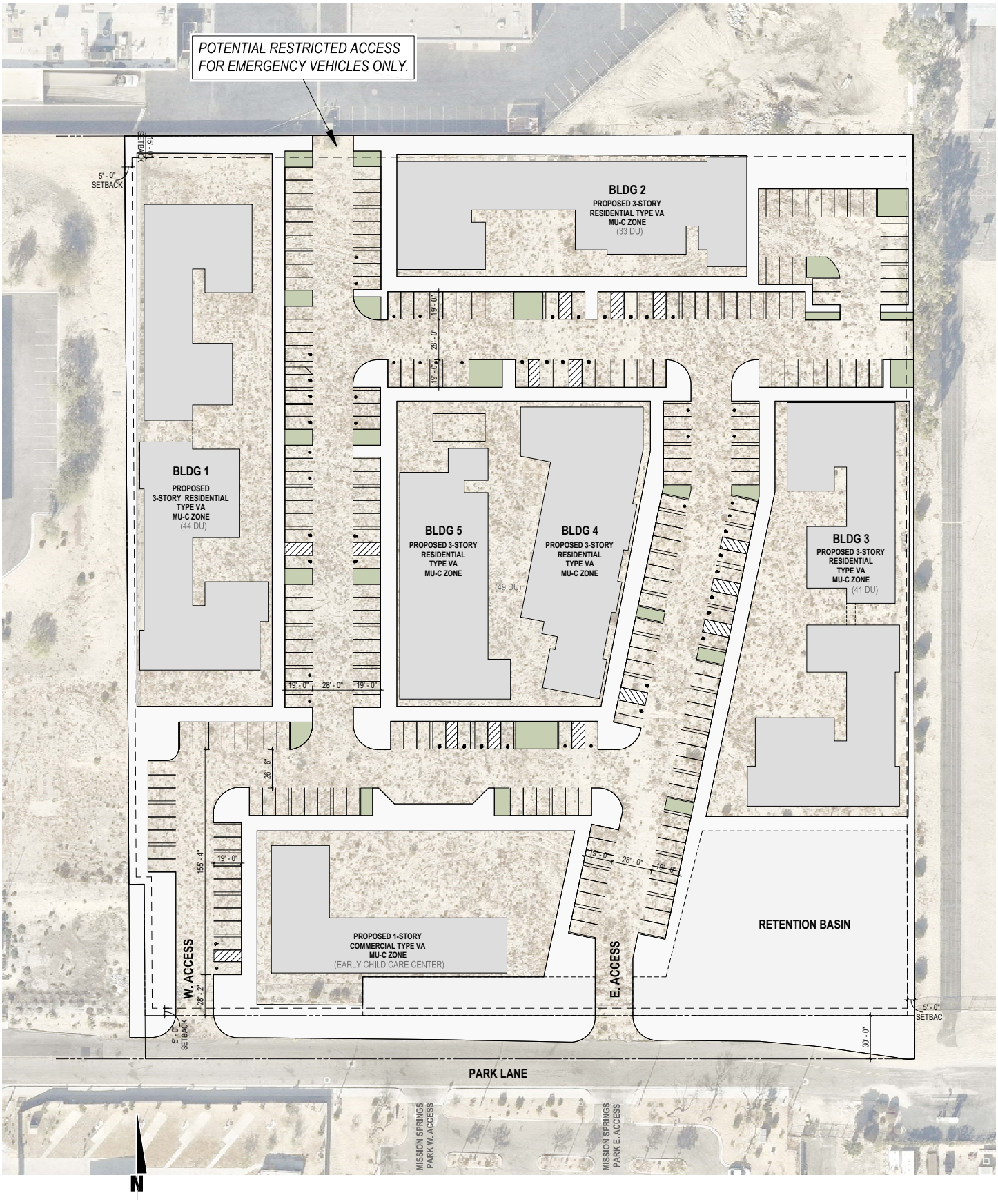
1.3.1 EXISTING (2025) CONDITIONS

Information for Existing (2025) conditions is presented to represent the baseline traffic conditions as they existed at the time this report was prepared.

1.3.2 EAP (2027) CONDITIONS

The Existing plus Ambient Growth plus Project (EAP) conditions analysis determines traffic deficiencies that would occur on the existing roadway system with the addition of Project traffic.

EXHIBIT 1-1: PRELIMINARY SITE PLAN



To account for background traffic growth, an ambient growth factor from Existing conditions of 4.04% (2% per year, compounded annually over 2 years) is included for EAP (2027) traffic conditions.

1.3.3 EAPC (2027) CONDITIONS

The Existing plus Project plus Ambient Growth plus Cumulative (EAPC) (2027) traffic conditions analysis determines the potential circulation system deficiencies with other know developments. To account for background traffic growth, traffic associated with other known cumulative projects in conjunction with an ambient growth factor from Existing conditions of 4.04% is included for EAPC (2027) traffic conditions. The list of other developments was compiled from information provided by the City of Desert Hot Springs.

1.4 STUDY AREA

The Project study area was defined in coordination with the City of Desert Hot Springs. Consistent with County of Riverside traffic study guidelines, the study area includes any intersection of "Collector" or higher classification street, with "Collector" or higher classification streets, at which the proposed project will add 50 or more peak hour trips. Exhibit 1-2 presents the study area and intersection analysis locations.

The "50 peak hour trip" criteria generally represents a minimum number of trips at which a typical intersection would have the potential to be substantively impacted by a given development proposal. Although each intersection may have unique operating characteristics, this traffic engineering rule of thumb is a widely utilized tool for estimating a potential area of impact (i.e., study area). The study area intersections shown on Exhibit 1-2 and listed in Table 1-1 were selected for this TA based on consultation with City of Desert Hot Springs.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	#	Intersection
1	Palm Dr. / Two Bunch Palms Tr.	4	W. Access / Park Ln.
2	Palm Dr. / Park Ln.	5	E. Access / Park Ln.
3	Palm Dr. / Camino Campanero		

1.5 ANALYSIS FINDINGS

This section provides a summary of the analysis results for Existing (2025), EAP (2027), and EAPC (2027) conditions.

1.5.1 EXISTING (2025) CONDITIONS

For Existing (2025) traffic conditions, the intersection of Palm Drive / Park Lane (#2) is currently operating at an unacceptable LOS (LOS "E" or worse) during the peak hours.

EXHIBIT 1-2: TRAFFIC ANALYSIS STUDY AREA

LEGEND:

- 4 = EXISTING ANALYSIS LOCATION
- (1) = FUTURE ANALYSIS LOCATION
- = FUTURE PROJECT ACCESS

N

1.5.2 OPENING YEAR (2027) CONDITIONS

For EAP (2027) and EAPC (2027) traffic conditions, no new intersections are anticipated to operate at an unacceptable LOS (LOS "E" or worse) during peak hours.

The existing deficient intersection of Palm Drive / Park Lane (#2) is anticipated to meet traffic signal warrants under EAPC (2027) conditions.

1.6 SITE ACCESS IMPROVEMENTS

Roadway improvements necessary to provide site access and on-site circulation are assumed to be constructed in conjunction with site development and are described below. These improvements should be in place prior to occupancy.

Park Lane – Park Lane is an east-west oriented roadway located along the Project's southern boundary, with two lanes and southern curb and gutter existing. Park Lane should be completed with curb and gutter improvements along the Project frontage at its ultimate half section width as a 2-lane local roadway in compliance with the applicable City of Desert Hot Springs standards. These improvements will include provision of a new sidewalk along the Project frontage.

Cross-street stop sign controls will adequately serve the Project driveway intersections on Park Lane.

W. Access / Park Ln. (#4)

- Install a cross-street stop control on the southbound approach.
- Provide one southbound shared left-right lane.

E. Access – Mission Springs Park E. Access/ Park Ln. (#5)

- Install a cross-street stop control on the southbound approach.
- Provide one southbound shared left-through-right lane.

1.7 PARTICIPATION AND CUMULATIVE IMPROVEMENTS

Off-site improvements to be provided by others include the following:

Palm Dr. / Camino Campanero - 15th Avenue (#3)

- Construct the west leg (15th Avenue) as a 2-lane roadway which serves as the primary access to nearby cumulative development (Ovation Condominiums)
- Provide one eastbound shared left-through-right lane.
- Modify westbound approach to provide one left turn lane, one through lane, and a separate right turn lane.
- Modify northbound striping to provide a separate left turn lane within an existing two-way left turn lane median.

There is an existing deficiency at the Palm Drive / Park Lane (#2) intersection which will need to be addressed, with Project participation, by providing the following improvements:

#2 – Palm Dr. / Park Lane.

- Install traffic signal.
- Modify northbound and southbound striping to provide separate 100-foot-long left turn lanes within the existing two-way left turn lane median.
- Modify eastbound striping to provide a separate left turn and shared through-right lane.
- Modify westbound striping to provide a separate 100-foot-long left turn lane and shared through-right lane.

As shown in Section 7.3 of this report, the Project's fair share contribution at the Palm Drive / Park Lane (#2) intersection is 14.3%. If the Palm Drive / Park Lane (#2) intersection is not already anticipated as a signal improvement in a relevant City fee program, participation in the signal installation by the Project may need to be increased beyond the calculated traffic share. The Project fair share calculations in Section 7.3 provide a basis for discussion between the City and Project Applicant.

2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are consistent with the County of Riverside Traffic Study Guidelines. (1)

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near Capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 7th Edition Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (2)The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Desert Hot Springs requires signalized intersection operations analysis based on the methodology described in the HCM. (2) Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described on Table 2-1.

The traffic modeling and signal timing optimization software package Synchro (Version 12) has been utilized to analyze signalized intersections. Synchro is a macroscopic traffic software program that is based on the signalized intersection Capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and Capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

A saturation flow rate of 1900 has been utilized for all study area intersections located within the study area. The peak hour traffic volumes are adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak

15-minute flow rate and the full hourly volume (e.g. PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (2)

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Serice, V/C ≤ 1.0[1]
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and indvidual cycle failures are noticeable.	35.01 to 55.00	D
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F

Source: HCM, 7th Edition

[1] if V/C is greater than 1.0 then LOS is F per HCM

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Desert Hot Springs requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (2) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (average delay).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Serice, V/C ≤ 1.0[1]
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersections capacity exceeded.	>50.00	F

Source: HCM, 7th Edition

[1] if V/C is greater than 1.0 then LOS is F per HCM

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or determine the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (3)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (3) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions and for all future analysis scenarios for existing unsignalized intersections. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics. For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. Urban warrants have been used as posted speed limits on the major roadways with unsignalized intersections are 40 miles per hour or below and rural warrants have been used on roadways with speeds greater than 40 miles per hour.

Future intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets. Similarly, the speed limit has been used as the basis for determining the use of Urban and Rural warrants. Traffic signal warrant analyses were performed for the following unsignalized study area intersection shown in Table 2-3:

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

#	Intersection	#	Intersection
2	Palm Dr. / Park Ln.	5	E. Access / Park Ln.
4	W. Access / Park Ln.		

The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3 *Area Conditions* of this report. The traffic signal warrant analyses for future conditions are presented in Section 5 *EAP (2027) Traffic Conditions*, and Section 6 *EAPC (2027) Traffic Conditions* of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

The City of Desert Hot Springs' General Plan recommends a minimum LOS standard of LOS D or better. If during the LOS evaluations an intersect City of Desert Hot Springs ion or roadway segment is found to not meet the requisite LOS standard as established by the' General Plan, improvement modifications will be evaluated to bring the forecasted deficiency to within acceptable LOS thresholds.

The following deficiency criteria has been utilized for the City of Desert Hot Springs to determine whether the addition of project-related traffic at a study intersection would result in a deficiency:

- A deficiency occurs at study area intersections if the pre-Project condition is at or better than LOS D (i.e., acceptable LOS), and the addition of project trips causes the peak hour LOS of the study area intersection to operate at unacceptable LOS (i.e., LOS E or F). Per the County of Riverside traffic study guidelines, for intersections currently operating at unacceptable LOS (LOS E or F), a deficiency will occur if the Project contributes 50 or more peak hour trips to pre-project traffic conditions.

3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Desert Hot Springs Circulation Network, and a review of existing peak hour intersection operations and traffic signal warrant analyses.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the agreement with City of Desert Hot Springs staff (Appendix 1.1), the study area includes 5 existing and future intersections as shown previously on Exhibit 1-2, where the Project is anticipated to contribute 50 or more peak hour trips or has been added at the direction of City staff.

Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 GENERAL PLAN CIRCULATION ELEMENT

As noted previously, the Project site is located within the City of Desert Hot Springs. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on the City of Desert Hot Springs General Plan Circulation Element, are described subsequently. Exhibit 3-2 shows the City of Desert Hot Springs General Plan Circulation Element and Exhibit 3-3 illustrates the City of Desert Hot Springs General Plan roadway cross-sections.

As shown in the Desert Hot Springs General Plan Circulation Element, Palm Drive is classified as a Primary I which can accommodate six travel lanes south of Two Bunch Palms Trail and a Secondary I which can accommodate four travel lanes north of Two Bunch Palms Trail in the study area.

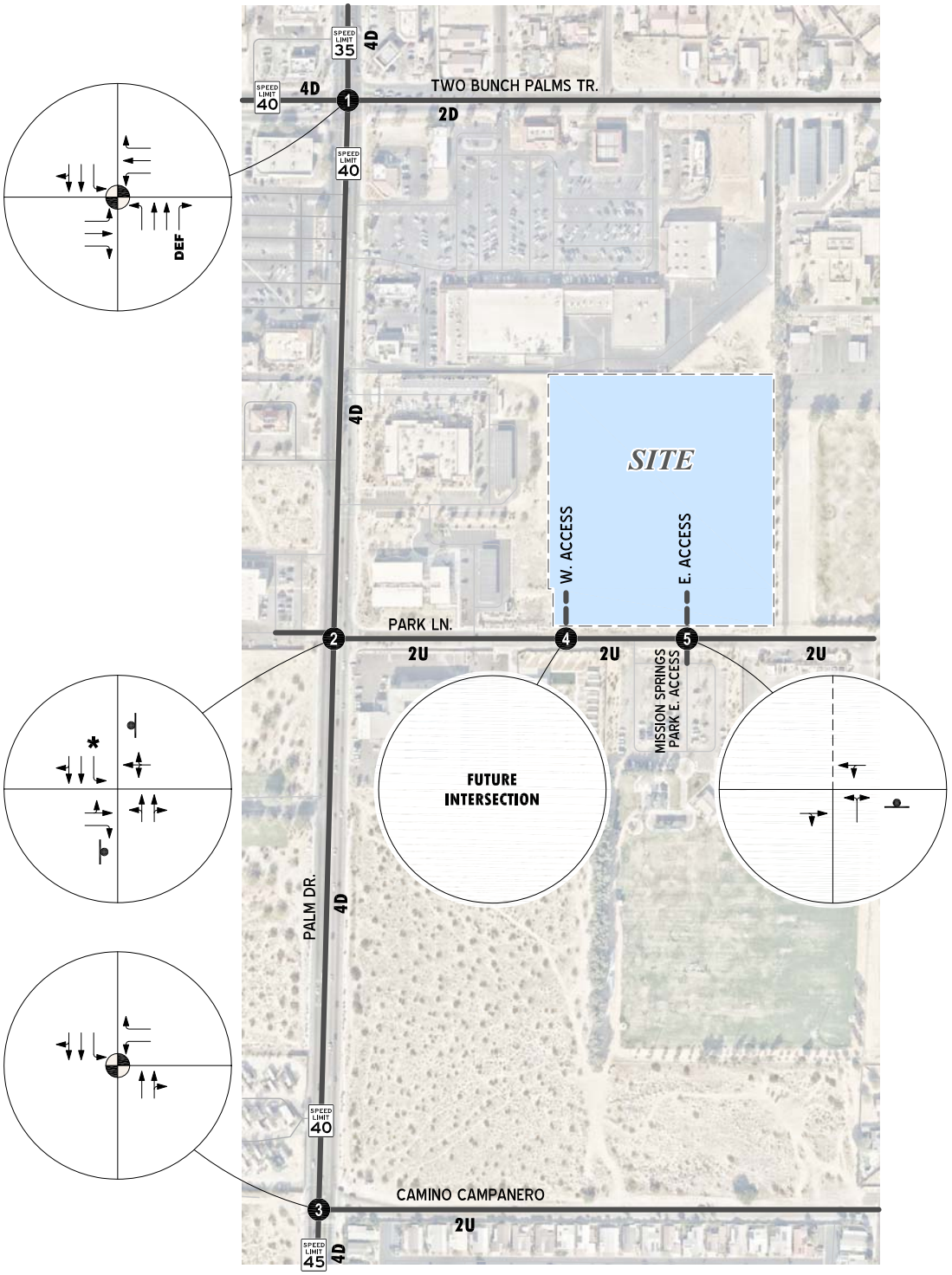
Two Bunch Palms Trail is an east-west oriented Secondary II which can accommodate four lanes in the study area. Park Lane is a local roadway which is not shown in the Desert Hot Springs General Plan Circulation Element.

3.3 TRANSIT SERVICE

The City of Desert Hot Springs is currently served by the SunLine Transit Agency, with routes (2 and 5) located along Palm Drive in the study area. Route 3 is included on Palm Drive north of Two Bunch Palms Trail and along Two Bunch Palms Trail west of Palm Drive.

Transit service is reviewed and updated by Sunline periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS

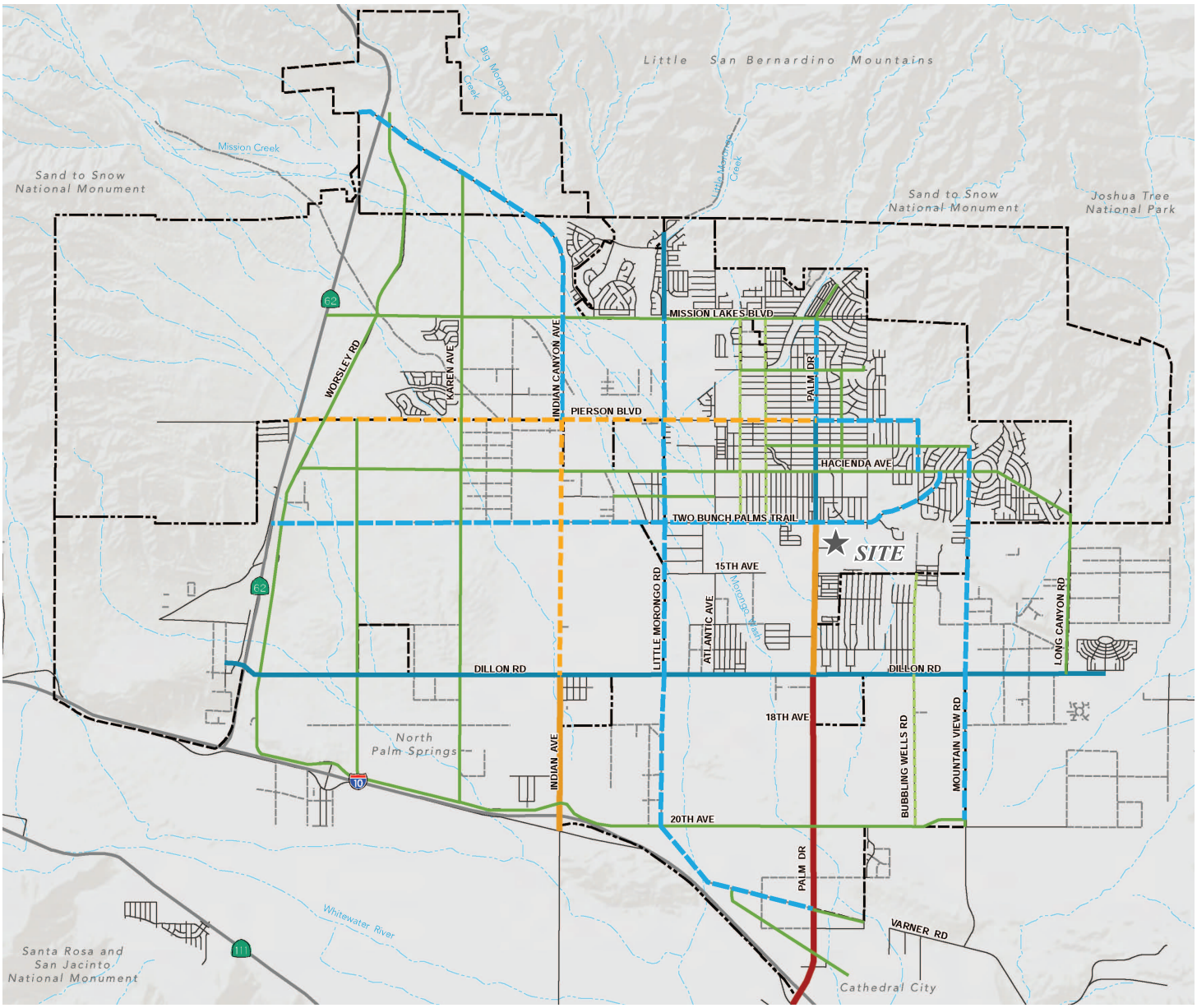


LEGEND:

- 5 = INTERSECTION ID
- = TRAFFIC SIGNAL
- = STOP SIGN
- = FUTURE PROJECT ACCESS
- DEF = DEFACTO RIGHT TURN LANE
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED
- * = LEFT TURN LANE ACCOMMODATED WITHIN EXISTING TWO-WAY LEFT TURN LANE MEDIAN

N

EXHIBIT 3-2: CITY OF DESERT HOT SPRINGS ROADWAYS PLAN



SOURCE: CITY OF DESERT HOT SPRINGS GENERAL PLAN (MAY 2020)

Road Classifications

- Urban Arterial
- Primary I
- Primary II
- Secondary I
- Secondary II
- Collector
- Local Collector

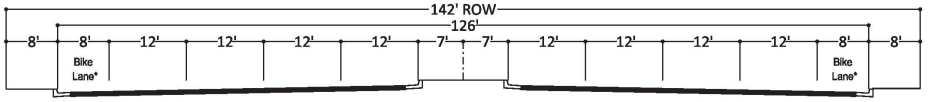
Base Map Features

- City Boundary
- Sphere of Influence
- Water Courses

N

EXHIBIT 3-3: CITY OF DESERT HOT SPRINGS GENERAL PLAN ROADWAY CROSS-SECTIONS

Urban Arterial
8-Lanes Divided
No Parking
With Protected Bike Lane

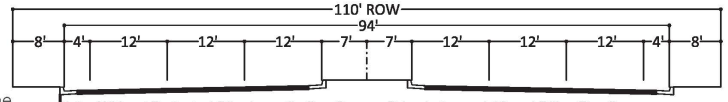


*See Enhanced Bike Lane Detail

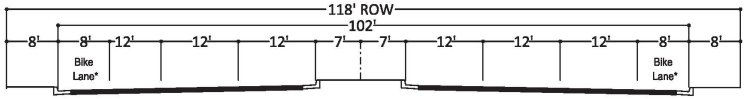
ENHANCED BIKE LANE DETAIL:

* Buffered bike lanes include painted buffer.
Protected bike lanes may include safety bollards or a landscaped median.

Primary I
6-Lanes Divided
No Parking
With or Without Protected Bike Lane

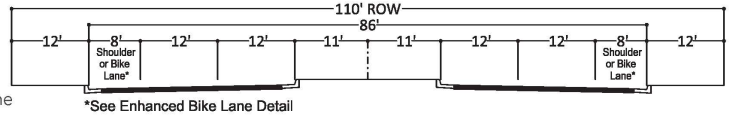


Note: Without Protected Bike Lane (Indian Canyon Drive between I-10 and Dillon Road)



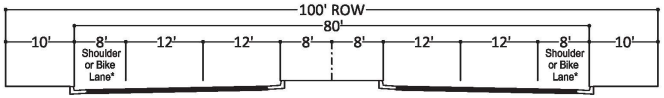
Note: With Protected Bike Lane (Palm Drive between Dillon Road and Two Bunch Palms Trail)
*See Enhanced Bike Lane Detail

Primary II
4-Lanes Divided
No Parking
With or Without Protected Bike Lane



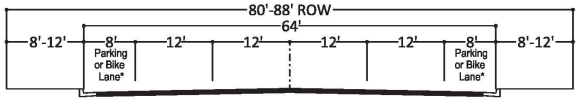
*See Enhanced Bike Lane Detail

Secondary I
4-Lanes Divided
No Parking
With Protected Bike Lane

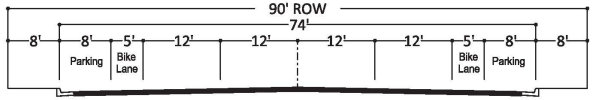


*See Enhanced Bike Lane Detail

Secondary II
4-Lanes Undivided
On-Street Parking
With or Without Dedicated Bike Lane

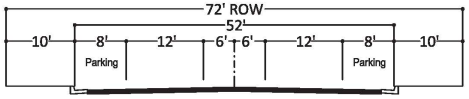


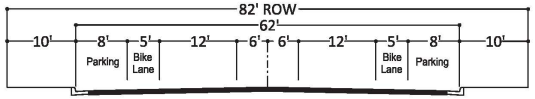
Note: With Parking or Bike Lane
*See Enhanced Bike Lane Detail



Note: With Parking and Bike Lane

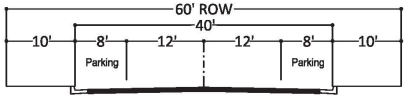
Collector
2-Lanes Undivided
On-Street Parking
With or Without Dedicated Bike Lane

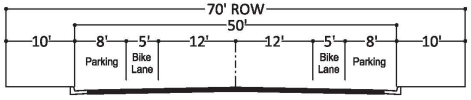




Note: With Parking and Bike Lane

Local Collector
2-Lanes Undivided
On-Street Parking
With or Without Dedicated Bike Lane





Note: With Parking and Bike Lane

SOURCE: CITY OF DESERT HOT SPRINGS GENERAL PLAN (MAY 2020)

3.4 PEDESTRIAN AND BICYCLE FACILITIES

Exhibits 3-4 and 3-5 illustrate the City of Desert Hot Springs trails plan and bikeway system, respectively. The trails plan shows the future hiking/multi-purpose trails along Two Bunch Palms Trail within the study area. The bicycle plan shows protected bike lanes along Palm Drive and Two Bunch Palms Trail, shared street facilities along Park lane and Camino Campanero east of Palm Drive, and striped bike lanes along 15th Avenue (Camino Campanero) west of Palm Drive.

The existing pedestrian facilities within the study area are shown on Exhibit 3-6. As shown on Exhibit 3-6, existing on-street bike lanes are located along Palm Drive and Two Bunch Palms Trail within the study area. Sidewalks also exist on Palm Drive, Two Bunch Palms Trail, and portions of Park Lane in the vicinity of the Palm Drive / Paul Road intersection.

3.5 EXISTING (2025) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in February 2025. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

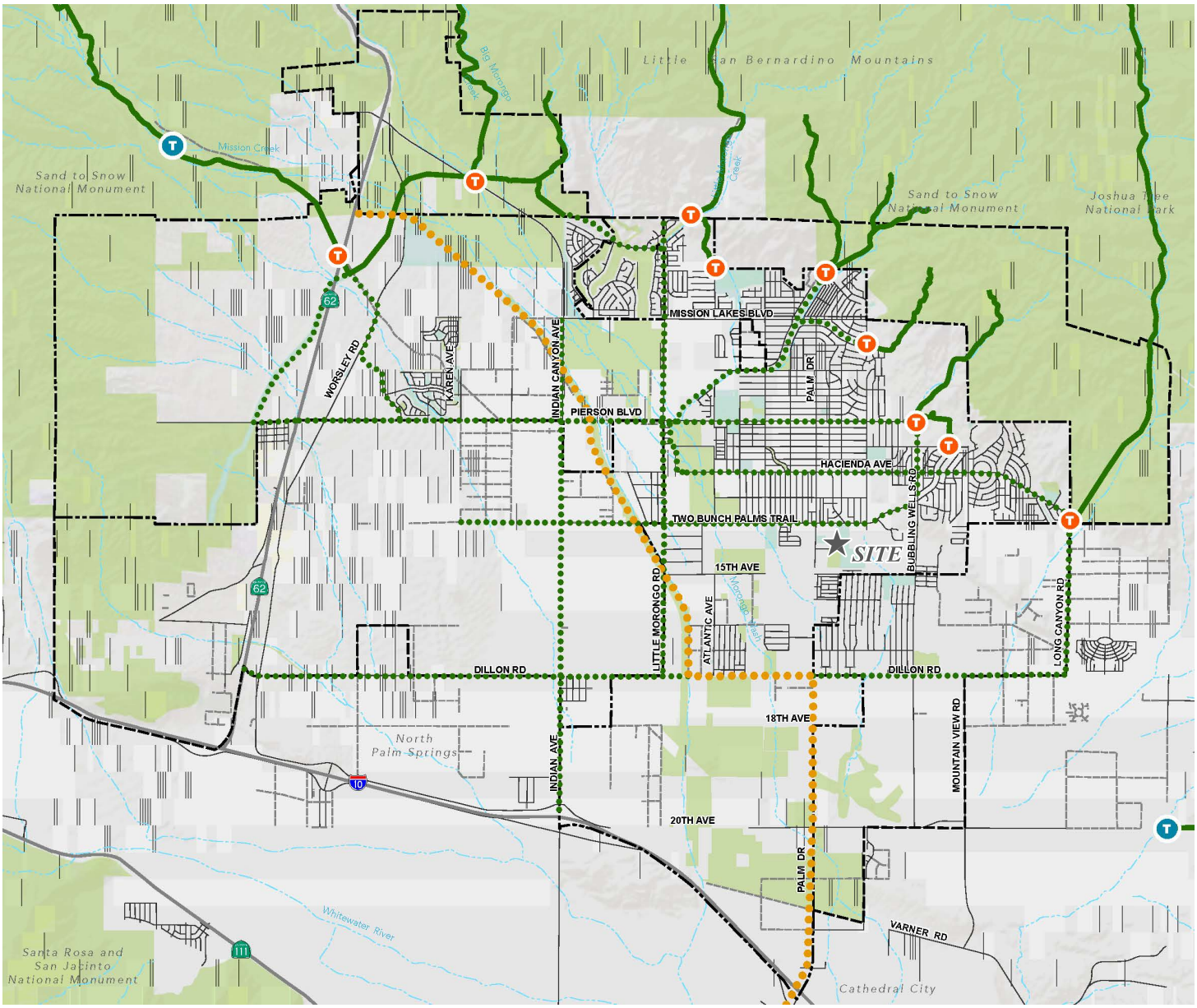
The weekday AM and PM peak hour count data are representative of typical peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity that would prevent or limit roadway access and detour routes. These raw turning volumes have been flow-conserved between intersections with limited access, no access and where there are currently no uses generating traffic.

Existing weekday ADT volumes are shown on Exhibit 3-7. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 13.699 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 7.3 percent. As such, the above equation utilizing a factor of 13.699 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 7.3 percent (i.e., 1/0.073 = 13.699) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses.

EXHIBIT 3-4: CITY OF DESERT HOT SPRINGS TRAILS PLAN



SOURCE: CITY OF DESERT HOT SPRINGS GENERAL PLAN (MAY 2020)

Trails

- Existing Hiking Trails
- Future Hiking/Multi-Purpose Trails
- Future CV Link

Trailheads

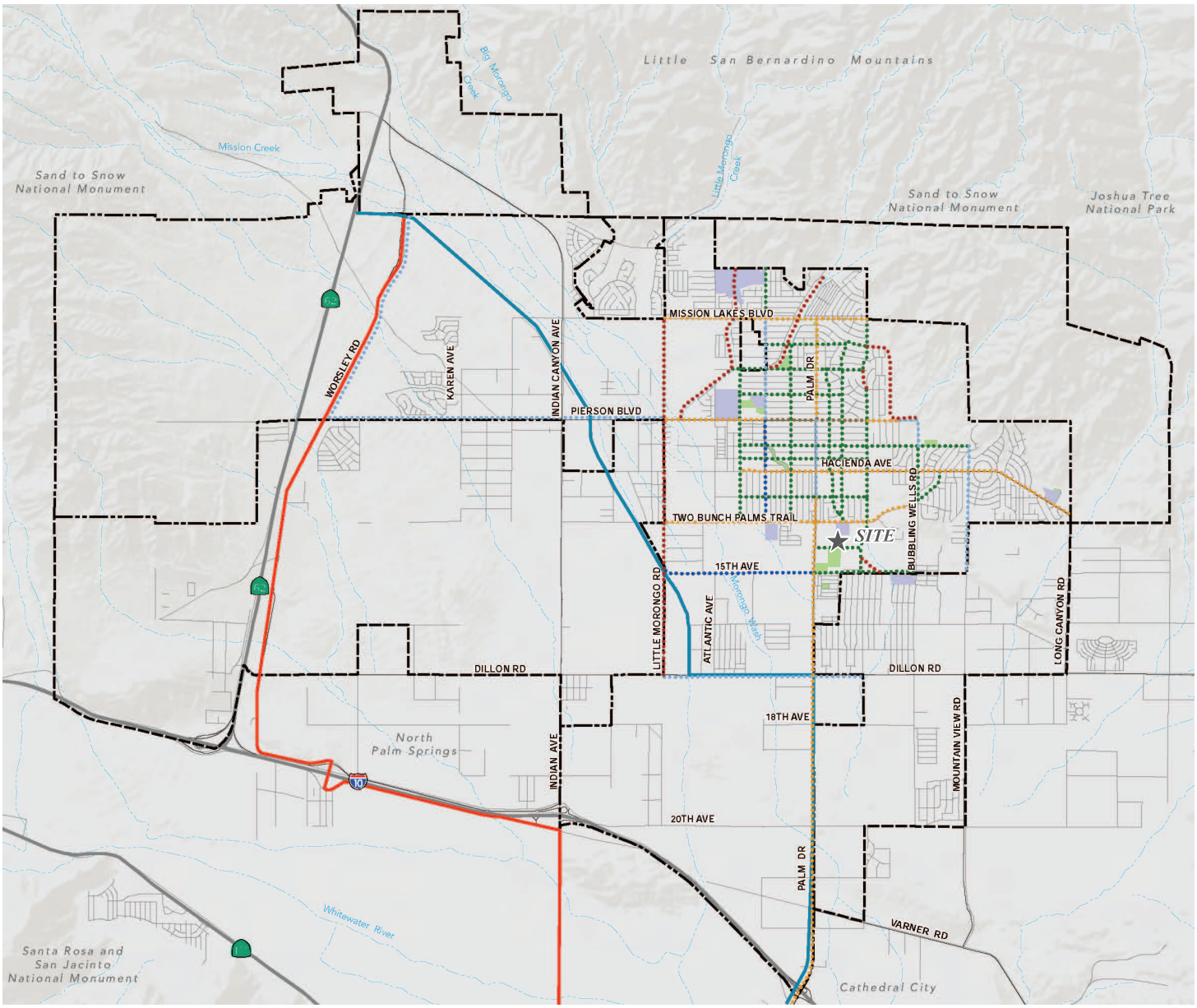
- Existing Trailheads
- Future Trailheads (Conceptual Locations)

Base Map Features

- City Boundary
- Sphere of Influence
- Water Courses
- Open Space
- Public/Institutional

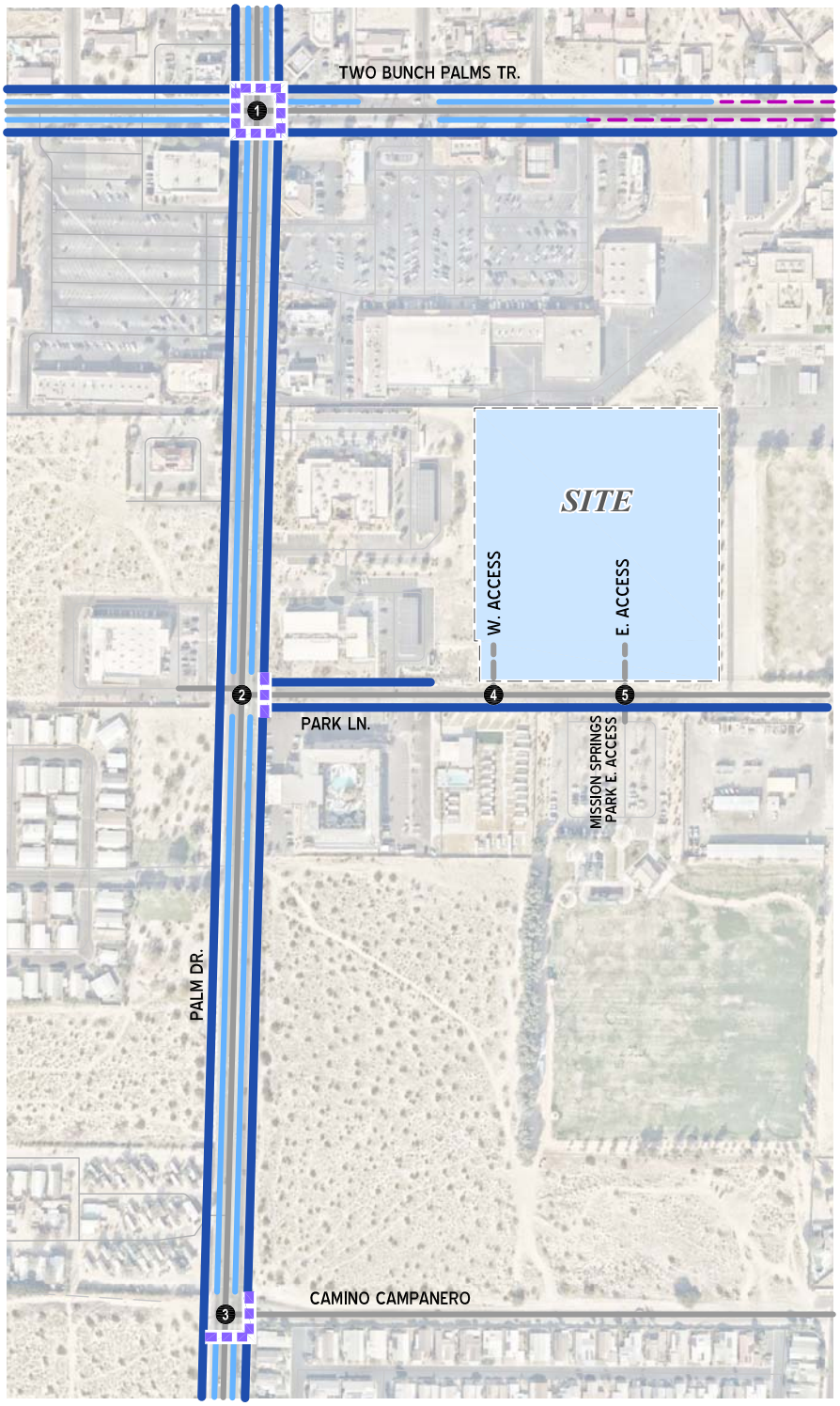
N

EXHIBIT 3-5: CITY OF DESERT HOT SPRINGS BICYCLE PLAN



SOURCE: CITY OF DESERT HOT SPRINGS GENERAL PLAN (MAY 2020)

EXHIBIT 3-6: EXISTING PEDESTRIAN AND BIKE FACILITIES

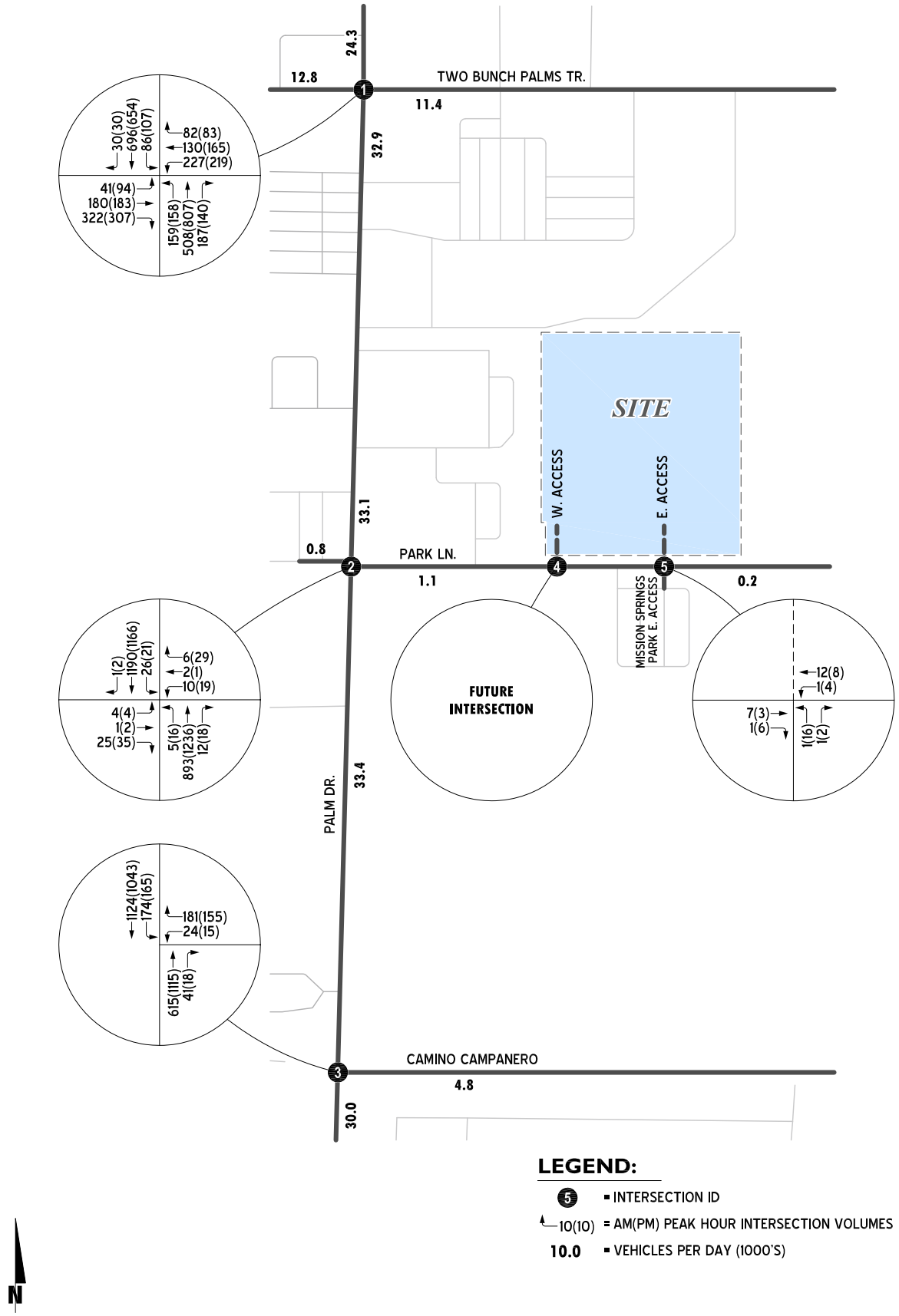


LEGEND:

- 5 = INTERSECTION ID
- = FUTURE PROJECT ACCESS
- = MARKED CROSSWALK
- = SIDEWALK/PATH
- = ON-STREET BIKE LANES
- = SHARROW LANE (SHARED LANE)

N

EXHIBIT 3-7: EXISTING (2025) TRAFFIC VOLUMES



3.6 TRAFFIC OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized on Table 3-1. The intersection of Palm Drive / Park Lane (#2) is currently operating at an unacceptable LOS (LOS "E" or worse) during the peak hours.

The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

Daily roadway segment analysis has also been performed for existing study area conditions, as shown in Table 3-2. It is important to note that daily roadway capacities are "rule of thumb" estimates for planning purposes. Roadway segment capacity is affected by such factors as intersections (spacing, lane configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, and vehicle mix (including truck traffic).

As shown in Table 3-2, the existing daily roadway segment volumes are not anticipated to exceed daily capacity estimates within the study area.

3.7 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on 2025 peak hour intersection turning volumes (see Appendix 3.3). For Existing (2025) traffic conditions, the unsignalized intersection of Palm Drive / Park Lane (#2) does not meet volume warrants for installation of a traffic signal.

TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2025) CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2]												Delay[3] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Palm Dr. / Two Bunch Palms Tr.	TS	1	2	d	1	2	0	1	1	1	1	1	1	40.4	38.3	D	D
2	Palm Dr. / Park Ln.	CSS	0.5	1.5	0	1*	2	0	0.5	0.5	1	0	1!	0	>80	>80	F	F
3	Palm Dr. / Camino Campanero	TS	0	2	0	1	2	0	0	0	0	1	0	1	11.4	13.9	B	B
4	W. Access / Park Ln.		Future Intersection															
5	E. Access / Park Ln.	CSS	0	1!	0	0	0	0	0	1	0	0.5	0.5	0	8.6	8.8	A	A

[1] TS = Traffic Signal; CSS = Cross-street Stop

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane; d = Defacto Right Turn Lane;

* = Turn lane accommodated within two-way left-turn lane (TWLTL) median

[3] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

F:\UXRjobs_16100-16500_16100\16155\02_LOS\Excel\[16155 - Report.xlsx]3-1 E

TABLE 3-2: ROADWAY VOLUME/CAPACITY ANALYSIS FOR EXISTING (2025) CONDITIONS

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	LOS E Capacity[2]	ADT[3]	V/C Ratio
Palm Dr.	North of Two Bunch Palms Tr.	Secondary I	4	36,000	24,300	0.68
Palm Dr.	South of Two Bunch Palms Tr.	Primary I	4	36,000	32,900	0.91
Palm Dr.	North of Park Ln.	Primary I	4	36,000	33,100	0.92
Palm Dr.	Between Park Ln. & Camino Camp	Primary I	4	36,000	33,400	0.93
Palm Dr.	South of Camino Campanero	Primary I	4	36,000	30,000	0.83
Palms Tr.	West of Palm Dr.	Secondary II	4	26,000	12,800	0.49
Palms Tr.	East of Palm Dr.	Secondary II	2	13,000	11,400	0.88
Park Ln.	East of Palm Dr.	Local	2	13,000	1,100	0.08
Campanero	East of Palm Dr.	Local	2	13,000	4,800	0.37

[1] Existing Number of Through lanes
[2] Source: City of Desert Hot Springs General Plan, May 2020.
[3] Average Daily Traffic (ADT) expressed in vehicles per day

F:\UXRjobs_16100-16500_16100\16155\02_LOS\Excel\[16155 - Report.xlsx]3-2

4 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. The Project is proposed to consist of 167 affordable dwelling units and an early childcare center accommodating 66 students.

For analysis purposes, it is anticipated that the Project would be fully developed by year 2027. Access to the Project will be provided via full access intersections along Park Lane (2 driveways). There is also a potential Emergency Vehicle Access (EVA) driveway connection to the adjacent commercial service drive north of the site.

4.1 PROJECT TRIP GENERATION

In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) *Trip Generation* (11th Edition, 2021) manual for the proposed land uses (ITE 223 – Affordable Housing based on General Urban/Suburban Dwelling Units and ITE 565 – Day Care Center) are utilized (4). Table 4-1 presents the trip generation rates and the resulting trip generation summary for the proposed Project.

As shown in Table 4-1, the Project is anticipated to generate 937 external vehicle trip-ends per day with 85 external AM peak hour trips and 103 external PM peak hour trips.

4.2 PROJECT TRIP DISTRIBUTION

The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional corridors.

Project trip distribution patterns for the Project are illustrated on Exhibit 4-1.

4.3 MODAL SPLIT

The potential for Project trips to be reduced by the use of public transit, walking or bicycling have not been included as part of the Project's estimated trip generation. Essentially, the Project's traffic projections are "conservative" in that these alternative travel modes would reduce the forecasted traffic volumes.

4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project weekday ADT and weekday peak hour intersection turning movement volumes are shown on Exhibit 4-2.

TABLE 4-1: PROJECT TRIP GENERATION SUMMARY

Trip Generation Rates[1]

Land Use	ITE LU Code	Quantity[2]		AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Affordable Housing	223	167	DU	0.10	0.26	0.36	0.27	0.19	0.46	4.81
Early Child Care Center	565	66	STU	0.41	0.37	0.78	0.37	0.42	0.79	4.09

Trip Generation Results

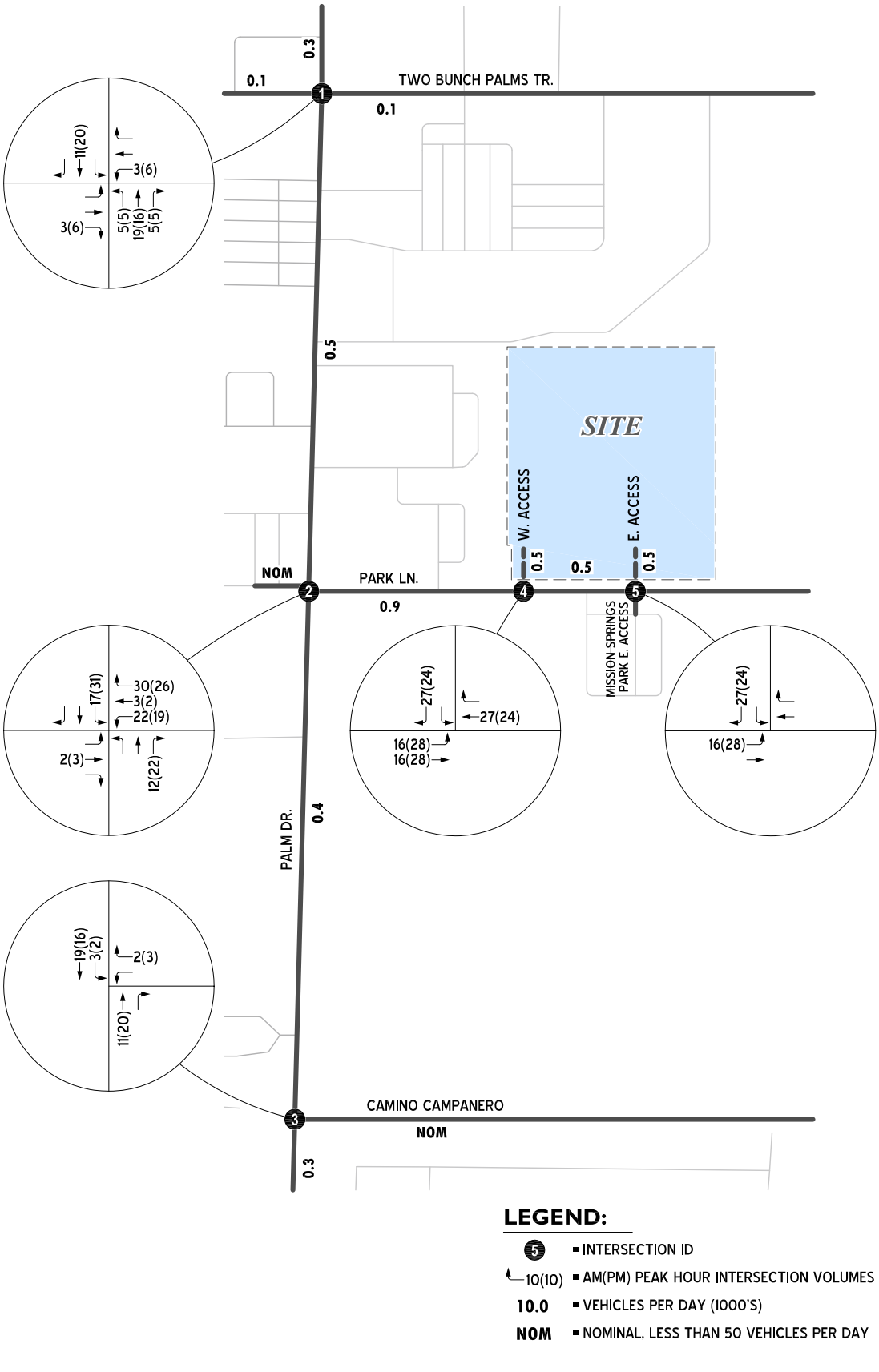
Land Use	ITE LU Code	Quantity[2]		AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Affordable Housing	223	167	DU	17	43	60	45	32	77	803
Internal Capture				*(6)*	*(7)*	*(13)*	*(7)*	*(6)*	*(13)*	*(68)*
Early Child Care Center	565	66	STU	27	24	51	24	28	52	270
Internal Capture				*(7)*	*(6)*	*(13)*	*(6)*	*(7)*	*(13)*	*(68)*
Project Subtotal				44	67	111	69	60	129	1,073
Internal Capture				*(13)*	*(13)*	*(26)*	*(13)*	*(13)*	*(26)*	*(136)*
TOTAL WITH PASS-BY				**31**	**54**	**85**	**56**	**47**	**103**	**937**

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).
[2] STU = Students; DU = Dwelling Units

F:\UXRjobs_16100-16500_16100\16155\02_LOS\Excel\[16155 - Report.xlsx]16155 - TG

EXHIBIT 4-1: PROJECT TRIP DISTRIBUTION

EXHIBIT 4-2: PROJECT ONLY TRAFFIC VOLUMES



4.5 BACKGROUND FUTURE TRAFFIC

Future year traffic forecasts have been based upon background (ambient) growth at 2% per year for 2027 traffic conditions. The total ambient growth is 4.04% for 2027 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects.

The near-term traffic analysis includes the following traffic conditions, with the various traffic components:

- EAP (2027)
  - Existing (2025) volumes
  - Ambient growth traffic (4.04% over 2 years)
  - Project Traffic
- EAPC (2027)
  - Existing (2025) volumes
  - Ambient growth traffic (4.04% over 2 years)
  - Project Traffic
  - Cumulative Development traffic

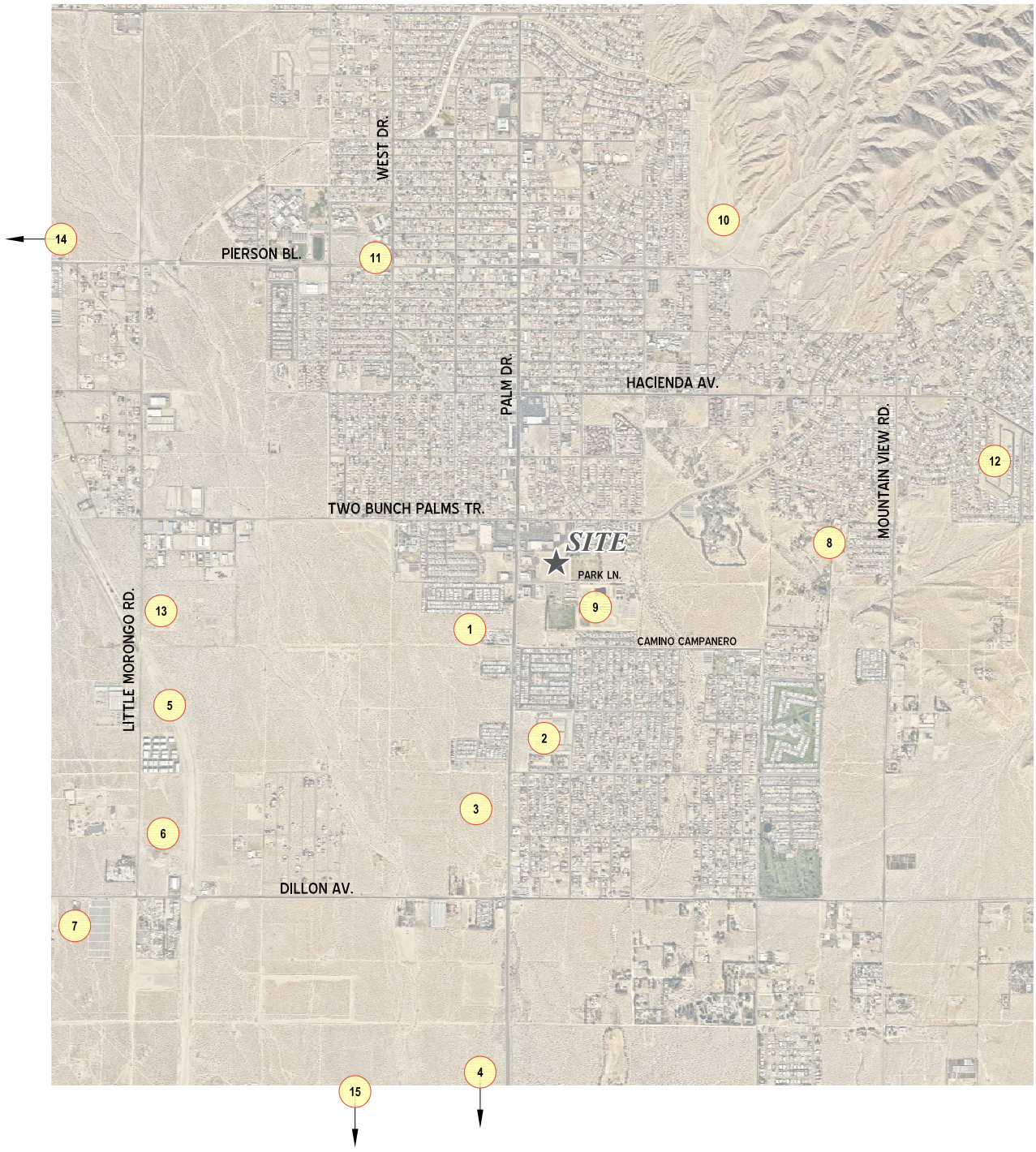
4.6 CUMULATIVE DEVELOPMENT TRAFFIC

The cumulative projects listed are those that would generate traffic and would contribute traffic to study area intersections.

Exhibit 4-3 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown on Table 4-2. Reference materials include *Marbella Villa Residential Project Traffic Impact Analysis* (Kunzman Associates, Inc. July 3, 2017), *Rancho Descano Traffic Impact Analysis* (Trames Solutions, Inc. August 23, 2021), *Palm Drive – Clair Avenue Mixed-Use Complex Traffic Impact Analysis* (TJW Engineering, Inc. August 30, 2023), *Green Day Village Access Analysis* (IBI Group October 6, 2022), and *Mission Springs Water District Critical Services Center Headquarters Building Project Trip Generation Assessment* (Urban Crossroads, Inc. June 26, 2024) (5) (6) (7) (8) (9).

If applicable, the traffic generated by individual cumulative projects was manually added to the Opening Year Cumulative forecasts to ensure that traffic generated by the listed cumulative development projects on Table 4-2 are reflected as part of the background traffic. In an effort to conduct a conservative analysis, the cumulative projects are added in conjunction with the ambient growth identified in Section 4.5 *Background Traffic*.

EXHIBIT 4-3: CUMULATIVE DEVELOPMENT LOCATION MAP



LEGEND:

1 = CUMULATIVE DEVELOPMENT ID

N

INTERSTATE 10

TABLE 4-2: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use[1]	Quantity	Units[2]
1	Ovation	Condominiums	402	DU
2	Rancho Descano	Single Family Residential	76	DU
3	Palm Drive - Claire Avenue Mixed Use Commercial Complex	Self-Storage Facility	115.148	TSF
		High-Turnover (Sit-Down) Restaurant	5.0	TSF
		Fast-Food Rest. w/ Drive Through	3.5	TSF
4	Green Day Village	Multi-Family Residential	608	DU
		Medical Office	21.854	TSF
		Fast-Food Rest. w/ Drive Through	4.608	TSF
		Restaurant	6.144	TSF
		Commercial	42.26	TSF
5	DHS Light Industrial w/ Cannabis Overlay	Marijuana Cultivation and Processing Facility	116.00	TSF
6	Oxford Properties Cultivation Center	Nursery (Wholesale)	70.26	AC
7	The Spot (south of Dillon & east of Bearce)	Cultivation	120	EMP
		Dispensary/Lounge Facility	6.0	TSF
8	Kimana Resort	Hotel & Glamping Units	48	RM
		Spa & Health Club	2.50	TSF
		Restaurant & Coffee Bar	0.64	TSF
9	Mission Springs Water District	Office / Corporate Yard	41.17	TSF
10	Tuscan Hills SP	Residential	1,878	DU
11	Public Safety Campus	Police Annex Building	6.371	TSF
12	Palari / Mighty Buildings	Single Family Residential	77	DU
13	Din Cultivation	Cannabis Cultivation Warehouse	63.446	TSF
14	Beyond Food Mart	Convenience Store/Gas Station/Car Wash	16	VFP
15	Varner / West Dr. Logistics Facility	High-Cube Warehouse	1,500.00	TSF

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Unit; RM = Room; TSF = Thousand Square Feet; AC = Acre; OCC RM = Occupied Room

F:\UXRjobs_16100-16500_16100\16155\02_LOS\Excel\[16155 - Report.xlsx]16155-Cumulative List

This page intentionally left blank

5 EAP (2027) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Existing plus Ambient Growth plus Project (EAP) conditions and the resulting intersection operations and traffic signal warrant analyses.

5.1 EAP TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 4.04% and the addition of Project traffic. The weekday ADT and weekday peak hour intersection turning movement volumes which can be expected for EAP (2027) traffic conditions are shown on Exhibit 5-1.

5.2 TRAFFIC OPERATIONS ANALYSIS

EAP peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 Methodologies of this TA. The intersection analysis results are summarized in Table 5-1, which indicates that there are no new study area intersections anticipated to operate at an unacceptable LOS (LOS "E" or worse) for opening year (2027) conditions, with the addition of Project traffic.

The intersection operations analysis worksheets for EAP traffic conditions is included in Appendix 5.1 of this TA.

Daily roadway segment analysis has also been performed for EAP conditions, as shown in Table 5-2. As discussed previously, daily roadway capacities are "rule of thumb" estimates for planning purposes. Roadway segment capacity is affected by such factors as intersections (spacing, lane configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, and vehicle mix.

As shown in Table 5-2, the EAP (2027) daily roadway segment volumes are not anticipated to exceed daily capacity estimates within the study area.

5.3 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for EAP (2027) traffic conditions provided in Appendix 3.3. For EAP (2027) traffic conditions, the unsignalized intersections of Palm Drive / Park Lane (#2) and Project Driveways along Park Lane are not anticipated to meet peak hour volume-based warrants and daily volume-based warrants with the addition of Project traffic (see Appendix 3.3).

EXHIBIT 5-1: EXISTING PLUS AMBIENT PLUS PROJECT (2027) TRAFFIC VOLUMES

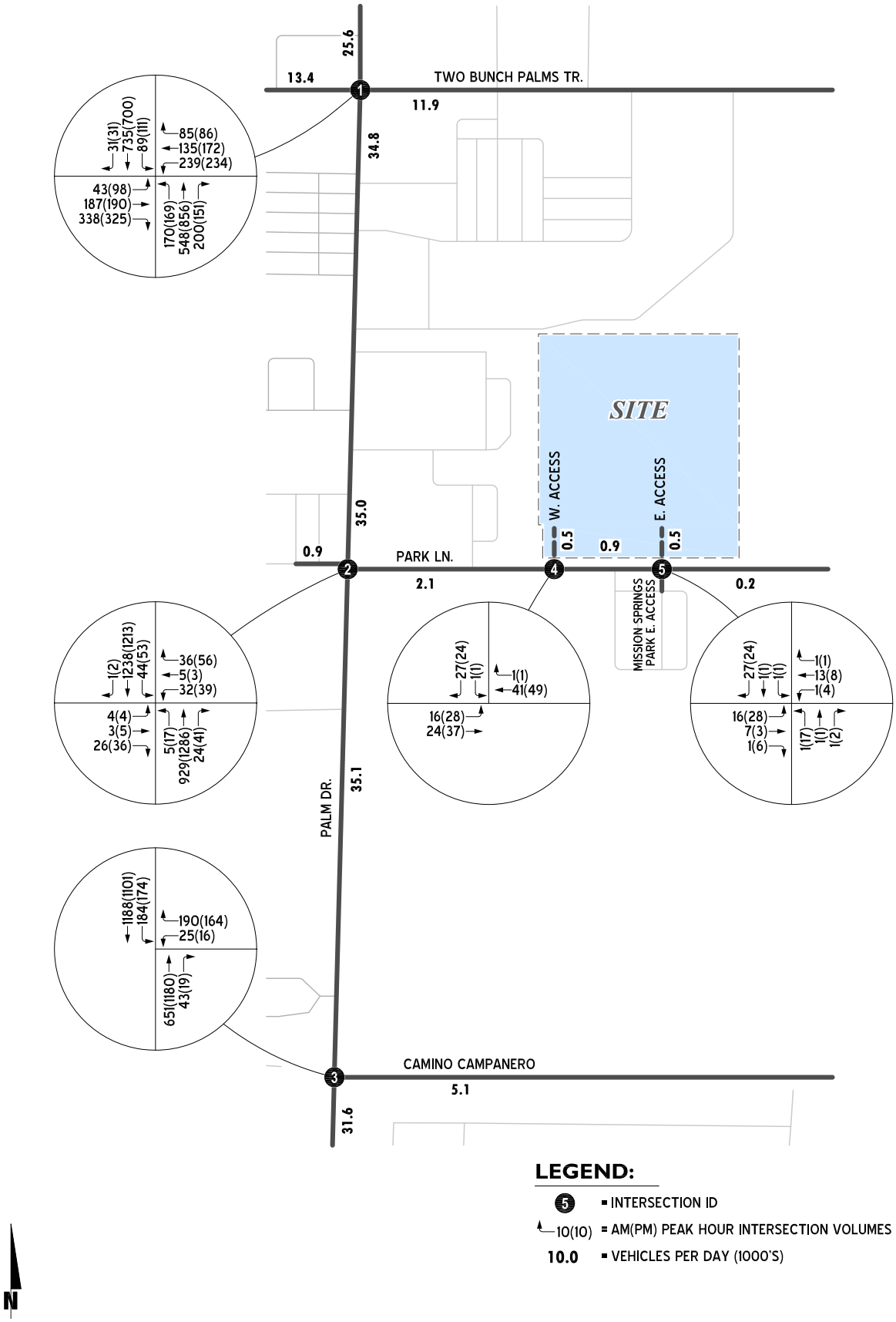


TABLE 5-1: INTERSECTION ANALYSIS FOR EAP (2027) CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2]												Delay[3] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Palm Dr. / Two Bunch Palms Tr.	TS	1	2	d	1	2	0	1	1	1	1	1	1	42.8	41.1	D	D
2	Palm Dr. / Park Ln.	CSS	0.5	1.5	0	1*	2	0	0.5	0.5	1	0	1!	0	>80	>80	F	F
	- With Improvements	**TS**	**1**	2	0	**1**	2	0	**1**	1	0	**1**	1	0	8.9	11.2	A	B
3	Palm Dr. / Camino Campanero	TS	0	2	0	1	2	0	0	0	0	1	0	1	11.9	15.0	B	B
4	W. Access / Park Ln.	**CSS**	0	0	0	0	**1!**	0	0.5	0.5	0	0	1	0	8.7	8.8	A	A
5	E. Access / Park Ln.	CSS	0	1!	0	0	**1!**	0	0.5	0.5	0	0	1	0	9.2	9.5	A	A

[1] TS = Traffic Signal; CSS = Cross-street Stop

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane; d = Defacto Right Turn Lane;
* = Turn lane accommodated within two-way left-turn lane (TWLTL) median; **1** = Improvement

[3] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

F:\UXRjobs_16100-16500_16100\16155\02_LOS\Excel\[16155 - Report.xlsx]5-1 EAP (2027)

TABLE 5-2: ROADWAY VOLUME/CAPACITY ANALYSIS FOR EAP (2027) CONDITIONS

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	LOS E Capacity[2]	ADT[3]	V/C Ratio
Palm Dr.	North of Two Bunch Palms Tr.	Secondary I	4	36,000	25,600	0.71
Palm Dr.	South of Two Bunch Palms Tr.	Primary I	4	36,000	34,800	0.97
Palm Dr.	North of Park Ln.	Primary I	4	36,000	35,000	0.97
Palm Dr.	Between Park Ln. & Camino Campanero	Primary I	4	36,000	35,100	0.98
Palm Dr.	South of Camino Campanero	Primary I	4	36,000	31,600	0.88
Two Bunch Palms Tr.	West of Palm Dr.	Secondary II	4	26,000	13,400	0.52
Two Bunch Palms Tr.	East of Palm Dr.	Secondary II	2	13,000	11,900	0.92
Park Ln.	East of Palm Dr.	Local	2	13,000	2,100	0.16
Camino Campanero	East of Palm Dr.	Local	2	13,000	5,100	0.39

[1] Existing Number of Through lanes
[2] Source: City of Desert Hot Springs General Plan, May 2020.
[3] Average Daily Traffic (ADT) expressed in vehicles per day

F:\UXRjobs_16100-16500_16100\16155\02_LOS\Excel\[16155 - Report.xlsx]5-2

5.4 RECOMMENDED IMPROVEMENTS

Installation of a traffic signal and turn lane improvements at the off-site deficient location of Palm Drive / Park Lane (#2) addresses intersection operational deficiencies for EAP (2027) conditions. The effectiveness of the recommended traffic signal at this location is presented in Table 5-1 for EAP (2027) traffic conditions.

It should be noted that the intersection of Palm Drive / Park Lane (#2) is an existing deficient intersection and is anticipated to meet traffic signal warrants with cumulative traffic (under EAPC conditions). For EAP (2027) conditions, this intersection is not anticipated to meet traffic signal warrants and providing additional lanes are not anticipated to improve intersection operations to acceptable LOS. Therefore, for analysis purposes, installation of the traffic signal at Palm Drive / Park Lane (#2) is recommended for EAP (2027) conditions as it will eventually meet warrants with the addition of cumulative traffic.

The intersection operations analysis worksheets for EAP (2027) traffic conditions, with improvements, are included in Appendix 5.1 of this TA.

This page intentionally left blank

6 EAPC (2027) TRAFFIC CONDITIONS

This section discusses the methods used to develop Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2027) traffic forecasts, and the resulting intersection operations and traffic signal warrant analyses.

6.1 PLANNED CUMULATIVE IMPROVEMENTS

The following planned improvements by nearby cumulative project (Ovation) for access purposes are assumed in place for EAPC (2027) conditions:

#3 – Palm Dr. / Camino Campanero - 15th Avenue

- Construct the west leg (15th Avenue) as a 2-lane roadway Ovation Condominiums (nearby cumulative project)
- Provide one eastbound shared left-through-right lane.
- Modify westbound approach to provide one left turn lane, one through lane, and a separate right turn lane.
- Modify northbound striping to provide a separate left turn lane within an existing two-way left turn lane median.

6.1 EAPC (2027) TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 4.04% plus traffic from pending and approved but not yet constructed known development projects in the area. The weekday ADT and weekday peak hour volumes which can be expected for EAPC (2027) traffic conditions are shown on Exhibit 6-1.

6.2 TRAFFIC OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under EAPC (2027) traffic conditions with project access roadway improvements. The intersection analysis results summarized in Table 6-1 which indicates that there are no new study area intersections anticipated to operate at an unacceptable LOS (LOS "E" or worse) with the addition of cumulative traffic. The intersection operations analysis worksheets for EAPC traffic conditions are included in Appendix 6.1 of this TA.

In addition, queuing analysis results at the Palm Drive / Park Lane (#2) are presented in Table 6-2. As shown in Table 6-2, the recommended turn pocket lengths are adequate to serve 95th percentile queue lengths. The 95th percentile queuing analysis worksheets at Palm Drive / Park Lane (#2) are also included in Appendix 6.2 of this TA.

EXHIBIT 6-1: EXISTING PLUS AMBIENT PLUS PROJECT PLUS CUMULATIVE (2027) TRAFFIC VOLUMES

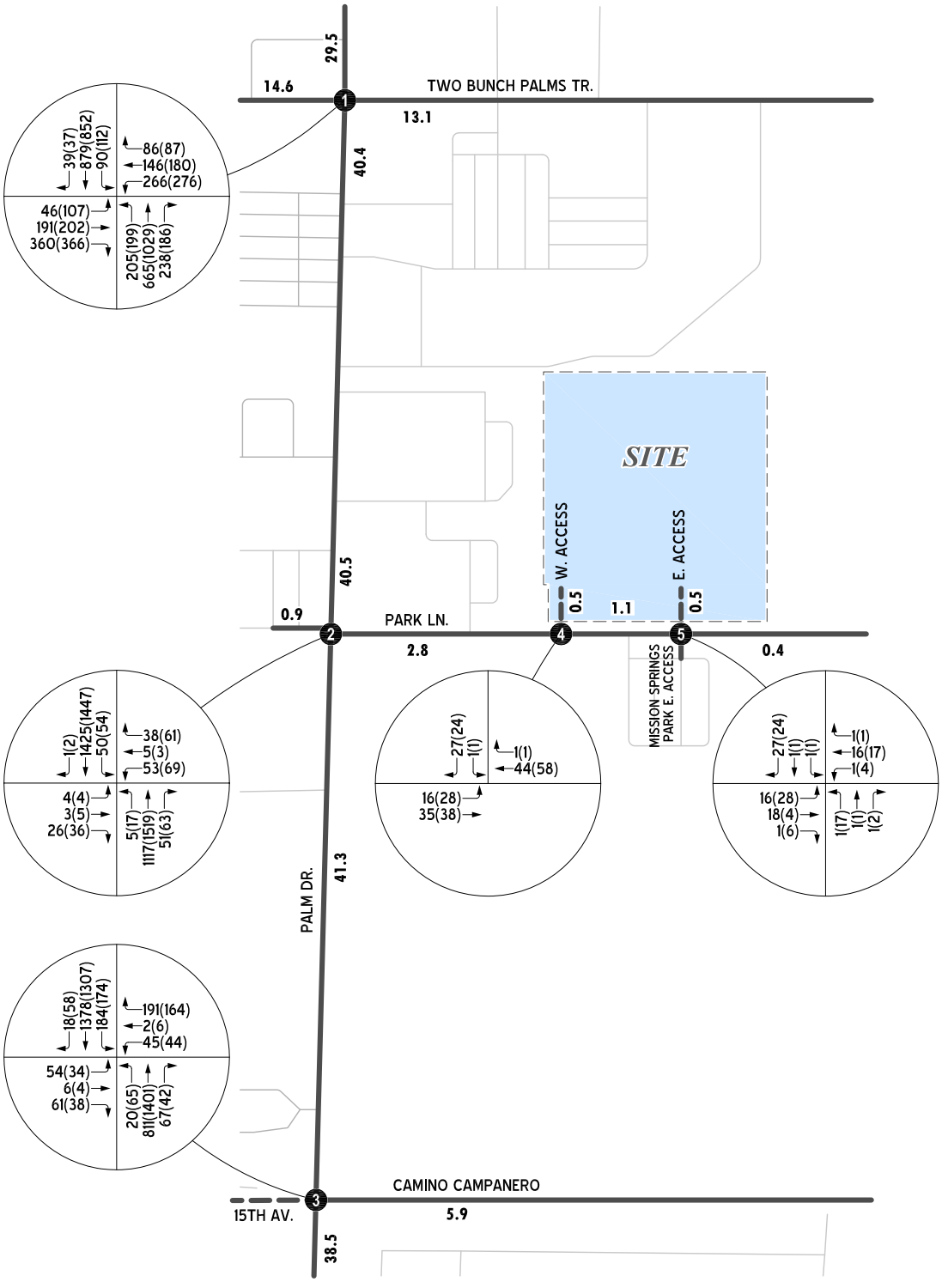


TABLE 6-1: INTERSECTION ANALYSIS FOR EAPC (2027) CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[3] (secs.) AM	PM	Level of Service AM	PM
1	Palm Dr. / Two Bunch Palms Tr.	TS	1	2	d	1	2	0	1	1	1	1	1	1	51.8	54.0	D	D
2	Palm Dr. / Park Ln.	CSS	0.5	1.5	0	1*	2	0	0.5	0.5	1	0	1!	0	>80	>80	F	F
	- With Improvements	**TS**	**1**	2	0	**1**	2	0	**1**	1	0	**1**	1	0	9.6	13.2	A	B
3	Palm Dr. / Camino Campanero - 15th Av.																	
	- With Cumulative Access Improvements	TS	**1**	2	0	1	2	0	0	**1!**	0	1	**1**	1	21.9	22.1	C	C
4	W. Access / Park Ln.	**CSS**	0	0	0	0	**1!**	0	0.5	0.5	0	0	1	0	8.7	8.8	A	A
5	E. Access / Park Ln.	CSS	0	1!	0	0	**1!**	0	0.5	0.5	0	0	1	0	9.3	9.6	A	A

[1] TS = Traffic Signal; CSS = Cross-street Stop

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane; d = Defacto Right Turn Lane;
* = Turn lane accommodated within two-way left-turn lane (TWLTL) median; **1** = Improvement

[3] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

F:\UXRjobs_16100-16500_16100\16155\02_LOS\Excel\[16155 - Report.xlsx]6-1 EAPC (2027)

Daily roadway segment analysis has also been performed for EAPC conditions, as shown in Table 6-3. Daily roadway capacities are "rule of thumb" estimates for planning purposes. Roadway segment capacity is affected by such factors as intersections (spacing, lane configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, and vehicle mix (including truck traffic).

In five cases, the EAPC daily roadway segment volumes are anticipated to exceed daily capacity estimates: Palm Drive south of Two Bunch Palms Trail, Palm Drive north of Park Lane, Palm Drive between Park Lane & Camino Campanero, Palm Drive south of Camino Campanero, and Two Bunch Palms Trail east of Palm Drive. As such, where the ADT volume-based roadway segment analysis indicates a potential deficiency, a review of the more detailed peak hour intersection analysis and progression analysis are undertaken. Review of EAPC peak hour intersection analysis results indicate that acceptable operations are actually provided south of Two Bunch Palms Trail, north of Park Ln. between Park Lane and Camino Campanero , south of Camino Campanero, and Two Bunch Palms Trail east of Palm Drive.

As shown in the Desert Hot Springs General Plan Circulation Element, Palm Drive is classified as a Primary I which will ultimately accommodate six travel lanes south of Two Bunch Palms Trail.

6.3 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for EAPC (2027) traffic conditions are provided in Appendix 3.3. The unsignalized intersection of Palm Drive / Park Lane (#2) is anticipated to meet peak hour volume-based warrants and daily volume-based warrants for EAPC traffic conditions.

TABLE 6-2: PALM DRIVE / PARK LANE QUEUEING ANALYSIS FOR EAPC (2027) CONDITIONS

ID	Intersection	Movement	# of Lanes	EAPC (2027) AM	EAPC (2027) PM	EAPC (2027) Peak	EAPC (2027) Volume	Storage Length[2] (ft.)	95th Percentile Queue Length (ft.)[1] AM	95th Percentile Queue Length (ft.)[1] PM
2	Palm Dr. / Park Ln.									
		NBL	1	5	17	PM	17	**100**	33	61
		SBL	1	50	54	PM	54	**100**	72	78
		EBL	1	4	4	AM	4	30	29	NOM
		WBL	1	53	69	PM	69	**100**	79	98

[1] Queue length calculated using SimTraffic.

[2] Existing length of storage = 100; Proposed length of storage = **100**

[3] NOM = Nominal, less than 5 feet.

F:\UXRjobs_16100-16500_16100\16155\02_LOS\Excel\[16155 - Report.xlsx]6-3

TABLE 6-3: ROADWAY VOLUME/CAPACITY ANALYSIS FOR EAPC (2027) CONDITIONS

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	LOS E Capacity[2]	ADT[3]	V/C Ratio[4]
Palm Dr.	North of Two Bunch Palms Tr.	Secondary I	4	36,000	29,500	0.82
Palm Dr.	South of Two Bunch Palms Tr.	Primary I	4	36,000	40,400	1.12
Palm Dr.	North of Park Ln.	Primary I	4	36,000	40,500	1.13
Palm Dr.	Between Park Ln. & Camino Campanero	Primary I	4	36,000	41,300	1.15
Palm Dr.	South of Camino Campanero	Primary I	4	36,000	38,500	1.07
Two Bunch Palms Tr.	West of Palm Dr.	Secondary II	4	26,000	14,600	0.56
Two Bunch Palms Tr.	East of Palm Dr.	Secondary II	2	13,000	13,100	1.01
Park Ln.	East of Palm Dr.	Local	2	13,000	2,800	0.22
Camino Campanero	East of Palm Dr.	Local	2	13,000	5,900	0.45

[1] Existing Number of Through lanes

[2] Source: City of Desert Hot Springs General Plan, May 2020.

[3] Average Daily Traffic (ADT) expressed in vehicles per day

[4] Volume/Capacity Ratio has been estimated based on ADT. In five cases, the EAPC daily roadway segment volumes are anticipated to exceed daily capacity estimates: Palm Drive south of Two Bunch Palms Trail, Palm Drive north of Park Lane, Palm Drive between Park Lane & Camino Campanero, Palm Drive south of Camino Campanero, and Two Bunch Palms Trail east of Palm Drive. As such, where the ADT volume-based roadway segment analysis indicates a potential deficiency, a review of the more detailed peak hour intersection analysis and progression analysis are undertaken. Review of peak hour intersection analysis results indicate that acceptable operations are actually provided south of Two Bunch Palms Trail, north of Park Ln. between Park Lane and Camino Campanero , south of Camino Campanero, and Two Bunch Palms Trail east of Palm Drive.

F:\UXRjobs_16100-16500_16100\16155\02_LOS\Excel\[16155 - Report.xlsx]6-3

7 SITE ACCESS AND OFF-SITE ROADWAY IMPROVEMENTS

The Project is proposed to be served by full access intersections along Park Lane (2 driveways). There is also a potential Emergency Vehicle Access (EVA) driveway connection to the adjacent commercial service drive north of the site.

7.1 SITE ACCESS

The following site access improvements should be in place prior to occupancy, as shown on Exhibit 7-1. Roadway improvements necessary to provide site access and on-site circulation consist of constructing curb and gutter improvements on Park Lane along the Project frontage at its ultimate half section width as a 2-lane local roadway. These improvements will include provision of a new sidewalk along the Project frontage.

Cross-street stop sign controls will adequately serve the Project driveway intersections on Park Lane.

W. Access / Park Ln. (#4)

- Install a cross-street stop control on the southbound approach.
- Provide one southbound shared left-right lane.

E. Access – Mission Springs Park E. Access/ Park Ln. (#5)

- Install a cross-street stop control on the southbound approach.
- Provide one southbound shared left-right lane.

7.2 OFF-SITE IMPROVEMENTS

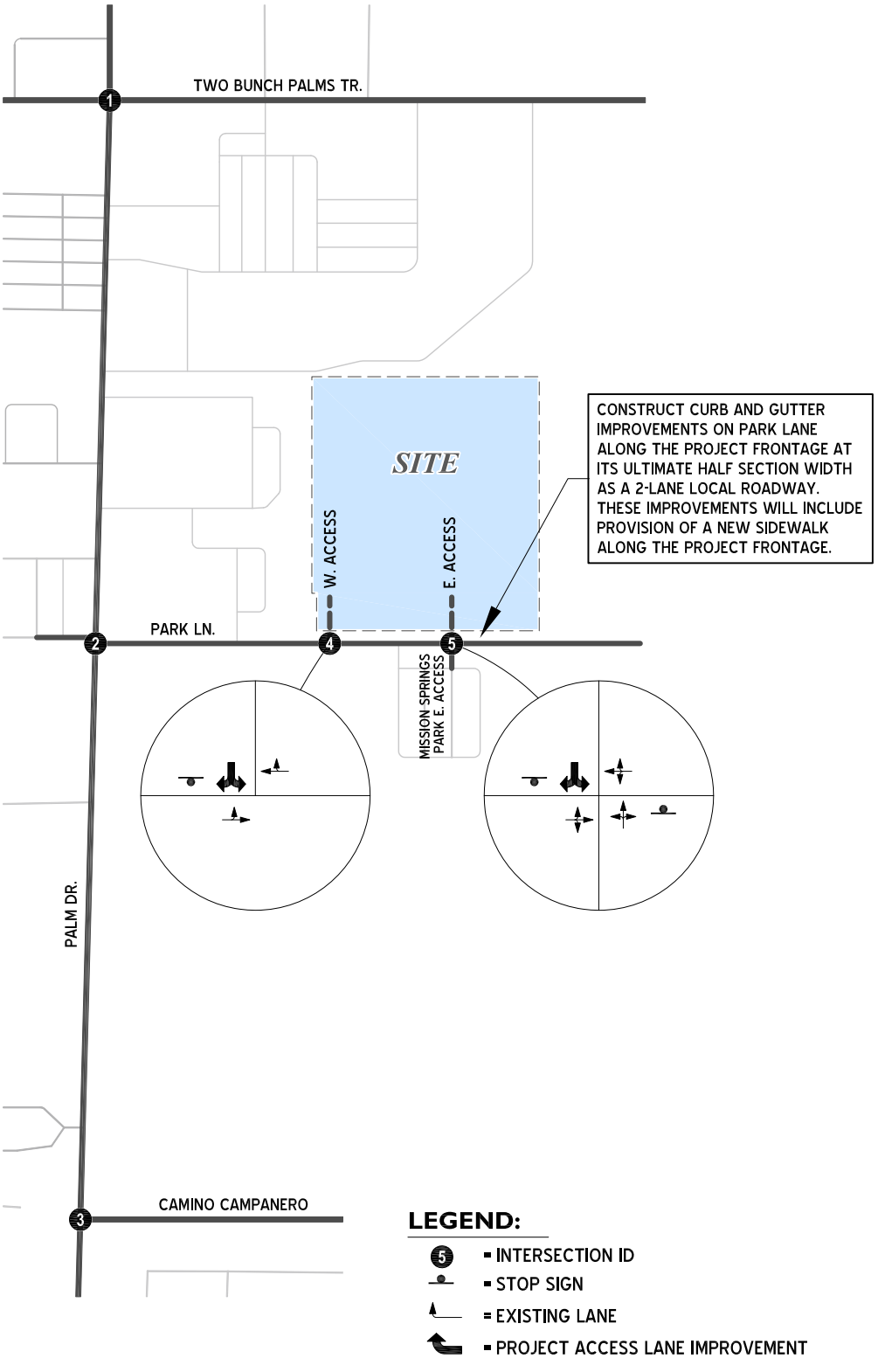
OFF-SITE IMPROVEMENTS BY OTHERS

The following planned improvements for cumulative access purposes are consistent with the improvements identified in the *Marbella Villa Residential Project Traffic Impact Analysis* (Kunzman Associates, Inc. July 3, 2017), now referred to as Ovation Project (Cumulative Development #1):

#3 – Palm Dr. / Camino Campanero - 15th Avenue

- Construct the west leg (15th Avenue) as a 2-lane roadway which serves as the primary access to nearby cumulative development (Ovation Condominiums)
- Provide one eastbound shared left-through-right lane.
- Modify westbound approach to provide one left turn lane, one through lane, and a separate right turn lane.
- Modify northbound striping to provide a separate left turn lane within an existing two-way left turn lane median.

EXHIBIT 7-1: SITE ACCESS CIRCULATION IMPROVEMENTS



OFF-SITE IMPROVEMENTS FOR PROJECT CONTRIBUTION

For EAP (2027) and EAPC (2027), the following study area intersection improvements are necessary to address an Existing (2025) deficiency:

#2 – Palm Dr. / Park Lane.

- Install traffic signal.
- Modify northbound and southbound striping to provide separate 100-foot-long left turn lanes within the existing two-way left turn lane median.
- Modify eastbound striping to provide a separate left turn and shared through-right lane.
- Modify westbound striping to provide a separate 100-foot-long left turn lane and shared through-right lane.

7.3 PARTICIPATION IN CUMULATIVE FUTURE IMPROVEMENTS

The Project applicant shall participate in relevant City and subregional (CVAG's TUMF program) fees. In some cases, separate fees based upon Project fair share calculations may be appropriate.

Fair share financial contribution based on the Project's estimated peak hour volumes at the intersection of Palm Drive / Park Lane (#2) may be imposed at the discretion of the City of Desert Hot Springs. Detailed fair share calculations, for each peak hour, are provided in Table 7-1 for the Palm Drive / Park Lane (#2) intersection. The fair share calculations at this location provide a basis for discussion between the City and Project Applicant.

TABLE 7-1: FAIR SHARE CALCULATIONS FOR PALM DRIVE / PARK LANE INTERSECTION

#	Intersection	Existing Traffic	EAPC (2027) Traffic[3]	Project Only Traffic	Total New Traffic[1]	Project Fair Share (%)[2]
2	Palm Dr. / Park Ln.					
	• AM Peak Hour	2,175	2,778	86	603	**14.3%**
	• PM Peak Hour	2,549	3,280	103	731	14.1%

[1] Total New Traffic = (EAPC - Existing Traffic)
[2] Project Fair Share % = (Project Only Traffic / Total New Traffic)
[3] Existing Plus Ambient Plus Project Plus Cumulative (2027)

This page intentionally left blank

8 REFERENCES

1. **Riverside County Transportation Department.** *Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled.* December 2020.
2. **Transportation Research Board, National Academy of Sciences.** *Highway Capacity Manual (HCM), 7th Edition.* 2022.
3. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD), (Revision 6). March 30, 2021.
4. **Institute of Transportation Engineers.** Trip Generation Manual. 11th Edition, 2021.
5. **Kunzman Associates, Inc.** *Marbella Villa Residential Project Traffic Impact Analysis.* July 3, 2017.
6. **Trames Solutions, Inc.** *Rancho Descano Traffic Impact Analysis.* August 23, 2021.
7. **TJW Engineering, Inc.** *Palm Drive – Clair Avenue Mixed-Use Complex Traffic Impact Analysis.* August 30, 2023.
8. **IBI Group.** *Green Day Village Access Analysis.* October 6, 2022.
9. **Urban Crossroads, Inc.** *Mission Springs Water District Critical Services Center Headquarters Building Project Trip Generation Assessment.* June 26, 2024.

This page intentionally left blank

APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

This Page Intentionally Left Blank

MEMORANDUM

To: City of Desert Springs, CA

From: Erika Becker, AICP (erika.beckeri@NV5.com)
James Miller, PE (james.miller@NV5.com)

Date: February 12, 2025

Re: Adobe Park Lane Homes Development
Traffic Analysis Scoping Agreement Review

NV5 Engineers and Consultants has reviewed the Traffic Analysis (TA) scoping documentation provided by Urban Crossroad, dated January 16, 2025, for the proposed Abode Park Lane Homes development. The purpose of a TA is to identify and disclose any potential transportation impacts associated with the project development on local area roadways and intersections. The purpose of this review is to confirm that the proposed scope of work is consistent with the County of Riverside's Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (December 2020) as the City of Desert Hot Springs utilized the County guidelines.

Project Exempt from Traffic Analysis: **No**

The scoping and analysis approach is deemed **Sufficient** to proceed with the formal Traffic Analysis.

Traffic Analysis (TA) – Typical Requirements

Based on our review, the scoping documentation includes the following:

Determination of study area, intersections and roadway links to be analyzed

Study Intersections:

1. Palm Dr / Two Bunch Palms Tr
2. Palm Dr / Park Ln
3. Palm Dr / Camino Campanero
4. W. Access / Park Ln (future intersection)
5. E. Access – Mission Springs Park E. Access / Park Ln

Analysis Scenarios:

- Existing (2025) Conditions
- Existing plus Ambient plus Project (EAP) (2027)
- Existing plus Ambient plus Cumulative (EAPC) (2027)

Project trip generation, distribution and assignment

Traffic Counts:

- Traffic count data will be collected in January 2025, during the AM peak period of 7:00 AM to 9:00 AM and PM peak period of 4:00 PM to 6:00 PM.

Trip Generation:

- ITE Land Use Codes (LUC) 223 and 565 were used to calculate project trip generation.
- The Project is anticipated to generate 937 external vehicle trip-ends per day with 85 external AM peak hour trips and 103 external PM peak hour trips.

Trip Distribution and Assignment:

- 55% to/from the north
- 5% to/from the west
- 40% to/from the south

Background projects, traffic growth assumptions, or integration with RIVTAM/RIVCOM, or other travel demand models

- Fifteen (15) background projects identified in the scoping memo

- Ambient growth rate of 2% will be used

Comments from city staff related to the City's Sphere of Influence or adjacent city

- N/A

Caltrans coordination

- N/A

Identification of unique transportation issues

- Traffic Signal Warrant Analysis
- Queuing Analysis
- Site Access and Circulation

Additional Comments

In addition to the above-mentioned information, we recommend the final TA submittal include the following to facilitate a prompt review of the development impacts:

Full Size Site Plan that Identifies:

- Pedestrian/bicycle access and on-site pedestrian circulation
- Location of any planned trails within ¼ mile of the project location

Land Use and Zoning

- Current and proposed rezoning, if required

Traffic Counts

- Weekday 24-hour Average Daily Traffic (ADT) counts should be collected for all study roadway segments
- A seasonal adjustment should be applied to turning movement counts not collected during the winter months (January through the end of March)

VMT Screening

- Provide the VMT screening assessment or full VMT analysis as required by the Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (County of Riverside, December 2020).

Final TA Report

- The TA must be prepared, signed and sealed by a Traffic Engineer or a Civil Engineer registered in the State of California, qualified to practice traffic engineering "Engineer"

January 16, 2025

Mr. Daniel Porras
City of Desert Hot Springs
65-950 Pierson Blvd.
Desert Hot Springs, CA 92240

ABODE PARK LANE HOMES LOS ANALYSIS SCOPE

Dear Mr. Daniel Porras:

Urban Crossroads, Inc. is pleased to submit this traffic Level of Service (LOS) scope to the City of Desert Hot Springs regarding the proposed Abode Park Lane Homes development ("Project"). The Project site is located north of Park Lane and east of Palm Drive in the City of Desert Hot Springs. The project consists of 167 affordable dwelling units and an early childcare center accommodating 66 students.

The remainder of this letter describes the proposed analysis methodology, Project trip generation, trip distribution, and Project traffic assignment/project trips on the surrounding roadway network. The following scoping assumptions have been prepared in accordance with the County of Riverside's *Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (December 2020)* as the City of Desert Hot Springs utilizes the County guidelines.

A preliminary site plan for the proposed Project is shown on Exhibit 1. Exhibit 2 depicts the location of the proposed project in relation to the existing roadway network.

It is anticipated that the Project would be fully developed by year 2027. Access to the Project will be provided via full access intersections along Park Lane (2 driveways). There is also a potential Emergency Vehicle Access (EVA) driveway connection to the adjacent commercial service drive north of the site.

TRIP GENERATION

In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) *Trip Generation* (11th Edition, 2021) manual for the proposed land uses (ITE 223 – Affordable Housing based on General Urban/Suburban Dwelling Units and ITE 565 – Day Care Center) are utilized. Table 1 presents the trip generation rates and the resulting trip generation summary for the proposed Project.

As shown in Table 1, the Project is anticipated to generate 937 external vehicle trip-ends per day with 85 external AM peak hour trips and 103 external PM peak hour trips.

EXHIBIT 1: PRELIMINARY SITE PLAN

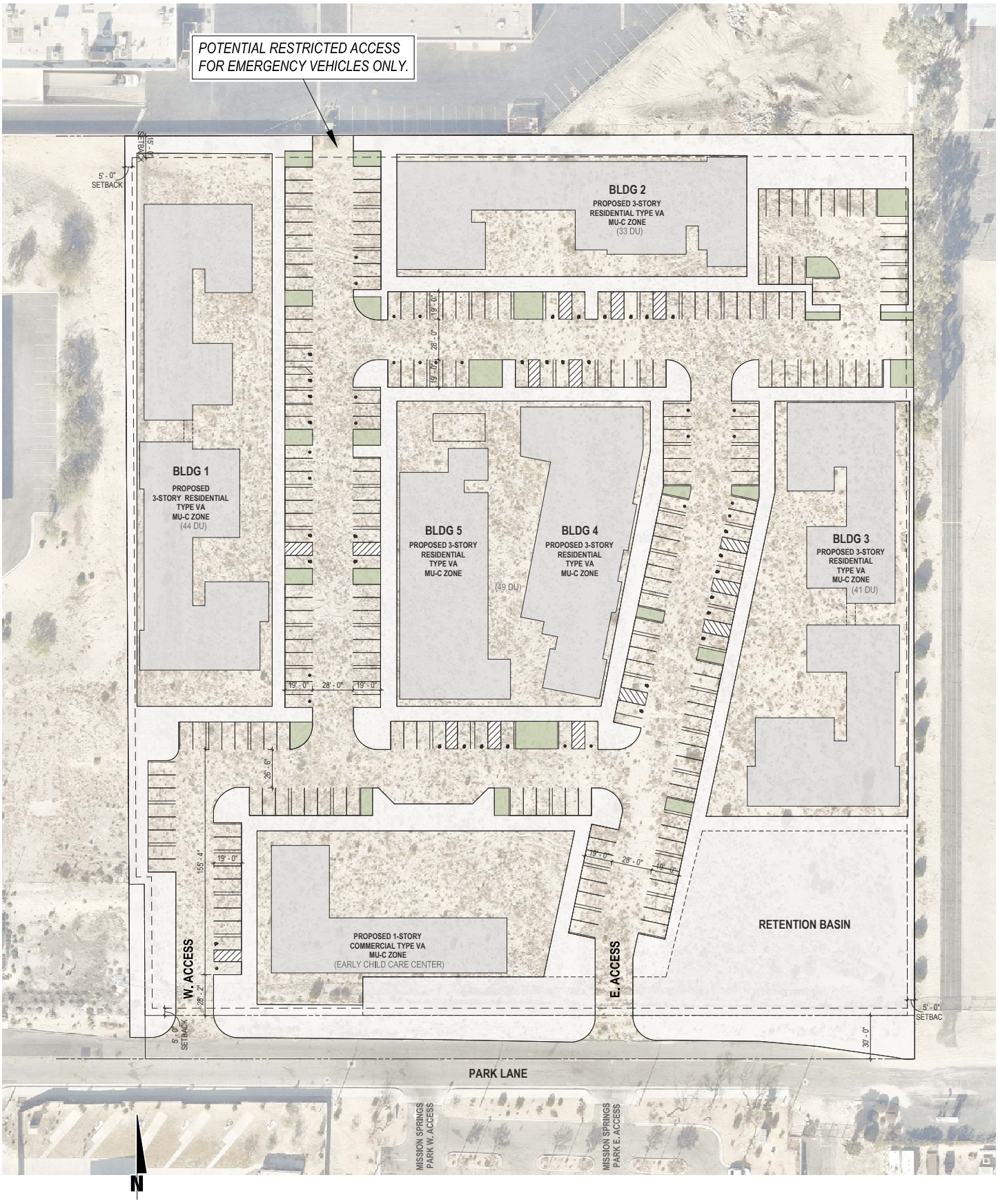


EXHIBIT 2: TRAFFIC ANALYSIS STUDY AREA

LEGEND:

4 = EXISTING ANALYSIS LOCATION
(1) = FUTURE ANALYSIS LOCATION
= FUTURE ROADWAY

N

TABLE 1: PROJECT TRIP GENERATION SUMMARY

Trip Generation Rates[1]

Land Use	ITE LU Code	Quantity[2]		AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Affordable Housing	223	167	DU	0.10	0.26	0.36	0.27	0.19	0.46	4.81
Early Child Care Center	565	66	STU	0.41	0.37	0.78	0.37	0.42	0.79	4.09

Trip Generation Results

Land Use	ITE LU Code	Quantity[2]		AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Affordable Housing	223	167	DU	17	43	60	45	32	77	803
Internal Capture				*(6)*	*(7)*	*(13)*	*(7)*	*(6)*	*(13)*	*(68)*
Early Child Care Center	565	66	STU	27	24	51	24	28	52	270
Internal Capture				*(7)*	*(6)*	*(13)*	*(6)*	*(7)*	*(13)*	*(68)*
Project Subtotal				44	67	111	69	60	129	1,073
Internal Capture Subtotal				*(13)*	*(13)*	*(26)*	*(13)*	*(13)*	*(26)*	*(136)*
TOTAL EXTERNAL TRIPS				**31**	**54**	**85**	**56**	**47**	**103**	**937**

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).
[2] STU = Students; DU = Dwelling Units

TRIP DISTRIBUTION AND TRIP ASSIGNMENT

The Project trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional highways.

Exhibit 3 presents the Project traffic distribution pattern estimated for the site.

Based on the identified Project traffic generation and trip distribution pattern, Project ADT and peak hour intersection turning movement volumes are shown on Exhibit 4.

ANALYSIS SCENARIOS

Consistent with the County's LOS guidelines, intersection analysis will be provided for the following analysis scenarios:

- Existing (2025) Conditions
- Existing plus Ambient plus Project (EAP) (2027)
- Existing plus Ambient plus Project plus Cumulative (EAPC) (2027)

STUDY AREA

The traffic impact study area was defined in conformance with the requirements of County of Riverside's Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled. Consistent with the County's LOS guidelines, study area intersections have been identified for the Project based on the contribution of 50 or more peak hour trips.

Based on this criterion, anticipated trip generation and trip distribution, the following intersections will be evaluated:

STUDY AREA INTERSECTIONS

#	Intersection	#	Intersection
1	Palm Dr. / Two Bunch Palms Tr.	4	W. Access / Park Ln. - *(Future Intersection)*
2	Palm Dr. / Park Ln.	5	E. Access – Mission Springs Park E. Access / Park Ln.
3	Palm Dr. / Camino Campanero		

Exhibit 2 illustrates the proposed study area intersection analysis locations.

LEVEL OF SERVICE (LOS) CRITERIA

Per the City of Desert Hot Springs's General Plan, LOS D as the threshold for acceptable traffic conditions on the circulation network.

ANALYSIS METHODOLOGY

For the purposes of this analysis, signalized intersection operations analysis will be based on the methodology described in the Highway Capacity Manual (7th Edition). Intersection LOS operations are based on an intersection's average control delay. Unsignalized intersections will be evaluated using the methodology described in the HCM 7th Edition.

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane.

TRAFFIC COUNTS

Traffic count data will be collected in January 2025, during the AM peak period of 7:00 AM to 9:00 AM and PM peak period of 4:00 PM to 6:00 PM.

The City of Desert Hot Springs experiences seasonal population variations over the course of the year, with relatively higher populations during the winter months from January to the end of March. The 2025 count data will be collected during January, so a seasonal adjustment to represent the peak winter period will not be needed.

EXHIBIT 3: PROJECT TRIP DISTRIBUTION

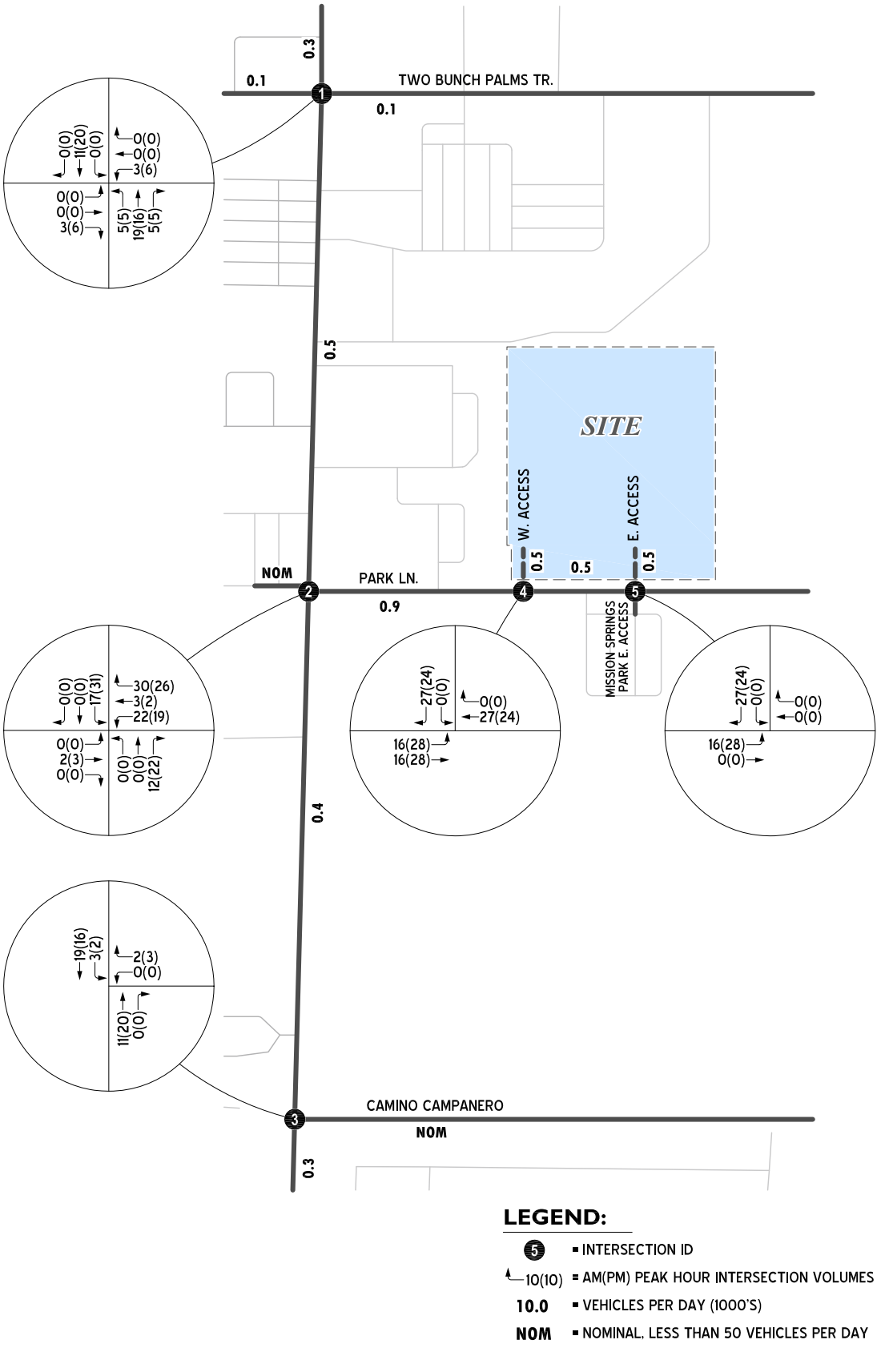
LEGEND:

10 = PERCENT FROM PROJECT

= FUTURE ACCESS ROADWAY

N

EXHIBIT 4: PROJECT ONLY TRAFFIC VOLUMES



GENERAL PLAN CIRCULATION ELEMENT

The City of Desert Hot Springs General Plan Circulation Element is depicted on Exhibit 5. The accompanying General Plan roadway cross-sections are presented on Exhibit 6.

CUMULATIVE DEVELOPMENT TRAFFIC

It is requested that City staff review the list of cumulative development projects (shown on Exhibit 7 and listed on Table 2) for inclusion in the traffic study.

Consistent with other studies performed in the area, an ambient growth rate of 2% per year will be utilized as a minimum if necessary. The rate will be compounded over a 2-year period (i.e., 1.022years = 1.0404 or 4.04%) for Interim Year (2027) conditions.

SPECIAL ISSUES

The following issues will also be addressed as part of the Traffic Analysis (TA):

- *Traffic Signal Warrant Analysis:* Signal warrant analysis will be prepared for the intersection of Park Lane at Palm Drive for each analysis scenario.
- *Queuing Analysis:* The analysis will identify the necessary lengths of turn pockets at the Palm Drive / Park Lane intersection for the With Project scenario.
- *Site Access and Circulation:* Potential impacts resulting from turning maneuvers by passenger cars entering and exiting the site.

Please review this LOS scope and provide any comments or your concurrence. If you have any questions, please contact John Kain at (949) 375-2435 or Marlie Whiteman at (714) 585-0574.

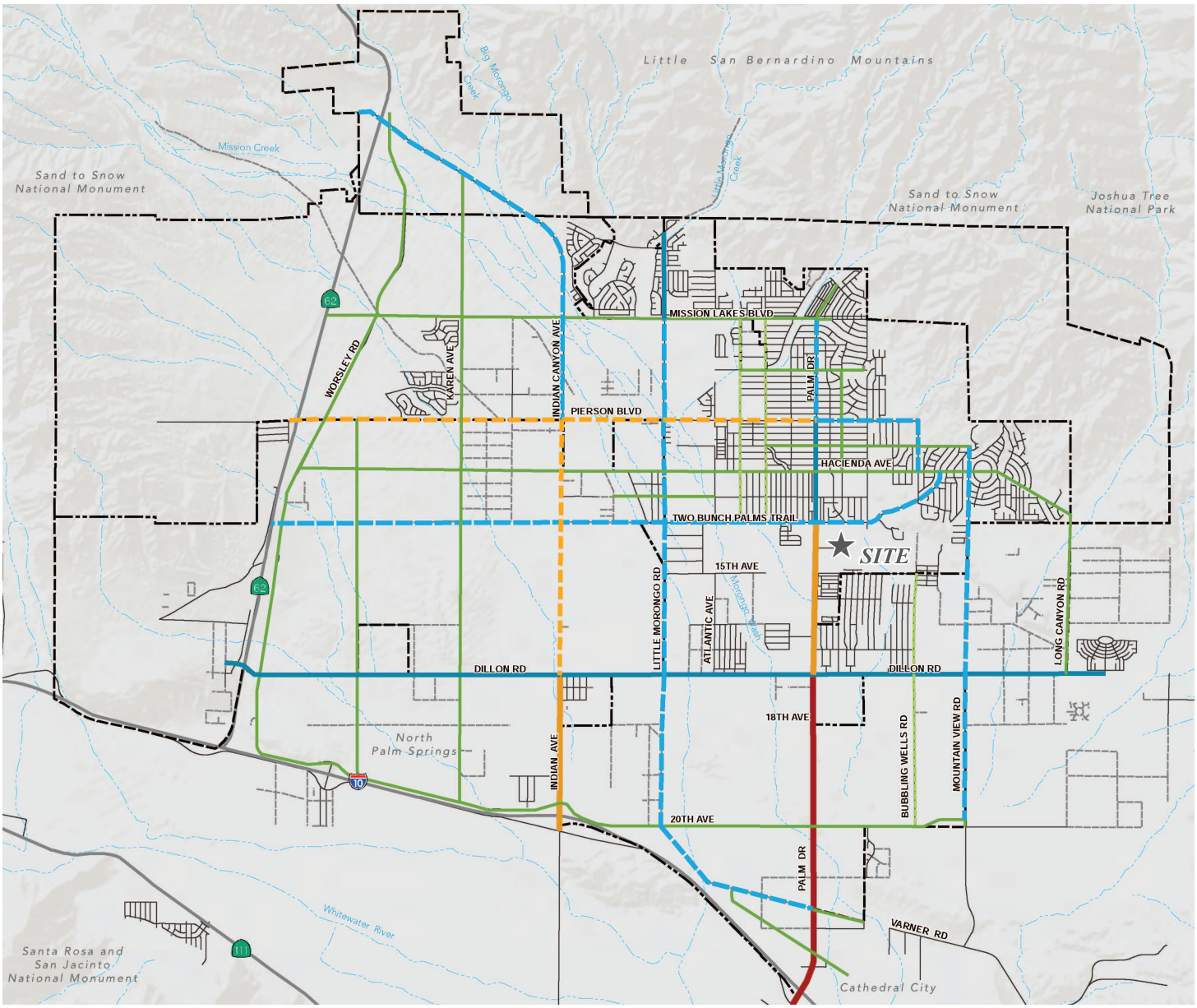
Respectfully submitted,

URBAN CROSSROADS, INC.

John Kain, AICP
Principal

Marlie Whiteman, PE
Senior Associate

EXHIBIT 5: CITY OF DESERT HOT SPRINGS ROADWAYS PLAN



SOURCE: CITY OF DESERT HOT SPRINGS GENERAL PLAN (MAY 2020)

Road Classifications

- Urban Arterial
- Primary I
- Primary II
- Secondary I
- Secondary II
- Collector
- Local Collector

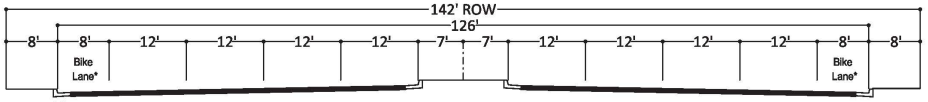
Base Map Features

- City Boundary
- Sphere of Influence
- Water Courses

N

EXHIBIT 6: CITY OF DESERT HOT SPRINGS GENERAL PLAN ROADWAY CROSS-SECTIONS

Urban Arterial
8-Lanes Divided
No Parking
With Protected Bike Lane

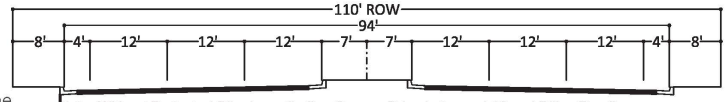


*See Enhanced Bike Lane Detail

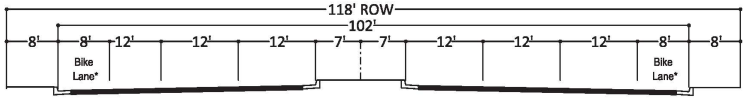
ENHANCED BIKE LANE DETAIL:

* Buffered bike lanes include painted buffer.
Protected bike lanes may include safety bollards or a landscaped median.

Primary I
6-Lanes Divided
No Parking
With or Without Protected Bike Lane

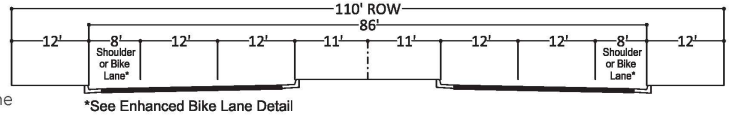


Note: Without Protected Bike Lane (Indian Canyon Drive between I-10 and Dillon Road)



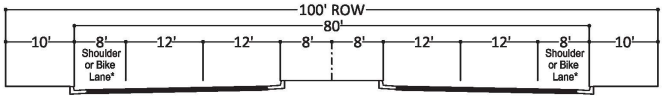
Note: With Protected Bike Lane (Palm Drive between Dillon Road and Two Bunch Palms Trail)
*See Enhanced Bike Lane Detail

Primary II
4-Lanes Divided
No Parking
With or Without Protected Bike Lane



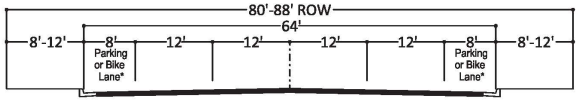
*See Enhanced Bike Lane Detail

Secondary I
4-Lanes Divided
No Parking
With Protected Bike Lane

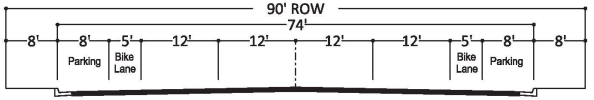


*See Enhanced Bike Lane Detail

Secondary II
4-Lanes Undivided
On-Street Parking
With or Without Dedicated Bike Lane

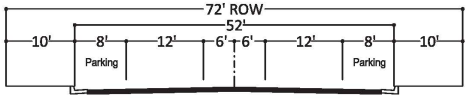


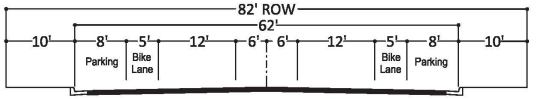
Note: With Parking or Bike Lane
*See Enhanced Bike Lane Detail



Note: With Parking and Bike Lane

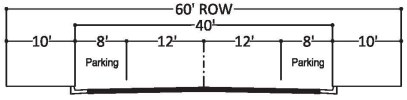
Collector
2-Lanes Undivided
On-Street Parking
With or Without Dedicated Bike Lane

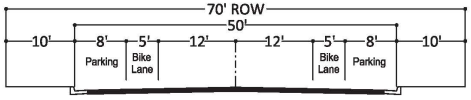




Note: With Parking and Bike Lane

Local Collector
2-Lanes Undivided
On-Street Parking
With or Without Dedicated Bike Lane

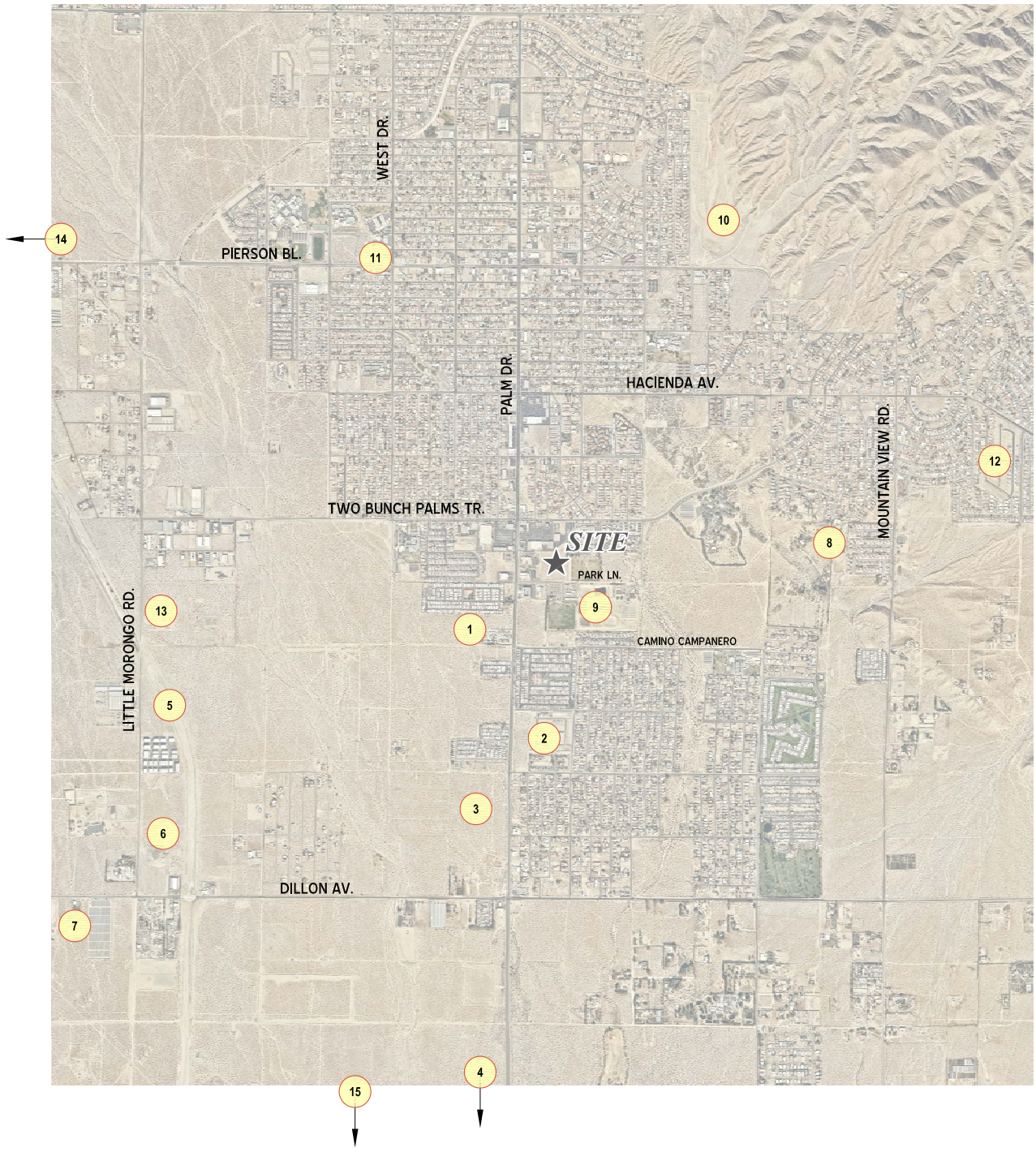




Note: With Parking and Bike Lane

SOURCE: CITY OF DESERT HOT SPRINGS GENERAL PLAN (MAY 2020)

EXHIBIT 7: CUMULATIVE DEVELOPMENT LOCATION MAP



LEGEND:

1 = CUMULATIVE DEVELOPMENT ID

N

INTERSTATE 10

TABLE 2: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use[1]	Quantity	Units[2]
1	Ovation	Condominiums	402	DU
2	Rancho Descano	Single Family Residential	76	DU
3	Palm Drive - Claire Avenue Mixed Use Commercial Complex	Self-Storage Facility	115.148	TSF
		High-Turnover (Sit-Down) Restaurant	5	TSF
		Fast-Food Rest. w/ Drive Through	3.5	TSF
4	Green Day Village	Multi-Family Residential	608	DU
		Medical Office	21.854	TSF
		Fast-Food Rest. w/ Drive Through	4.608	TSF
		Restaurant	6.144	TSF
		Commercial	42.26	TSF
5	DHS Light Industrial w/ Cannabis Overlay	Marijuana Cultivation and Processing Facility	116.00	TSF
6	Oxford Properties Cultivation Center	Nursery (Wholesale)	70.26	AC
7	The Spot (south of Dillon & east of Bearce)	Cultivation	120	EMP
		Dispensary/Lounge Facility	6	TSF
8	Kimana Resort	Hotel & Glamping Units	48	RM
		Spa & Health Club	2.50	TSF
		Restaurant & Coffee Bar	0.64	TSF
9	Mission Springs Water District	Office / Corporate Yard	41.17	TSF
10	Tuscan Hills SP	Residential	1,878	DU
11	Public Safety Campus	Police Annex Building	6.371	TSF
12	Palari / Mighty Buildings	Single Family Residential	77	DU
13	Din Cultivation	Cannabis Cultivation Warehouse	63.446	TSF
14	Beyond Food Mart	Convenience Store/Gas Station/Car Wash	16	VFP
15	Varner / West Dr. Logistics Facility	High-Cube Warehouse	1,500.00	TSF

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Unit; RM = Room; TSF = Thousand Square Feet; AC = Acre; OCC RM = Occupied Room

F:\UXRjobs_16100-16500_16100\16155\02_LOS\Excel\[16155 - Scope.xlsx]16155-Cumulative List

APPENDIX 3.1: TRAFFIC COUNTS – FEBRUARY 2025

This Page Intentionally Left Blank

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Two Bunch Palms Trail
Weather: Clear

File Name : 01_DHS_Palm_TWP AM
Site Code : 05125154
Start Date : 2/20/2025
Page No : 1

Groups Printed- Total Volume

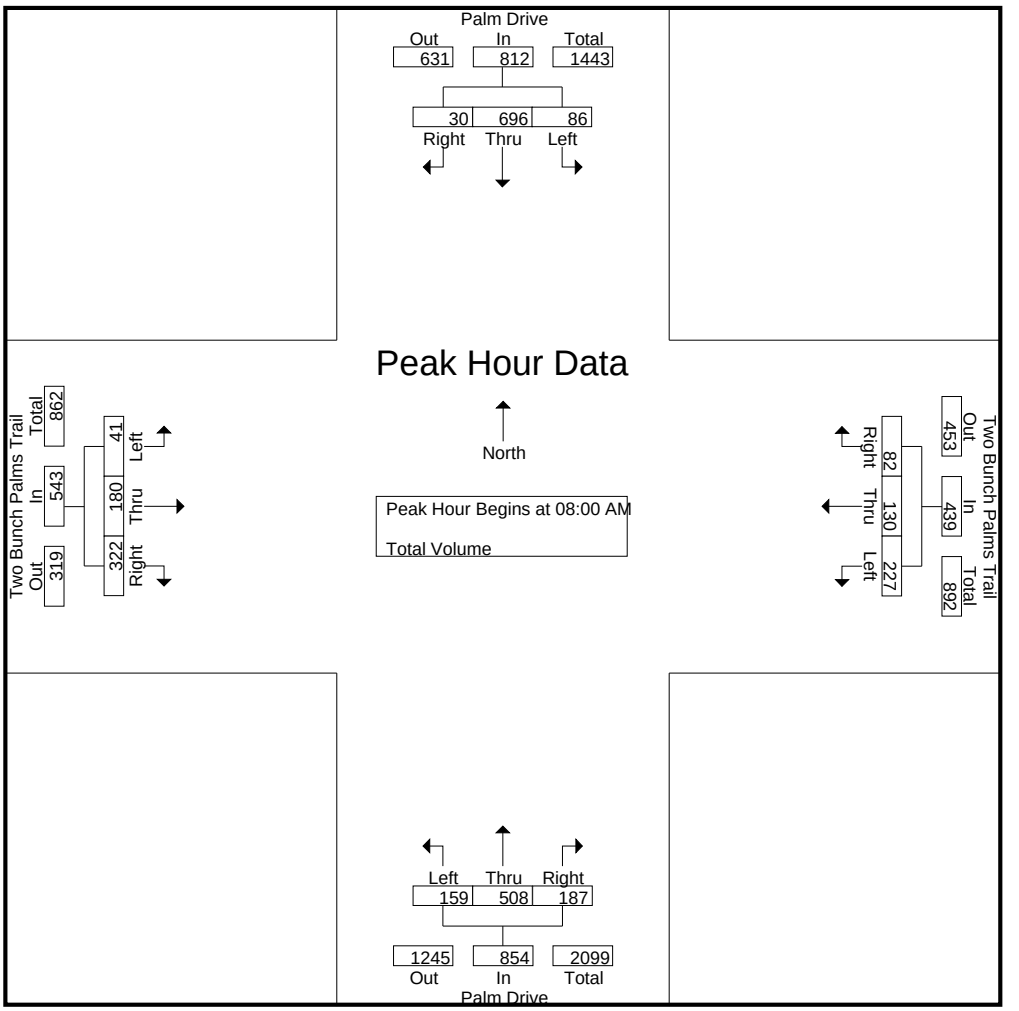
	Palm Drive Southbound				Two Bunch Palms Trail Westbound				Palm Drive Northbound				Two Bunch Palms Trail Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	216	6	227	62	25	6	93	39	89	22	150	10	26	101	137	607
07:15 AM	10	187	4	201	65	27	8	100	51	109	31	191	10	27	76	113	605
07:30 AM	10	181	9	200	53	39	8	100	38	137	21	196	10	30	83	123	619
07:45 AM	21	152	6	179	52	25	16	93	54	148	37	239	13	37	60	110	621
Total	46	736	25	807	232	116	38	386	182	483	111	776	43	120	320	483	2452
08:00 AM	16	184	6	206	53	28	18	99	34	123	33	190	11	36	75	122	617
08:15 AM	27	169	5	201	51	36	24	111	41	124	57	222	14	51	77	142	676
08:30 AM	16	172	10	198	62	43	22	127	40	124	62	226	9	59	92	160	711
08:45 AM	27	171	9	207	61	23	18	102	44	137	35	216	7	34	78	119	644
Total	86	696	30	812	227	130	82	439	159	508	187	854	41	180	322	543	2648
Grand Total	132	1432	55	1619	459	246	120	825	341	991	298	1630	84	300	642	1026	5100
Apprch %	8.2	88.4	3.4		55.6	29.8	14.5		20.9	60.8	18.3		8.2	29.2	62.6		
Total %	2.6	28.1	1.1	31.7	9	4.8	2.4	16.2	6.7	19.4	5.8	32	1.6	5.9	12.6	20.1	

	Palm Drive Southbound				Two Bunch Palms Trail Westbound				Palm Drive Northbound				Two Bunch Palms Trail 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	16	**184**	6	206	53	28	18	99	34	123	33	190	11	36	75	122	617
08:15 AM	**27**	169	5	201	51	36	**24**	111	41	124	57	222	**14**	51	77	142	676
08:30 AM	16	172	**10**	198	**62**	**43**	22	**127**	40	124	**62**	**226**	9	**59**	**92**	**160**	**711**
08:45 AM	27	171	9	**207**	61	23	18	102	**44**	**137**	35	216	7	34	78	119	644
Total Volume	86	696	30	812	227	130	82	439	159	508	187	854	41	180	322	543	2648
% App. Total	10.6	85.7	3.7		51.7	29.6	18.7		18.6	59.5	21.9		7.6	33.1	59.3		
PHF	.796	.946	.750	.981	.915	.756	.854	.864	.903	.927	.754	.945	.732	.763	.875	.848	.931

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Two Bunch Palms Trail
Weather: Clear

File Name : 01_DHS_Palm_TWP AM
Site Code : 05125154
Start Date : 2/20/2025
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:

	08:00 AM				08:00 AM				07:45 AM				08:00 AM			
+0 mins.	16	**184**	6	206	53	28	18	99	**54**	**148**	37	**239**	11	36	75	122
+15 mins.	**27**	169	5	201	51	36	**24**	111	34	123	33	190	**14**	51	77	142
+30 mins.	16	172	**10**	198	**62**	**43**	22	**127**	41	124	57	222	9	**59**	**92**	**160**
+45 mins.	27	171	9	**207**	61	23	18	102	40	124	**62**	226	7	34	78	119
Total Volume	86	696	30	812	227	130	82	439	169	519	189	877	41	180	322	543
% App. Total	10.6	85.7	3.7		51.7	29.6	18.7		19.3	59.2	21.6		7.6	33.1	59.3	
PHF	.796	.946	.750	.981	.915	.756	.854	.864	.782	.877	.762	.917	.732	.763	.875	.848

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Two Bunch Palms Trail
Weather: Clear

File Name : 01_DHS_Palm_TWP PM
Site Code : 05125154
Start Date : 2/20/2025
Page No : 1

Groups Printed- Total Volume

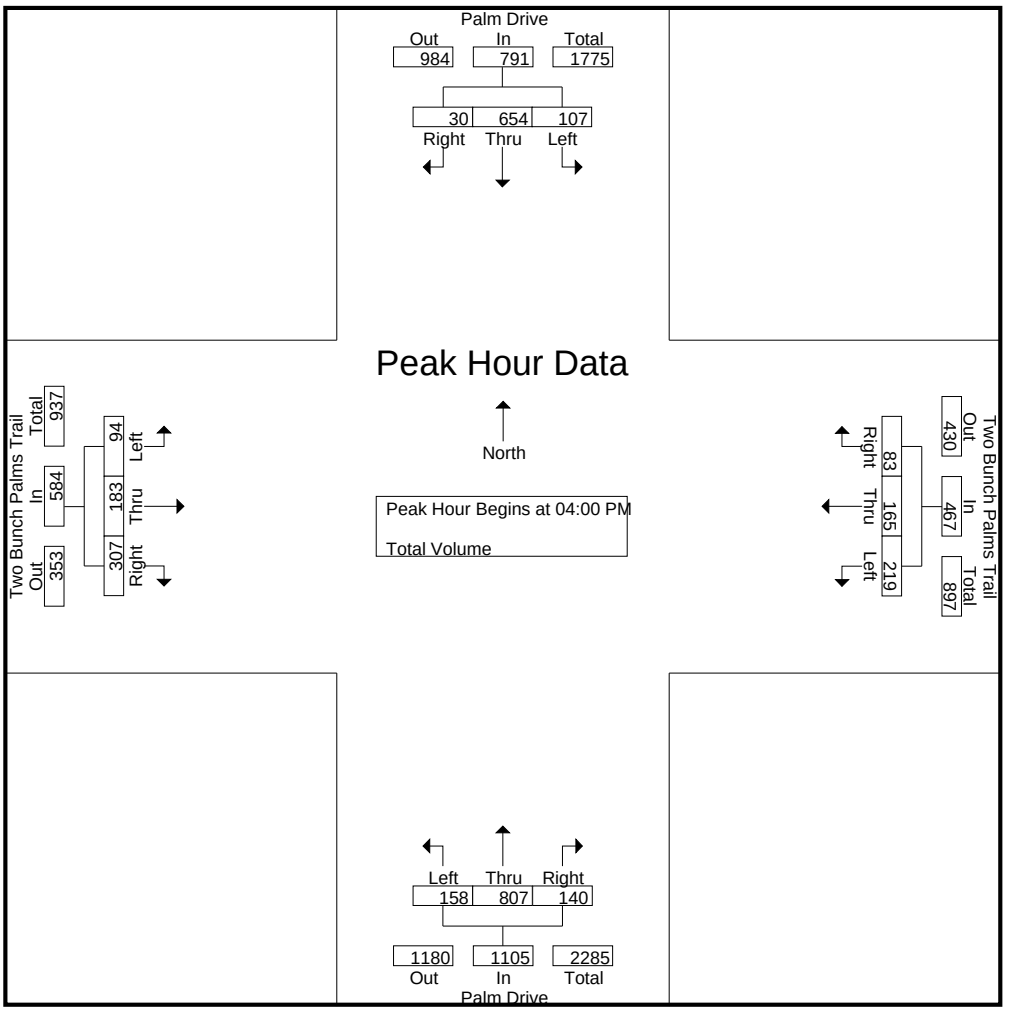
	Palm Drive Southbound				Two Bunch Palms Trail Westbound				Palm Drive Northbound				Two Bunch Palms Trail Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	30	176	6	212	59	45	24	128	45	209	29	283	26	56	94	176	799
04:15 PM	32	173	6	211	62	39	22	123	37	212	34	283	16	49	65	130	747
04:30 PM	23	148	6	177	53	46	15	114	38	211	35	284	29	33	65	127	702
04:45 PM	22	157	12	191	45	35	22	102	38	175	42	255	23	45	83	151	699
Total	107	654	30	791	219	165	83	467	158	807	140	1105	94	183	307	584	2947
05:00 PM	24	147	8	179	64	33	22	119	26	201	47	274	19	38	58	115	687
05:15 PM	29	151	3	183	49	28	24	101	48	202	35	285	18	39	45	102	671
05:30 PM	19	153	2	174	49	26	22	97	32	244	53	329	19	34	77	130	730
05:45 PM	19	146	1	166	59	34	25	118	38	238	40	316	17	34	78	129	729
Total	91	597	14	702	221	121	93	435	144	885	175	1204	73	145	258	476	2817
Grand Total	198	1251	44	1493	440	286	176	902	302	1692	315	2309	167	328	565	1060	5764
Apprch %	13.3	83.8	2.9		48.8	31.7	19.5		13.1	73.3	13.6		15.8	30.9	53.3		
Total %	3.4	21.7	0.8	25.9	7.6	5	3.1	15.6	5.2	29.4	5.5	40.1	2.9	5.7	9.8	18.4	

	Palm Drive Southbound				Two Bunch Palms Trail Westbound				Palm Drive Northbound				Two Bunch Palms Trail 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	30	**176**	6	**212**	59	45	**24**	**128**	**45**	209	29	283	26	**56**	**94**	**176**	**799**
04:15 PM	**32**	173	6	211	**62**	39	22	123	37	**212**	34	283	16	49	65	130	747
04:30 PM	23	148	6	177	53	**46**	15	114	38	211	35	**284**	**29**	33	65	127	702
04:45 PM	22	157	**12**	191	45	35	22	102	38	175	**42**	255	23	45	83	151	699
Total Volume	107	654	30	791	219	165	83	467	158	807	140	1105	94	183	307	584	2947
% App. Total	13.5	82.7	3.8		46.9	35.3	17.8		14.3	73	12.7		16.1	31.3	52.6		
PHF	.836	.929	.625	.933	.883	.897	.865	.912	.878	.952	.833	.973	.810	.817	.816	.830	.922

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Two Bunch Palms Trail
Weather: Clear

File Name : 01_DHS_Palm_TWP PM
Site Code : 05125154
Start Date : 2/20/2025
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				05:00 PM				04:00 PM			
+0 mins.	30	**176**	6	**212**	59	45	**24**	**128**	26	201	47	274	26	**56**	**94**	**176**
+15 mins.	**32**	173	6	211	**62**	39	22	123	**48**	202	35	285	16	49	65	130
+30 mins.	23	148	6	177	53	**46**	15	114	32	**244**	**53**	**329**	**29**	33	65	127
+45 mins.	22	157	**12**	191	45	35	22	102	38	238	40	316	23	45	83	151
Total Volume	107	654	30	791	219	165	83	467	144	885	175	1204	94	183	307	584
% App. Total	13.5	82.7	3.8		46.9	35.3	17.8		12	73.5	14.5		16.1	31.3	52.6	
PHF	.836	.929	.625	.933	.883	.897	.865	.912	.750	.907	.825	.915	.810	.817	.816	.830

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Park Lane
Weather: Clear

File Name : 02_DHS_Palm_Park AM
Site Code : 05125154
Start Date : 2/20/2025
Page No : 1

Groups Printed- Total Volume

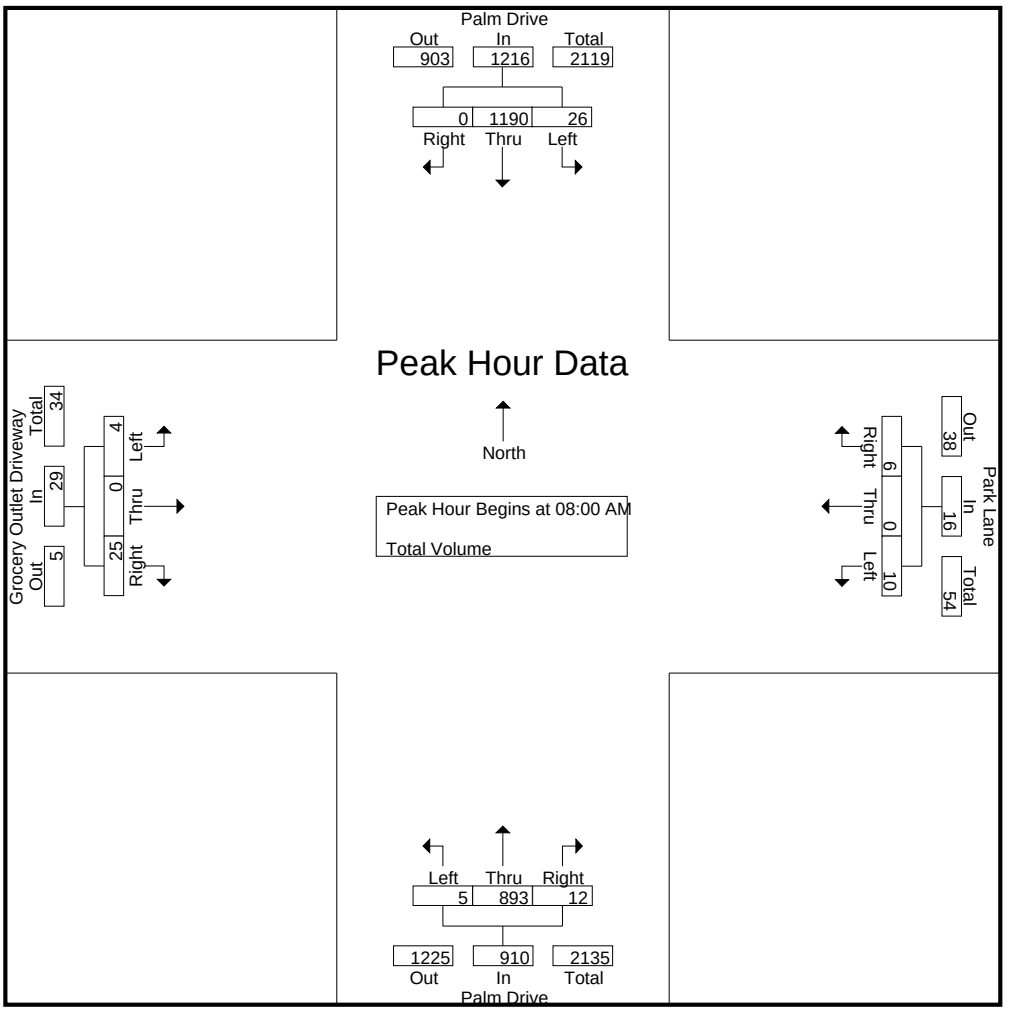
	Palm Drive Southbound				Park Lane Westbound				Palm Drive Northbound				Grocery Outlet Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	364	0	368	0	0	4	4	1	145	2	148	0	0	7	7	527
07:15 AM	4	338	0	342	2	0	2	4	0	215	1	216	0	0	6	6	568
07:30 AM	9	307	0	316	1	0	1	2	0	206	4	210	0	0	4	4	532
07:45 AM	4	259	0	263	0	0	2	2	2	234	3	239	0	0	5	5	509
Total	21	1268	0	1289	3	0	9	12	3	800	10	813	0	0	22	22	2136
08:00 AM	5	292	0	297	2	0	3	5	3	187	3	193	1	0	8	9	504
08:15 AM	5	291	0	296	2	0	1	3	2	250	1	253	1	0	4	5	557
08:30 AM	10	316	0	326	2	0	0	2	0	241	2	243	2	0	7	9	580
08:45 AM	6	291	0	297	4	0	2	6	0	215	6	221	0	0	6	6	530
Total	26	1190	0	1216	10	0	6	16	5	893	12	910	4	0	25	29	2171
Grand Total	47	2458	0	2505	13	0	15	28	8	1693	22	1723	4	0	47	51	4307
Apprch %	1.9	98.1	0		46.4	0	53.6		0.5	98.3	1.3		7.8	0	92.2		
Total %	1.1	57.1	0	58.2	0.3	0	0.3	0.7	0.2	39.3	0.5	40	0.1	0	1.1	1.2	

	Palm Drive Southbound				Park Lane Westbound				Palm Drive Northbound				Grocery Outlet Driveway 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	5	292	0	297	2	0	**3**	5	**3**	187	3	193	1	0	**8**	**9**	504
08:15 AM	5	291	0	296	2	0	1	3	2	**250**	1	**253**	1	0	4	5	557
08:30 AM	**10**	**316**	0	**326**	2	0	0	2	0	241	2	243	**2**	0	7	9	**580**
08:45 AM	6	291	0	297	**4**	0	2	**6**	0	215	**6**	221	0	0	6	6	530
Total Volume	26	1190	0	1216	10	0	6	16	5	893	12	910	4	0	25	29	2171
% App. Total	2.1	97.9	0		62.5	0	37.5		0.5	98.1	1.3		13.8	0	86.2		
PHF	.650	.941	.000	.933	.625	.000	.500	.667	.417	.893	.500	.899	.500	.000	.781	.806	.936

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Park Lane
Weather: Clear

File Name : 02_DHS_Palm_Park AM
Site Code : 05125154
Start Date : 2/20/2025
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:

	07:00 AM				08:00 AM				07:45 AM				08:00 AM			
+0 mins.	4	**364**	0	**368**	2	0	**3**	5	2	234	**3**	239	1	0	**8**	**9**
+15 mins.	4	338	0	342	2	0	1	3	**3**	187	3	193	1	0	4	5
+30 mins.	**9**	307	0	316	2	0	0	2	2	**250**	1	**253**	**2**	0	7	9
+45 mins.	4	259	0	263	**4**	0	2	**6**	0	241	2	243	0	0	6	6
Total Volume	21	1268	0	1289	10	0	6	16	7	912	9	928	4	0	25	29
% App. Total	1.6	98.4	0		62.5	0	37.5		0.8	98.3	1		13.8	0	86.2	
PHF	.583	.871	.000	.876	.625	.000	.500	.667	.583	.912	.750	.917	.500	.000	.781	.806

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Park Lane
Weather: Clear

File Name : 02_DHS_Palm_Park PM
Site Code : 05125154
Start Date : 2/20/2025
Page No : 1

Groups Printed- Total Volume

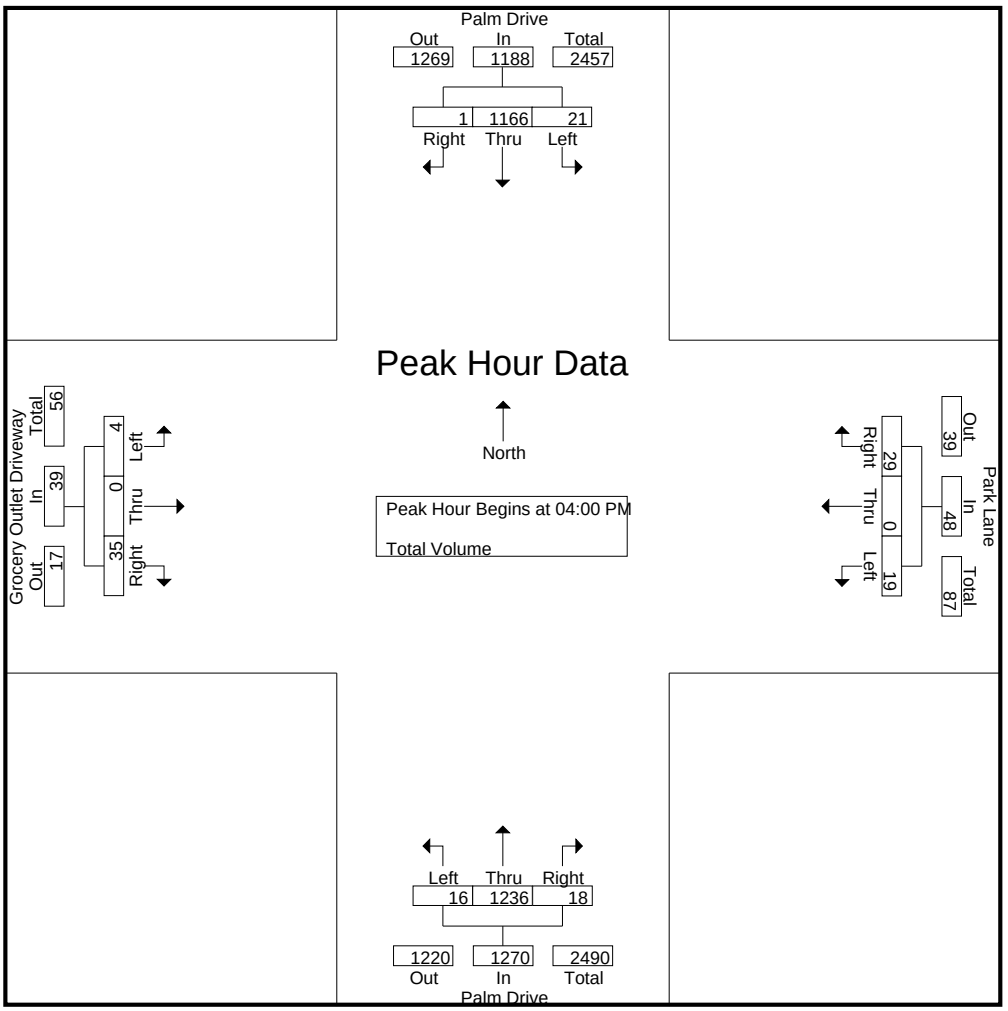
	Palm Drive Southbound				Park Lane Westbound				Palm Drive Northbound				Grocery Outlet Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	345	1	352	5	0	8	13	3	314	1	318	3	0	10	13	696
04:15 PM	7	288	0	295	5	0	11	16	6	323	7	336	0	0	10	10	657
04:30 PM	3	270	0	273	6	0	6	12	5	322	4	331	0	0	11	11	627
04:45 PM	5	263	0	268	3	0	4	7	2	277	6	285	1	0	4	5	565
Total	21	1166	1	1188	19	0	29	48	16	1236	18	1270	4	0	35	39	2545
05:00 PM	6	249	0	255	3	1	9	13	5	290	5	300	0	0	9	9	577
05:15 PM	11	217	0	228	7	0	7	14	2	324	7	333	0	0	8	8	583
05:30 PM	13	233	0	246	0	0	7	7	3	351	2	356	0	0	13	13	622
05:45 PM	16	276	0	292	1	0	6	7	3	369	9	381	1	0	19	20	700
Total	46	975	0	1021	11	1	29	41	13	1334	23	1370	1	0	49	50	2482
Grand Total	67	2141	1	2209	30	1	58	89	29	2570	41	2640	5	0	84	89	5027
Apprch %	3	96.9	0		33.7	1.1	65.2		1.1	97.3	1.6		5.6	0	94.4		
Total %	1.3	42.6	0	43.9	0.6	0	1.2	1.8	0.6	51.1	0.8	52.5	0.1	0	1.7	1.8	

	Palm Drive Southbound				Park Lane Westbound				Palm Drive Northbound				Grocery Outlet Driveway 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	6	**345**	**1**	**352**	5	0	8	13	3	314	1	318	**3**	0	10	**13**	**696**
04:15 PM	**7**	288	0	295	5	0	**11**	**16**	**6**	**323**	**7**	**336**	0	0	10	10	657
04:30 PM	3	270	0	273	**6**	0	6	12	5	322	4	331	0	0	**11**	11	627
04:45 PM	5	263	0	268	3	0	4	7	2	277	6	285	1	0	4	5	565
Total Volume	21	1166	1	1188	19	0	29	48	16	1236	18	1270	4	0	35	39	2545
% App. Total	1.8	98.1	0.1		39.6	0	60.4		1.3	97.3	1.4		10.3	0	89.7		
PHF	.750	.845	.250	.844	.792	.000	.659	.750	.667	.957	.643	.945	.333	.000	.795	.750	.914

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Park Lane
Weather: Clear

File Name : 02_DHS_Palm_Park PM
Site Code : 05125154
Start Date : 2/20/2025
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				05:00 PM				05:00 PM			
+0 mins.	6	**345**	**1**	**352**	5	0	8	13	**5**	290	5	300	0	0	9	9
+15 mins.	**7**	288	0	295	5	0	**11**	**16**	2	324	7	333	0	0	8	8
+30 mins.	3	270	0	273	**6**	0	6	12	3	351	2	356	0	0	13	13
+45 mins.	5	263	0	268	3	0	4	7	3	**369**	**9**	**381**	**1**	0	**19**	**20**
Total Volume	21	1166	1	1188	19	0	29	48	13	1334	23	1370	1	0	49	50
% App. Total	1.8	98.1	0.1		39.6	0	60.4		0.9	97.4	1.7		2	0	98	
PHF	.750	.845	.250	.844	.792	.000	.659	.750	.650	.904	.639	.899	.250	.000	.645	.625

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Camino Campanero
Weather: Clear

File Name : 03_DHS_Palm_CC AM
Site Code : 05125154
Start Date : 2/20/2025
Page No : 1

Groups Printed- Total Volume

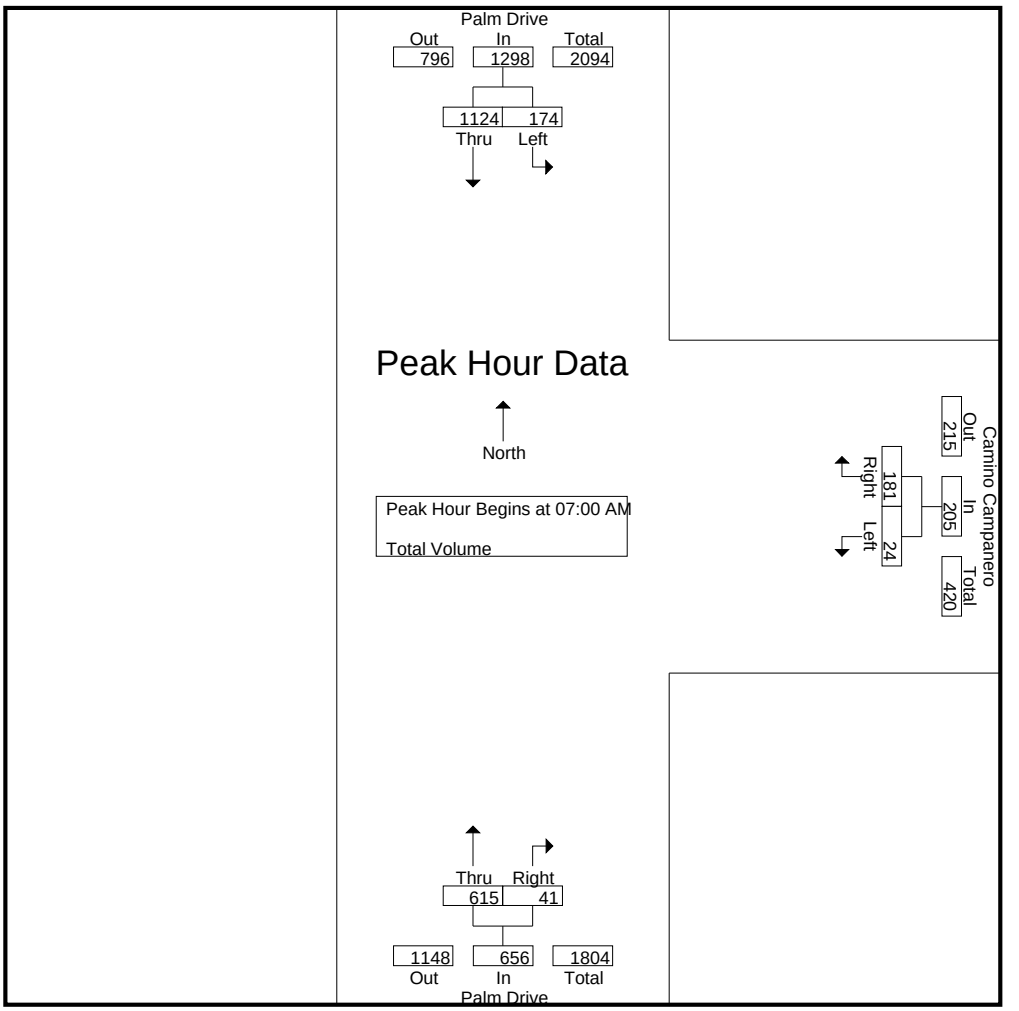
	Palm Drive Southbound			Camino Campanero Westbound			Palm Drive Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	22	343	365	2	28	30	122	5	127	522
07:15 AM	56	294	350	3	28	31	176	17	193	574
07:30 AM	64	253	317	11	60	71	132	17	149	537
07:45 AM	32	234	266	8	65	73	185	2	187	526
Total	174	1124	1298	24	181	205	615	41	656	2159
08:00 AM	27	275	302	9	38	47	162	4	166	515
08:15 AM	24	273	297	6	77	83	169	2	171	551
08:30 AM	33	272	305	3	58	61	182	1	183	549
08:45 AM	43	263	306	1	43	44	177	0	177	527
Total	127	1083	1210	19	216	235	690	7	697	2142
Grand Total	301	2207	2508	43	397	440	1305	48	1353	4301
Apprch %	12	88		9.8	90.2		96.5	3.5		
Total %	7	51.3	58.3	1	9.2	10.2	30.3	1.1	31.5	

	Palm Drive Southbound			Camino Campanero Westbound			Palm Drive Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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 07:00 AM										
07:00 AM	22	**343**	**365**	2	28	30	122	5	127	522
07:15 AM	56	294	350	3	28	31	176	**17**	**193**	**574**
07:30 AM	**64**	253	317	**11**	60	71	132	17	149	537
07:45 AM	32	234	266	8	**65**	**73**	**185**	2	187	526
Total Volume	174	1124	1298	24	181	205	615	41	656	2159
% App. Total	13.4	86.6		11.7	88.3		93.8	6.2		
PHF	.680	.819	.889	.545	.696	.702	.831	.603	.850	.940

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Camino Campanero
Weather: Clear

File Name : 03_DHS_Palm_CC AM
Site Code : 05125154
Start Date : 2/20/2025



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

	07:00 AM			07:30 AM			07:45 AM		
+0 mins.	22	**343**	**365**	**11**	60	71	**185**	2	**187**
+15 mins.	56	294	350	8	65	73	162	**4**	166
+30 mins.	**64**	253	317	9	38	47	169	2	171
+45 mins.	32	234	266	6	**77**	**83**	182	1	183
Total Volume	174	1124	1298	34	240	274	698	9	707
% App. Total	13.4	86.6		12.4	87.6		98.7	1.3	
PHF	.680	.819	.889	.773	.779	.825	.943	.563	.945

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Camino Campanero
Weather: Clear

File Name : 03_DHS_Palm_CC PM
Site Code : 05125154
Start Date : 2/20/2025
Page No : 1

Groups Printed- Total Volume

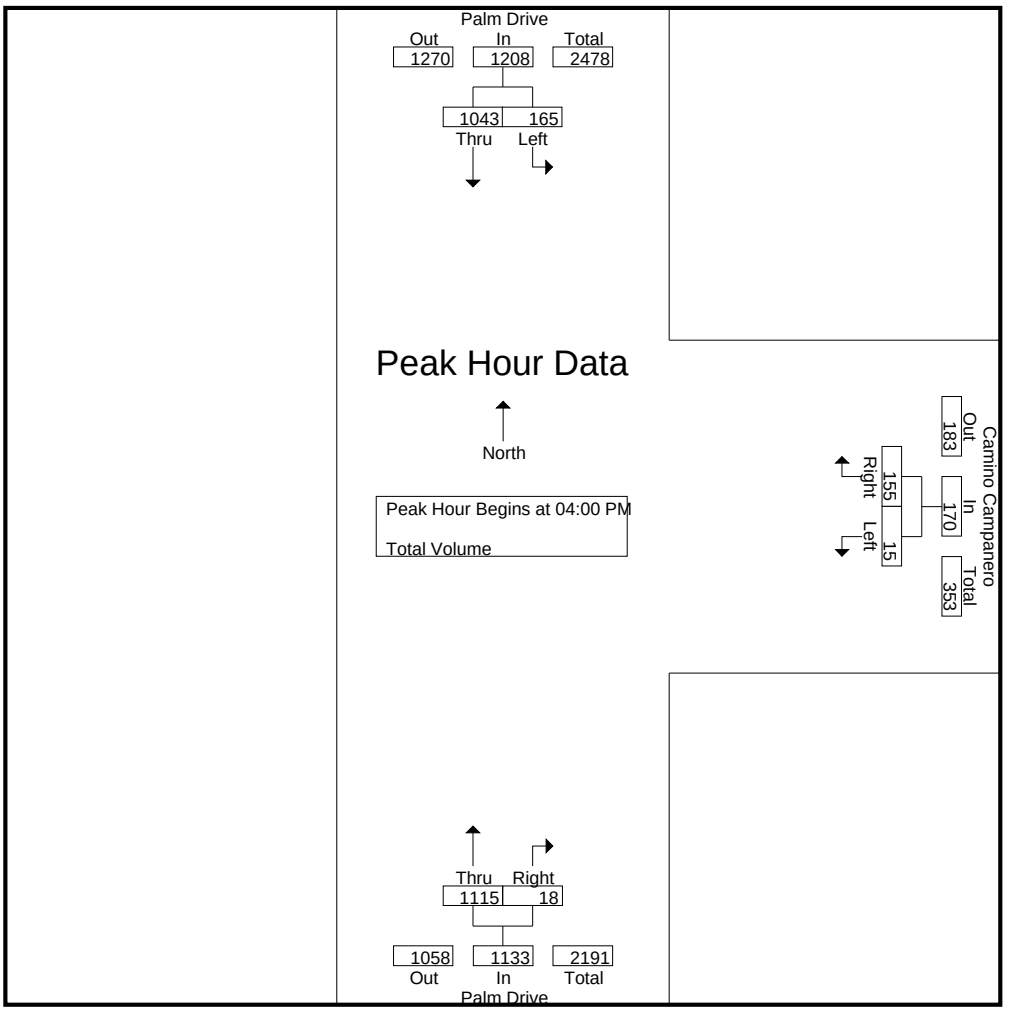
	Palm Drive Southbound			Camino Campanero Westbound			Palm Drive Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	58	286	344	6	35	41	275	6	281	666
04:15 PM	34	280	314	3	34	37	306	6	312	663
04:30 PM	35	238	273	3	47	50	293	5	298	621
04:45 PM	38	239	277	3	39	42	241	1	242	561
Total	165	1043	1208	15	155	170	1115	18	1133	2511
05:00 PM	29	231	260	2	33	35	280	3	283	578
05:15 PM	24	198	222	0	44	44	279	4	283	549
05:30 PM	30	203	233	4	25	29	346	2	348	610
05:45 PM	29	234	263	6	57	63	319	8	327	653
Total	112	866	978	12	159	171	1224	17	1241	2390
Grand Total	277	1909	2186	27	314	341	2339	35	2374	4901
Apprch %	12.7	87.3		7.9	92.1		98.5	1.5		
Total %	5.7	39	44.6	0.6	6.4	7	47.7	0.7	48.4	

	Palm Drive Southbound			Camino Campanero Westbound			Palm Drive Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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	**58**	**286**	**344**	**6**	35	41	275	**6**	281	**666**
04:15 PM	34	280	314	3	34	37	**306**	6	**312**	663
04:30 PM	35	238	273	3	**47**	**50**	293	5	298	621
04:45 PM	38	239	277	3	39	42	241	1	242	561
Total Volume	165	1043	1208	15	155	170	1115	18	1133	2511
% App. Total	13.7	86.3		8.8	91.2		98.4	1.6		
PHF	.711	.912	.878	.625	.824	.850	.911	.750	.908	.943

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

City of Desert Hot Springs
N/S: Palm Drive
E/W: Camino Campanero
Weather: Clear

File Name : 03_DHS_Palm_CC PM
Site Code : 05125154
Start Date : 2/20/2025
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			04:30 PM			05:00 PM		
+0 mins.	**58**	**286**	**344**	**3**	**47**	**50**	280	3	283
+15 mins.	34	280	314	3	39	42	279	4	283
+30 mins.	35	238	273	2	33	35	**346**	2	**348**
+45 mins.	38	239	277	0	44	44	319	**8**	327
Total Volume	165	1043	1208	8	163	171	1224	17	1241
% App. Total	13.7	86.3		4.7	95.3		98.6	1.4	
PHF	.711	.912	.878	.667	.867	.855	.884	.531	.892

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

City of Desert Hot Springs
N/S: Mission Springs Park East Access DW
E/W: Park Lane
Weather: Clear

File Name : 04_DHS_E Acc_Park AM
Site Code : 05125154
Start Date : 2/20/2025
Page No : 1

Groups Printed- Total Volume

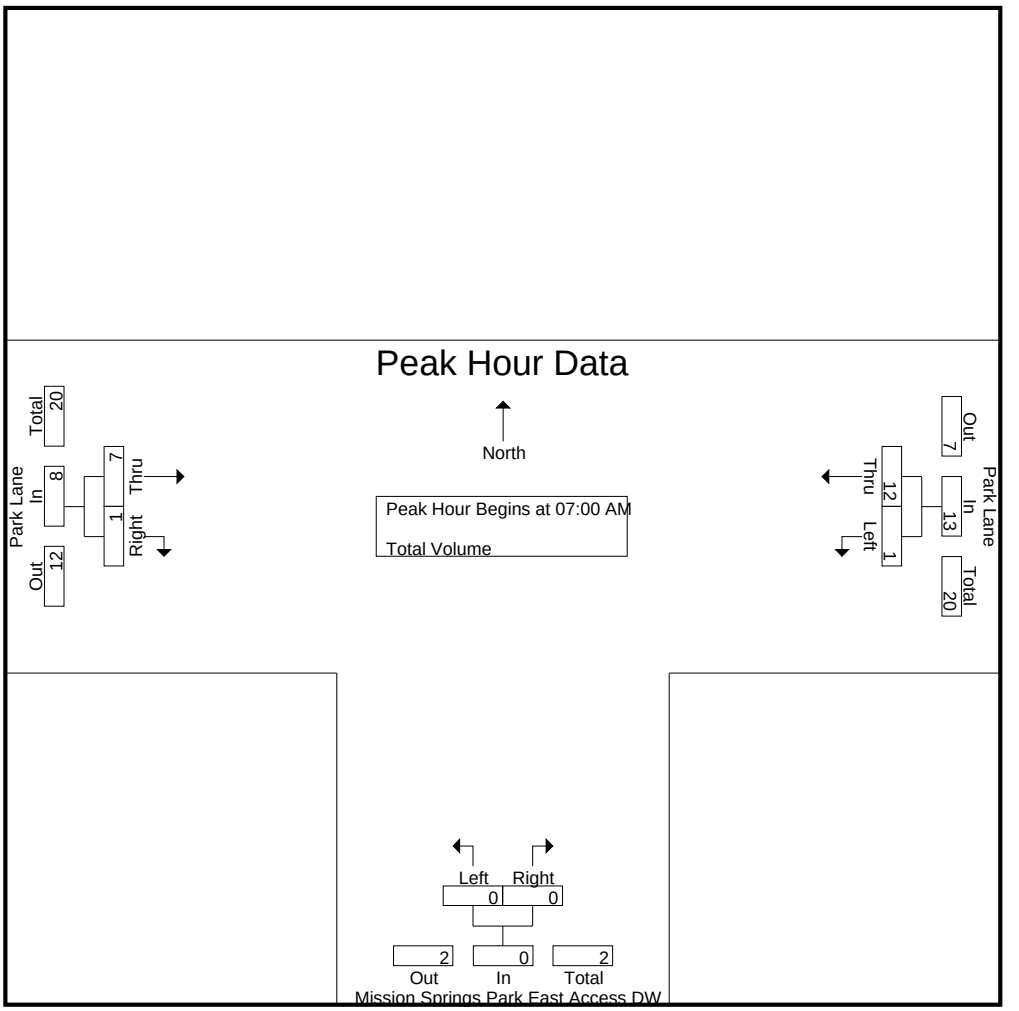
	Park Lane Westbound			Mission Springs Park East Access DW Northbound			Park Lane Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	1	5	6	0	0	0	2	1	3	9
07:15 AM	0	4	4	0	0	0	1	0	1	5
07:30 AM	0	1	1	0	0	0	4	0	4	5
07:45 AM	0	2	2	0	0	0	0	0	0	2
Total	1	12	13	0	0	0	7	1	8	21
08:00 AM	0	3	3	2	0	2	0	0	0	5
08:15 AM	0	0	0	0	0	0	2	0	2	2
08:30 AM	0	1	1	1	0	1	1	0	1	3
08:45 AM	1	1	2	0	1	1	3	0	3	6
Total	1	5	6	3	1	4	6	0	6	16
Grand Total	2	17	19	3	1	4	13	1	14	37
Apprch %	10.5	89.5		75	25		92.9	7.1		
Total %	5.4	45.9	51.4	8.1	2.7	10.8	35.1	2.7	37.8	

	Park Lane Westbound			Mission Springs Park East Access DW Northbound			Park Lane Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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 07:00 AM										
07:00 AM	**1**	**5**	**6**	0	0	0	2	**1**	3	**9**
07:15 AM	0	4	4	0	0	0	1	0	1	5
07:30 AM	0	1	1	0	0	0	**4**	0	**4**	5
07:45 AM	0	2	2	0	0	0	0	0	0	2
Total Volume	1	12	13	0	0	0	7	1	8	21
% App. Total	7.7	92.3		0	0		87.5	12.5		
PHF	.250	.600	.542	.000	.000	.000	.438	.250	.500	.583

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

City of Desert Hot Springs
N/S: Mission Springs Park East Access DW
E/W: Park Lane
Weather: Clear

File Name : 04_DHS_E Acc_Park AM
Site Code : 05125154
Start Date : 2/20/2025
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:

	07:00 AM			08:00 AM			07:00 AM		
+0 mins.	**1**	**5**	**6**	**2**	0	**2**	2	**1**	3
+15 mins.	0	4	4	0	0	0	1	0	1
+30 mins.	0	1	1	1	0	1	**4**	0	**4**
+45 mins.	0	2	2	0	**1**	1	0	0	0
Total Volume	1	12	13	3	1	4	7	1	8
% App. Total	7.7	92.3		75	25		87.5	12.5	
PHF	.250	.600	.542	.375	.250	.500	.438	.250	.500

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

City of Desert Hot Springs
N/S: Mission Springs Park East Access DW
E/W: Park Lane
Weather: Clear

File Name : 04_DHS_E Acc_Park PM
Site Code : 05125154
Start Date : 2/20/2025
Page No : 1

Groups Printed- Total Volume

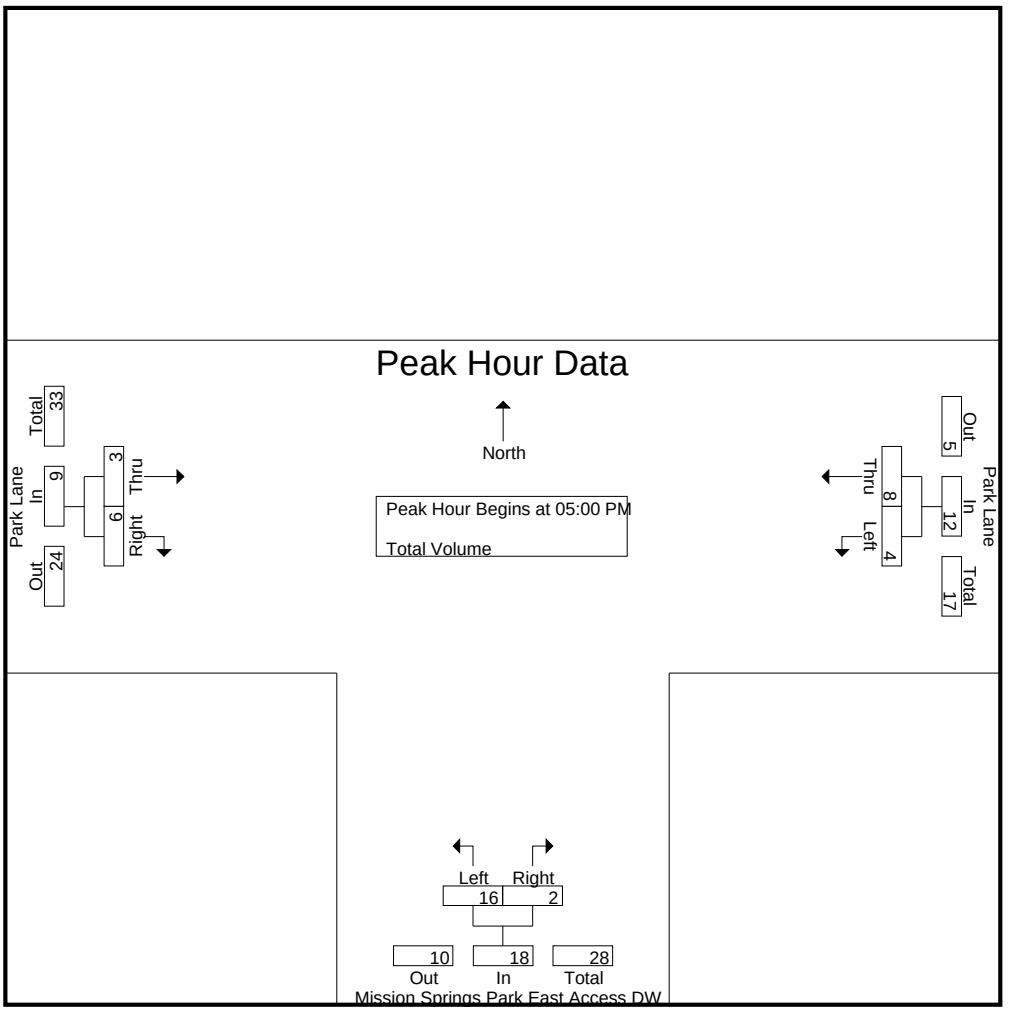
	Park Lane Westbound			Mission Springs Park East Access DW Northbound			Park Lane Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	8	8	2	0	2	0	0	0	10
04:15 PM	0	3	3	1	0	1	2	1	3	7
04:30 PM	0	1	1	1	0	1	1	0	1	3
04:45 PM	0	1	1	1	0	1	0	2	2	4
Total	0	13	13	5	0	5	3	3	6	24
05:00 PM	0	1	1	2	1	3	1	2	3	7
05:15 PM	1	2	3	3	0	3	0	3	3	9
05:30 PM	1	1	2	7	0	7	0	1	1	10
05:45 PM	2	4	6	4	1	5	2	0	2	13
Total	4	8	12	16	2	18	3	6	9	39
Grand Total	4	21	25	21	2	23	6	9	15	63
Apprch %	16	84		91.3	8.7		40	60		
Total %	6.3	33.3	39.7	33.3	3.2	36.5	9.5	14.3	23.8	

	Park Lane Westbound			Mission Springs Park East Access DW Northbound			Park Lane Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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 05:00 PM										
05:00 PM	0	1	1	2	**1**	3	1	2	**3**	7
05:15 PM	1	2	3	3	0	3	0	**3**	3	9
05:30 PM	1	1	2	**7**	0	**7**	0	1	1	10
05:45 PM	**2**	**4**	**6**	4	1	5	**2**	0	2	**13**
Total Volume	4	8	12	16	2	18	3	6	9	39
% App. Total	33.3	66.7		88.9	11.1		33.3	66.7		
PHF	.500	.500	.500	.571	.500	.643	.375	.500	.750	.750

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

City of Desert Hot Springs
N/S: Mission Springs Park East Access DW
E/W: Park Lane
Weather: Clear

File Name : 04_DHS_E Acc_Park PM
Site Code : 05125154
Start Date : 2/20/2025
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			05:00 PM			04:15 PM		
+0 mins.	0	**8**	**8**	2	**1**	3	**2**	1	**3**
+15 mins.	0	3	3	3	0	3	1	0	1
+30 mins.	0	1	1	**7**	0	**7**	0	**2**	2
+45 mins.	0	1	1	4	1	5	1	2	3
Total Volume	0	13	13	16	2	18	4	5	9
% App. Total	0	100		88.9	11.1		44.4	55.6	
PHF	.000	.406	.406	.571	.500	.643	.500	.625	.750

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Desert Hot Springs
Palm Drive
S/ Two Bunch Palms Trail
24 Hour Directional Volume Count

DHS001
Site Code: 051-25154

Start Time	2/20/25 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		45	205			31	258				
12:15		48	227			26	229				
12:30		40	207			33	236				
12:45		44	224	177	863	16	228	106	951	283	1814
01:00		31	187			17	254				
01:15		21	228			16	254				
01:30		20	244			16	270				
01:45		18	214	90	873	11	259	60	1037	150	1910
02:00		24	226			15	255				
02:15		6	274			16	246				
02:30		9	273			9	261				
02:45		19	301	58	1074	13	333	53	1095	111	2169
03:00		11	278			14	323				
03:15		17	276			23	266				
03:30		12	308			36	**282**				
03:45		9	288	49	1150	44	**357**	117	1228	166	2378
04:00		14	283			32	**329**				
04:15		15	283			79	**300**				
04:30		18	284			67	266				
04:45		28	255	75	1105	85	285	263	1180	338	2285
05:00		34	274			107	269				
05:15		44	285			146	245				
05:30		55	**329**			190	279				
05:45		57	**316**	190	1204	187	283	630	1076	820	2280
06:00		60	**315**			264	281				
06:15		69	**333**			310	268				
06:30		70	273			**360**	262				
06:45		147	275	346	1196	**312**	215	1246	1026	1592	2222
07:00		150	248			**379**	176				
07:15		191	211			**328**	179				
07:30		196	209			317	186				
07:45		**239**	198	776	866	264	158	1288	699	2064	1565
08:00		**190**	168			312	149				
08:15		**222**	225			297	130				
08:30		**226**	188			326	143				
08:45		216	174	854	755	310	116	1245	538	2099	1293
09:00		175	156			252	104				
09:15		173	185			269	111				
09:30		148	142			227	112				
09:45		167	162	663	645	258	83	1006	410	1669	1055
10:00		142	157			276	91				
10:15		153	159			231	87				
10:30		184	130			231	72				
10:45		162	111	641	557	224	61	962	311	1603	868
11:00		174	99			229	47				
11:15		201	113			233	43				
11:30		183	66			236	50				
11:45		199	69	757	347	219	53	917	193	1674	540
Total		4676	10635	4676	10635	7893	9744	7893	9744	12569	20379
Combined Total		15311		15311		17637		17637		32948	
AM Peak	-	07:45	-	-	-	06:30	-	-	-	-	-
Vol.	-	877	-	-	-	1379	-	-	-	-	-
P.H.F.		0.917				0.910					
PM Peak	-	-	05:30	-	-	-	03:30	-	-	-	-
Vol.	-	-	1293	-	-	-	1268	-	-	-	-
P.H.F.			0.971				0.888				
Percentage		30.5%	69.5%			44.8%	55.2%				
ADT/AADT		ADT 32,948		AADT 32,948							

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Desert Hot Springs
Palm Drive
N/ Park Lane
24 Hour Directional Volume Count

DHS002
Site Code: 051-25154

Start Time	2/20/25 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		44	238			31	238				
12:15		47	233			23	218				
12:30		33	234			31	213				
12:45		27	228	151	933	10	218	95	887	246	1820
01:00		24	216			15	243				
01:15		21	232			22	245				
01:30		14	258			10	240				
01:45		14	236	73	942	10	249	57	977	130	1919
02:00		12	236			10	228				
02:15		14	314			10	231				
02:30		7	310			10	252				
02:45		17	331	50	1191	14	296	44	1007	94	2198
03:00		10	284			14	282				
03:15		16	349			20	270				
03:30		14	337			35	**277**				
03:45		12	310	52	1280	42	**338**	111	1167	163	2447
04:00		15	325			36	**352**				
04:15		14	334			71	**295**				
04:30		17	328			71	273				
04:45		34	282	80	1269	76	268	254	1188	334	2457
05:00		31	299			104	255				
05:15		49	**331**			144	228				
05:30		54	**358**			182	246				
05:45		61	**376**	195	1364	194	292	624	1021	819	2385
06:00		58	**369**			256	282				
06:15		70	330			302	241				
06:30		87	300			**363**	245				
06:45		156	262	371	1261	**311**	216	1232	984	1603	2245
07:00		149	271			**368**	181				
07:15		217	223			**342**	172				
07:30		207	210			316	161				
07:45		**236**	200	809	904	263	145	1289	659	2098	1563
08:00		**191**	176			297	133				
08:15		**252**	212			296	134				
08:30		**243**	182			326	127				
08:45		217	168	903	738	297	104	1216	498	2119	1236
09:00		188	151			247	110				
09:15		171	179			248	96				
09:30		142	151			227	114				
09:45		166	157	667	638	231	79	953	399	1620	1037
10:00		148	142			246	85				
10:15		184	156			225	79				
10:30		183	127			218	77				
10:45		189	101	704	526	218	59	907	300	1611	826
11:00		176	89			213	48				
11:15		222	104			209	40				
11:30		198	68			226	43				
11:45		202	60	798	321	212	57	860	188	1658	509
Total		4853	11367	4853	11367	7642	9275	7642	9275	12495	20642
Combined Total		16220		16220		16917		16917		33137	
AM Peak	-	07:45	-	-	-	06:30	-	-	-	-	-
Vol.	-	922	-	-	-	1384	-	-	-	-	-
P.H.F.		0.915				0.940					
PM Peak	-	-	05:15	-	-	-	03:30	-	-	-	-
Vol.	-	-	1434	-	-	-	1262	-	-	-	-
P.H.F.			0.953				0.896				
Percentage		29.9%	70.1%			45.2%	54.8%				
ADT/AADT		ADT 33,137		AADT 33,137							

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Desert Hot Springs
Palm Drive
S/ Park Lane
24 Hour Directional Volume Count

DHS003
Site Code: 051-25154

Start Time	2/20/25 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		44	235			31	238				
12:15		47	227			23	230				
12:30		33	232			31	217				
12:45		26	227	150	921	10	227	95	912	245	1833
01:00		24	218			15	246				
01:15		21	237			22	253				
01:30		14	254			10	247				
01:45		15	238	74	947	10	244	57	990	131	1937
02:00		12	238			11	231				
02:15		14	313			10	238				
02:30		8	309			11	261				
02:45		17	335	51	1195	14	293	46	1023	97	2218
03:00		10	281			14	284				
03:15		16	352			20	272				
03:30		14	333			35	278				
03:45		12	314	52	1280	42	**336**	111	1170	163	2450
04:00		15	318			36	**360**				
04:15		14	336			71	**303**				
04:30		17	331			71	**287**				
04:45		36	285	82	1270	76	270	254	1220	336	2490
05:00		31	300			102	261				
05:15		49	333			144	232				
05:30		54	**356**			182	246				
05:45		63	**381**	197	1370	192	296	620	1035	817	2405
06:00		62	**368**			252	281				
06:15		75	**337**			302	243				
06:30		86	297			**368**	253				
06:45		157	256	380	1258	**314**	212	1236	989	1616	2247
07:00		148	273			**371**	187				
07:15		216	223			**346**	181				
07:30		210	208			312	169				
07:45		**239**	197	813	901	264	150	1293	687	2106	1588
08:00		**193**	173			302	139				
08:15		**253**	207			297	148				
08:30		**243**	178			325	138				
08:45		221	165	910	723	301	105	1225	530	2135	1253
09:00		190	147			257	115				
09:15		172	179			250	99				
09:30		144	151			233	116				
09:45		164	157	670	634	230	80	970	410	1640	1044
10:00		146	143			257	91				
10:15		178	156			228	78				
10:30		174	127			224	77				
10:45		195	100	693	526	220	59	929	305	1622	831
11:00		176	90			218	48				
11:15		223	104			210	40				
11:30		193	68			228	43				
11:45		200	60	792	322	214	57	870	188	1662	510
Total		4864	11347	4864	11347	7706	9459	7706	9459	12570	20806
Combined Total		16211		16211		17165		17165		33376	
AM Peak	-	07:45	-	-	-	06:30	-	-	-	-	-
Vol.	-	928	-	-	-	1399	-	-	-	-	-
P.H.F.		0.917				0.943					
PM Peak	-	-	05:30	-	-	-	03:45	-	-	-	-
Vol.	-	-	1442	-	-	-	1286	-	-	-	-
P.H.F.			0.946				0.893				
Percentage		30.0%	70.0%			44.9%	55.1%				
ADT/AADT		ADT 33,376		AADT 33,376							

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Desert Hot Springs
Two Bunch Palms Trail
E/ Palm Drive
24 Hour Directional Volume Count

DHS004
Site Code: 051-25154

Start Time	2/20/25 Thu	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		9	74			9	88				
12:15		15	84			12	89				
12:30		15	83			6	95				
12:45		7	63	46	304	3	82	30	354	76	658
01:00		4	76			9	104				
01:15		3	81			3	85				
01:30		5	73			4	93				
01:45		4	75	16	305	2	94	18	376	34	681
02:00		10	67			2	96				
02:15		2	86			0	90				
02:30		4	92			3	108				
02:45		4	118	20	363	2	114	7	408	27	771
03:00		4	109			2	96				
03:15		4	108			2	109				
03:30		0	**116**			4	**127**				
03:45		6	**108**	14	441	17	**132**	25	464	39	905
04:00		4	**115**			9	**128**				
04:15		4	**115**			15	**123**				
04:30		7	91			17	114				
04:45		7	109	22	430	23	102	64	467	86	897
05:00		7	109			22	119				
05:15		9	103			31	101				
05:30		8	106			40	97				
05:45		17	93	41	411	54	118	147	435	188	846
06:00		20	109			58	113				
06:15		26	95			66	106				
06:30		27	92			77	117				
06:45		40	88	113	384	99	92	300	428	413	812
07:00		53	79			93	97				
07:15		68	71			100	72				
07:30		61	67			100	66				
07:45		95	59	277	276	93	67	386	302	663	578
08:00		**85**	59			**99**	44				
08:15		**135**	56			**111**	36				
08:30		**137**	38			**127**	52				
08:45		**96**	58	453	211	**102**	36	439	168	892	379
09:00		74	40			96	33				
09:15		57	45			77	25				
09:30		63	34			67	34				
09:45		60	46	254	165	82	29	322	121	576	286
10:00		74	50			86	31				
10:15		60	38			98	21				
10:30		67	29			72	20				
10:45		56	25	257	142	89	21	345	93	602	235
11:00		68	22			85	15				
11:15		58	20			103	10				
11:30		71	29			72	14				
11:45		75	15	272	86	77	13	337	52	609	138
Total		1785	3518	1785	3518	2420	3668	2420	3668	4205	7186
Combined Total		5303		5303		6088		6088		11391	
AM Peak	-	08:00	-	-	-	08:00	-	-	-	-	-
Vol.	-	453	-	-	-	439	-	-	-	-	-
P.H.F.		0.827				0.864					
PM Peak	-	-	03:30	-	-	-	03:30	-	-	-	-
Vol.	-	-	454	-	-	-	510	-	-	-	-
P.H.F.			0.978				0.966				
Percentage		33.7%	66.3%			39.8%	60.2%				
ADT/AADT		ADT 11,391		AADT 11,391							

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Desert Hot Springs
Park Lane
E/ Palm Drive
24 Hour Directional Volume Count

DHS005
Site Code: 051-25154

Start Time	2/20/25 Thu	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	10			0	12				
12:15		0	7			0	15				
12:30		0	6			0	10				
12:45		0	10	0	33	0	11	0	48	0	81
01:00		0	7			0	8				
01:15		1	8			0	9				
01:30		0	4			0	12				
01:45		1	16	2	35	0	11	0	40	2	75
02:00		0	15			0	11				
02:15		0	8			0	9				
02:30		1	9			0	11				
02:45		0	16	1	48	0	7	0	38	1	86
03:00		0	10			0	12				
03:15		0	11			0	7				
03:30		0	9			0	9				
03:45		0	5	0	35	0	**8**	0	36	0	71
04:00		0	7			0	**13**				
04:15		0	14			0	**16**				
04:30		0	7			0	**12**				
04:45		2	11	2	39	0	7	0	48	2	87
05:00		2	11			0	13				
05:15		0	**18**			0	14				
05:30		0	**15**			0	7				
05:45		5	**25**	7	69	0	7	0	41	7	110
06:00		11	**16**			0	8				
06:15		11	15			0	6				
06:30		1	10			3	17				
06:45		1	18	24	59	0	12	3	43	27	102
07:00		6	17			4	6				
07:15		5	8			4	9				
07:30		13	6			2	9				
07:45		7	5	31	36	2	7	12	31	43	67
08:00		8	4			5	7				
08:15		6	5			3	7				
08:30		**12**	2			2	5				
08:45		**12**	5	38	16	6	2	16	21	54	37
09:00		**7**	1			11	6				
09:15		**10**	3			8	2				
09:30		11	1			14	3				
09:45		10	2	38	7	11	3	44	14	82	21
10:00		2	2			11	3				
10:15		8	1			8	0				
10:30		5	0			**15**	0				
10:45		10	2	25	5	**12**	1	46	4	71	9
11:00		6	3			**13**	1				
11:15		6	0			**11**	0				
11:30		11	0			15	0				
11:45		8	1	31	4	9	0	48	1	79	5
Total		199	386	199	386	169	365	169	365	368	751
Combined Total		585		585		534		534		1119	
AM Peak	-	08:30	-	-	-	10:30	-	-	-	-	-
Vol.	-	41	-	-	-	51	-	-	-	-	-
P.H.F.		0.854				0.850					
PM Peak	-	-	05:15	-	-	-	03:45	-	-	-	-
Vol.	-	-	74	-	-	-	49	-	-	-	-
P.H.F.			0.740				0.766				
Percentage		34.0%	66.0%			31.6%	68.4%				
ADT/AADT		ADT 1,119		AADT 1,119							

This Page Intentionally Left Blank

APPENDIX 3.2: EXISTING (2025) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

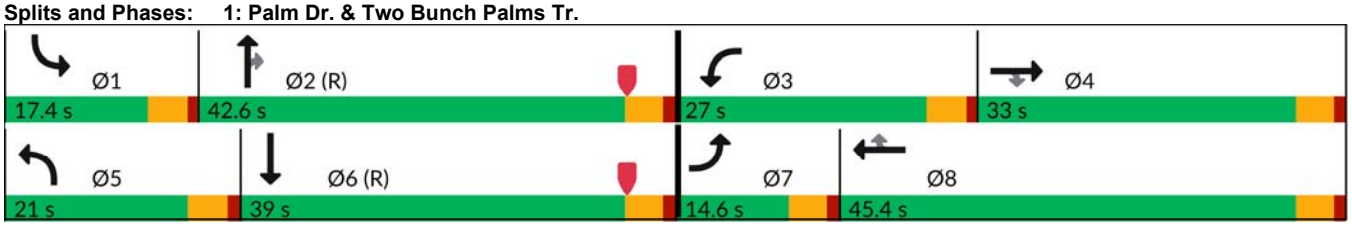
This Page Intentionally Left Blank

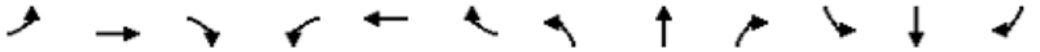
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	180	322	227	130	82	159	508	187	86	696	30
Future Volume (vph)	41	180	322	227	130	82	159	508	187	86	696	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0	70		35	100		50	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		692			663			1297			626	
Travel Time (s)		11.8			11.3			22.1			12.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	14.5	33.0	33.0	14.5	22.5	22.5	14.5	22.5	22.5	14.5	22.5	
Total Split (s)	14.6	33.0	33.0	27.0	45.4	45.4	21.0	42.6	42.6	17.4	39.0	
Total Split (%)	12.2%	27.5%	27.5%	22.5%	37.8%	37.8%	17.5%	35.5%	35.5%	14.5%	32.5%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max	Max	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 1: Palm Dr. & Two Bunch Palms Tr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	180	322	227	130	82	159	508	187	86	696	30
Future Volume (veh/h)	41	180	322	227	130	82	159	508	187	86	696	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	194	346	244	140	88	171	546	201	92	748	32
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	444	374	273	611	515	196	1350	598	142	1212	52
Arrive On Green	0.06	0.24	0.24	0.15	0.33	0.33	0.22	0.76	0.76	0.08	0.35	0.35
Sat Flow, veh/h	1781	1870	1575	1781	1870	1578	1781	3554	1575	1781	3471	148
Grp Volume(v), veh/h	44	194	346	244	140	88	171	546	201	92	383	397
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1578	1781	1777	1575	1781	1777	1843
Q Serve(g_s), s	2.8	10.6	25.8	16.1	6.5	4.8	11.1	6.4	4.9	6.0	21.4	21.5
Cycle Q Clear(g_c), s	2.8	10.6	25.8	16.1	6.5	4.8	11.1	6.4	4.9	6.0	21.4	21.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	114	444	374	273	611	515	196	1350	598	142	620	643
V/C Ratio(X)	0.39	0.44	0.92	0.89	0.23	0.17	0.87	0.40	0.34	0.65	0.62	0.62
Avail Cap(c_a), veh/h	150	444	374	334	637	538	245	1350	598	191	620	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	38.9	44.7	49.8	29.4	28.8	46.0	9.7	9.5	53.6	32.4	32.4
Incr Delay (d2), s/veh	2.1	3.1	30.9	21.9	0.2	0.2	23.5	0.9	1.5	4.9	4.6	4.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.2	13.0	8.7	2.9	1.8	5.6	2.1	1.7	2.9	9.9	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.0	42.0	75.7	71.8	29.6	29.0	69.4	10.6	11.1	58.6	36.9	36.8
LnGrp LOS	E	D	E	E	C	C	E	B	B	E	D	D
Approach Vol, veh/h		584			472			918			872	
Approach Delay, s/veh		63.0			51.3			21.7			39.2	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	50.1	22.9	33.0	17.7	46.4	12.2	43.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.9	38.1	22.5	28.5	16.5	34.5	10.1	40.9
Max Q Clear Time (g_c+I1), s	8.0	8.4	18.1	27.8	13.1	23.5	4.8	8.5
Green Ext Time (p_c), s	0.1	4.4	0.3	0.2	0.1	3.6	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	40.4
HCM 7th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	1	25	10	2	6	5	893	12	26	1190	1
Future Volume (vph)	4	1	25	10	2	6	5	893	12	26	1190	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		229			596			1360			1297	
Travel Time (s)		5.2			13.5			23.2			22.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1	25	10	2	6	5	893	12	26	1190	1
Future Vol, veh/h	4	1	25	10	2	6	5	893	12	26	1190	1
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	1	27	11	2	6	5	950	13	28	1266	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1819	2305	644	1666	2299	491	1272	0	0	968	0	0
Stage 1	1327	1327	-	972	972	-	-	-	-	-	-	-
Stage 2	492	978	-	694	1327	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	49	38	416	63	38	523	542	-	-	708	-	-
Stage 1	164	223	-	271	329	-	-	-	-	-	-	-
Stage 2	527	327	-	399	223	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	42	36	412	54	36	518	539	-	-	704	-	-
Mov Cap-2 Maneuver	42	36	-	54	36	-	-	-	-	-	-	-
Stage 1	157	213	-	266	323	-	-	-	-	-	-	-
Stage 2	508	321	-	355	213	-	-	-	-	-	-	-

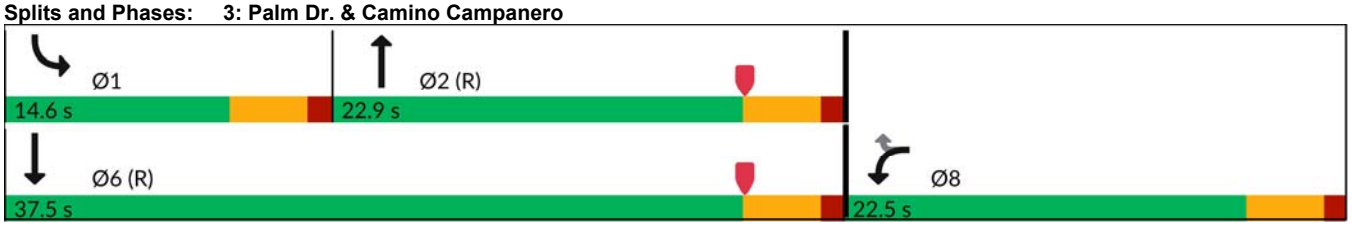
Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	29.59	73.14	0.22	0.22
HCM LOS	D	F		

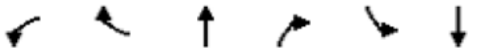
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	19	-	-	41	412	71	704	-	-
HCM Lane V/C Ratio	0.01	-	-	0.13	0.065	0.269	0.039	-	-
HCM Ctrl Dly (s/v)	11.7	0.2	-	105.8	14.3	73.1	10.3	-	-
HCM Lane LOS	B	A	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	1	0.1	-	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	24	181	615	41	174	1124
Future Volume (vph)	24	181	615	41	174	1124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	80	
Storage Lanes	1	1		0	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	30		45			40
Link Distance (ft)	1008		299			1360
Travel Time (s)	22.9		4.5			23.2
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0		10.0	10.0
Minimum Split (s)	22.5	22.5	22.5		14.5	22.5
Total Split (s)	22.5	22.5	22.9		14.6	37.5
Total Split (%)	37.5%	37.5%	38.2%		24.3%	62.5%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 11.4 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Palm Dr. & Camino Campanero





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	24	181	615	41	174	1124
Future Volume (veh/h)	24	181	615	41	174	1124
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	193	654	44	185	1196
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	289	257	1532	103	283	2444
Arrive On Green	0.16	0.16	0.45	0.45	0.16	0.69
Sat Flow, veh/h	1781	1585	3471	227	1781	3647
Grp Volume(v), veh/h	26	193	344	354	185	1196
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1828	1781	1777
Q Serve(g_s), s	0.7	7.0	7.9	7.9	5.8	9.5
Cycle Q Clear(g_c), s	0.7	7.0	7.9	7.9	5.8	9.5
Prop In Lane	1.00	1.00		0.12	1.00	
Lane Grp Cap(c), veh/h	289	257	806	829	283	2444
V/C Ratio(X)	0.09	0.75	0.43	0.43	0.65	0.49
Avail Cap(c_a), veh/h	534	476	806	829	300	2444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	24.0	11.1	11.1	23.7	4.4
Incr Delay (d2), s/veh	0.1	4.4	1.6	1.6	4.6	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.7	2.7	2.8	2.6	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.5	28.3	12.8	12.7	28.3	5.1
LnGrp LOS	C	C	B	B	C	A
Approach Vol, veh/h	219		698			1381
Approach Delay, s/veh	27.5		12.7			8.2
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.0	31.7			45.8	14.2
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	10.1	18.4			33.0	18.0
Max Q Clear Time (g_c+I1), s	7.8	9.9			11.5	9.0
Green Ext Time (p_c), s	0.1	2.5			8.7	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	11.4
HCM 7th LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	7	1	1	12	1	1
Future Volume (vph)	7	1	1	12	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30			30	30	
Link Distance (ft)	261			357	165	
Travel Time (s)	5.9			8.1	3.8	
Confl. Peds. (#/hr)		5	5		5	5
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	7	1	1	12	1	1
Future Vol, veh/h	7	1	1	12	1	1
Conflicting Peds, #/hr	0	5	5	0	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	2	2	20	2	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	18	0	46	23
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1598	-	964	1054
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1591	-	954	1044
Mov Cap-2 Maneuver	-	-	-	-	954	-
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	988	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.56	8.62
HCM LOS			A

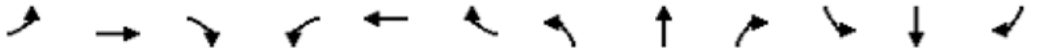
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	997	-	-	138	-
HCM Lane V/C Ratio	0.003	-	-	0.001	-
HCM Ctrl Dly (s/v)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	183	307	219	165	83	158	807	140	107	654	30
Future Volume (vph)	94	183	307	219	165	83	158	807	140	107	654	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0	70		35	100		50	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		692			663			1297			626	
Travel Time (s)		11.8			11.3			22.1			12.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	14.5	33.0	33.0	14.5	22.5	22.5	14.5	22.5	22.5	14.5	22.5	
Total Split (s)	18.0	33.0	33.0	27.0	42.0	42.0	22.0	43.0	43.0	17.0	38.0	
Total Split (%)	15.0%	27.5%	27.5%	22.5%	35.0%	35.0%	18.3%	35.8%	35.8%	14.2%	31.7%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max	Max	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 1: Palm Dr. & Two Bunch Palms Tr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	183	307	219	165	83	158	807	140	107	654	30
Future Volume (veh/h)	94	183	307	219	165	83	158	807	140	107	654	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	199	334	238	179	90	172	877	152	116	711	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	444	374	267	574	484	197	1354	600	145	1216	56
Arrive On Green	0.08	0.24	0.24	0.15	0.31	0.31	0.22	0.76	0.76	0.08	0.35	0.35
Sat Flow, veh/h	1781	1870	1575	1781	1870	1577	1781	3554	1575	1781	3457	160
Grp Volume(v), veh/h	102	199	334	238	179	90	172	877	152	116	365	379
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1577	1781	1777	1575	1781	1777	1841
Q Serve(g_s), s	6.7	10.9	24.6	15.7	8.8	5.0	11.2	13.9	3.4	7.7	20.1	20.2
Cycle Q Clear(g_c), s	6.7	10.9	24.6	15.7	8.8	5.0	11.2	13.9	3.4	7.7	20.1	20.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	143	444	374	267	574	484	197	1354	600	145	625	647
V/C Ratio(X)	0.71	0.45	0.89	0.89	0.31	0.19	0.87	0.65	0.25	0.80	0.58	0.59
Avail Cap(c_a), veh/h	200	444	374	334	584	493	260	1354	600	186	625	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	39.0	44.3	50.0	31.9	30.6	45.9	10.5	9.3	54.1	31.7	31.8
Incr Delay (d2), s/veh	6.7	3.2	26.0	21.1	0.3	0.2	21.2	2.4	1.0	17.0	4.0	3.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	5.3	12.1	8.4	4.0	1.9	5.5	3.7	1.2	4.1	9.2	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.6	42.3	70.3	71.1	32.2	30.7	67.1	12.9	10.3	71.1	35.7	35.6
LnGrp LOS	E	D	E	E	C	C	E	B	B	E	D	D
Approach Vol, veh/h		635			507			1201			860	
Approach Delay, s/veh		60.0			50.2			20.3			40.4	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	50.2	22.5	33.0	17.8	46.7	14.2	41.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	38.5	22.5	28.5	17.5	33.5	13.5	37.5
Max Q Clear Time (g_c+I1), s	9.7	15.9	17.7	26.6	13.2	22.2	8.7	10.8
Green Ext Time (p_c), s	0.1	6.6	0.3	0.5	0.2	3.4	0.1	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	38.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	2	35	19	1	29	16	1236	18	21	1166	2
Future Volume (vph)	4	2	35	19	1	29	16	1236	18	21	1166	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		229			596			1360			1297	
Travel Time (s)		5.2			13.5			23.2			22.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	2	35	19	1	29	16	1236	18	21	1166	2
Future Vol, veh/h	4	2	35	19	1	29	16	1236	18	21	1166	2
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	2	38	21	1	32	18	1358	20	23	1281	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2053	2752	652	2101	2743	699	1289	0	0	1383	0	0
Stage 1	1334	1334	-	1408	1408	-	-	-	-	-	-	-
Stage 2	720	1418	-	693	1335	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	32	19	411	30	20	382	534	-	-	491	-	-
Stage 1	162	221	-	146	203	-	-	-	-	-	-	-
Stage 2	385	201	-	400	221	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	25	17	407	21	18	379	532	-	-	489	-	-
Mov Cap-2 Maneuver	25	17	-	21	18	-	-	-	-	-	-	-
Stage 1	154	210	-	137	192	-	-	-	-	-	-	-
Stage 2	330	190	-	340	209	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	46.46	$ 309.92	0.76	0.22
HCM LOS	E	F		

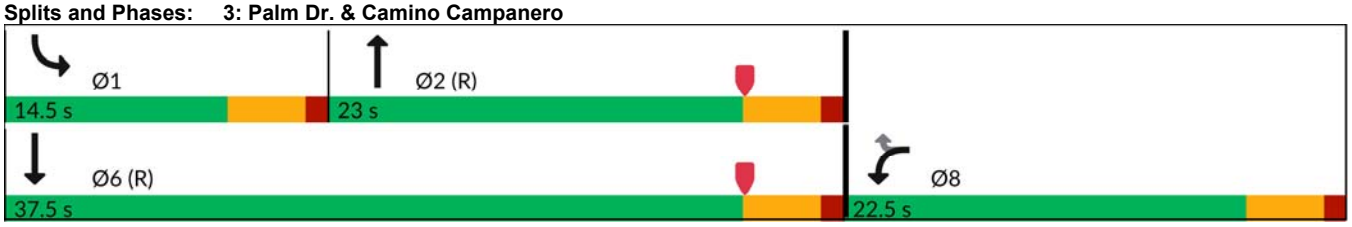
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	44	-	-	22	407	47	489	-	-
HCM Lane V/C Ratio	0.033	-	-	0.304	0.095	1.134	0.047	-	-
HCM Ctrl Dly (s/v)	12	0.6	-	231.3	14.8	$ 309.9	12.7	-	-
HCM Lane LOS	B	A	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	0.3	4.9	0.1	-	-

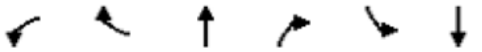
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	155	1115	18	165	1043
Future Volume (vph)	15	155	1115	18	165	1043
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	80	
Storage Lanes	1	1		0	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	30		45			40
Link Distance (ft)	1008		299			1360
Travel Time (s)	22.9		4.5			23.2
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0		10.0	10.0
Minimum Split (s)	22.5	22.5	22.5		14.5	22.5
Total Split (s)	22.5	22.5	23.0		14.5	37.5
Total Split (%)	37.5%	37.5%	38.3%		24.2%	62.5%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 10.4 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Palm Dr. & Camino Campanero





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	15	155	1115	18	165	1043
Future Volume (veh/h)	15	155	1115	18	165	1043
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	165	1186	19	176	1110
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	282	251	1642	26	281	2457
Arrive On Green	0.16	0.16	0.46	0.46	0.16	0.69
Sat Flow, veh/h	1781	1585	3673	57	1781	3647
Grp Volume(v), veh/h	16	165	589	616	176	1110
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1860	1781	1777
Q Serve(g_s), s	0.5	5.9	16.1	16.1	5.5	8.4
Cycle Q Clear(g_c), s	0.5	5.9	16.1	16.1	5.5	8.4
Prop In Lane	1.00	1.00		0.03	1.00	
Lane Grp Cap(c), veh/h	282	251	815	853	281	2457
V/C Ratio(X)	0.06	0.66	0.72	0.72	0.63	0.45
Avail Cap(c_a), veh/h	534	476	815	853	297	2457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	23.7	13.1	13.1	23.6	4.2
Incr Delay (d2), s/veh	0.1	2.9	5.5	5.3	3.8	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.2	6.1	6.3	2.4	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.5	26.6	18.6	18.4	27.4	4.8
LnGrp LOS	C	C	B	B	C	A
Approach Vol, veh/h	181		1205			1286
Approach Delay, s/veh	26.2		18.5			7.9
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.0	32.0			46.0	14.0
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	10.0	18.5			33.0	18.0
Max Q Clear Time (g_c+I1), s	7.5	18.1			10.4	7.9
Green Ext Time (p_c), s	0.1	0.3			8.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	13.9
HCM 7th LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	3	6	4	8	16	2
Future Volume (vph)	3	6	4	8	16	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30			30	30	
Link Distance (ft)	261			357	158	
Travel Time (s)	5.9			8.1	3.6	
Confl. Peds. (#/hr)		5	5		5	5
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	3	6	4	8	16	2
Future Vol, veh/h	3	6	4	8	16	2
Conflicting Peds, #/hr	0	5	5	0	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	8	5	11	21	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	17	0	39	18
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1600	-	972	1061
Stage 1	-	-	-	-	1010	-
Stage 2	-	-	-	-	996	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1593	-	960	1050
Mov Cap-2 Maneuver	-	-	-	-	960	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	988	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	2.42	8.81
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	969	-	-	600	-
HCM Lane V/C Ratio	0.025	-	-	0.003	-
HCM Ctrl Dly (s/v)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

APPENDIX 3.3: TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EXISTING (2025) AM PEAK HOUR WARRANTS**

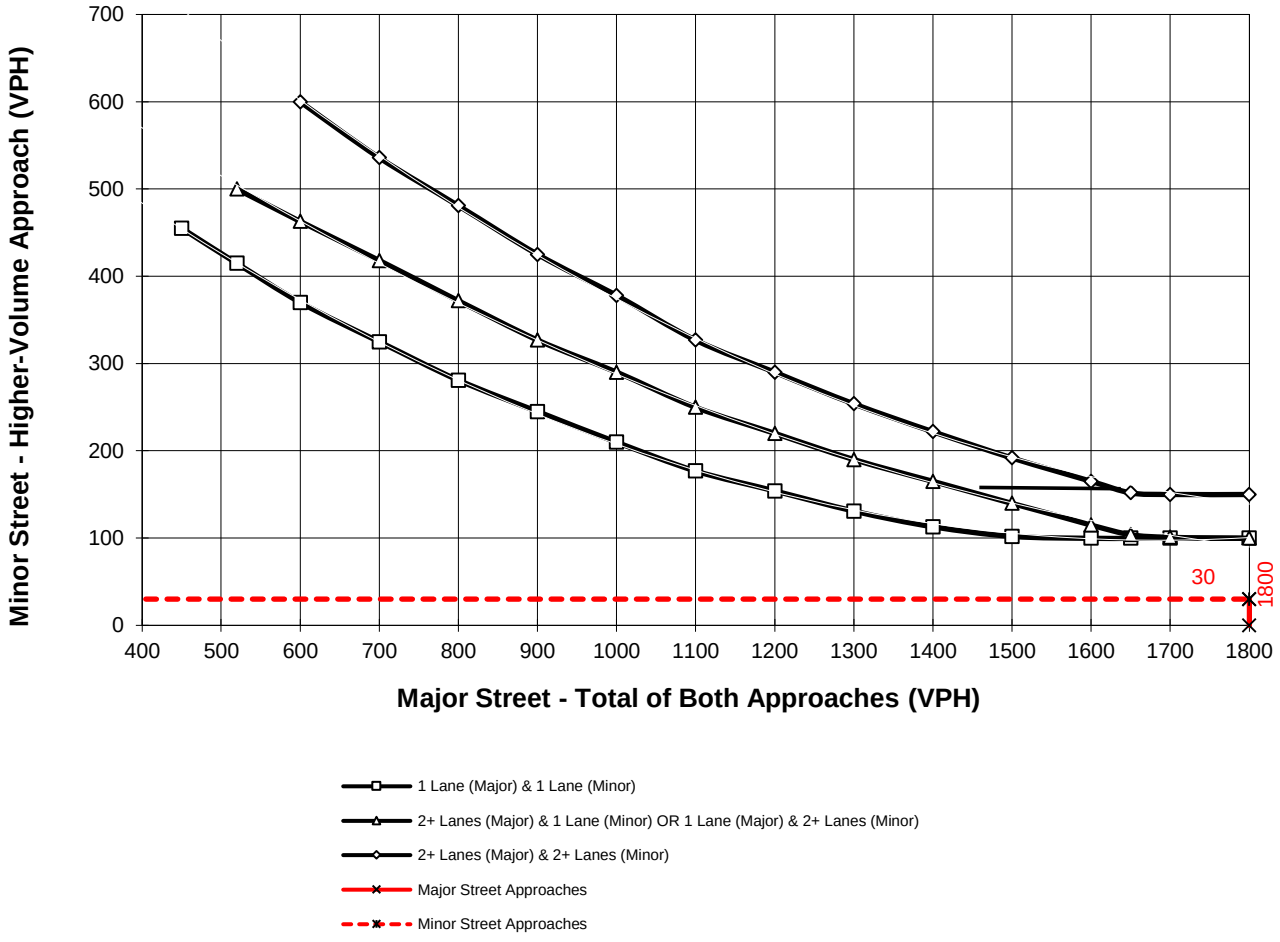
Major Street Name = **Palm Dr.**

Total of Both Approaches (VPH) = **2,127**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Park Ln.**

High Volume Approach (VPH) = **30**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

Intersection ID: #2

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EXISTING (2025) PM PEAK HOUR WARRANTS**

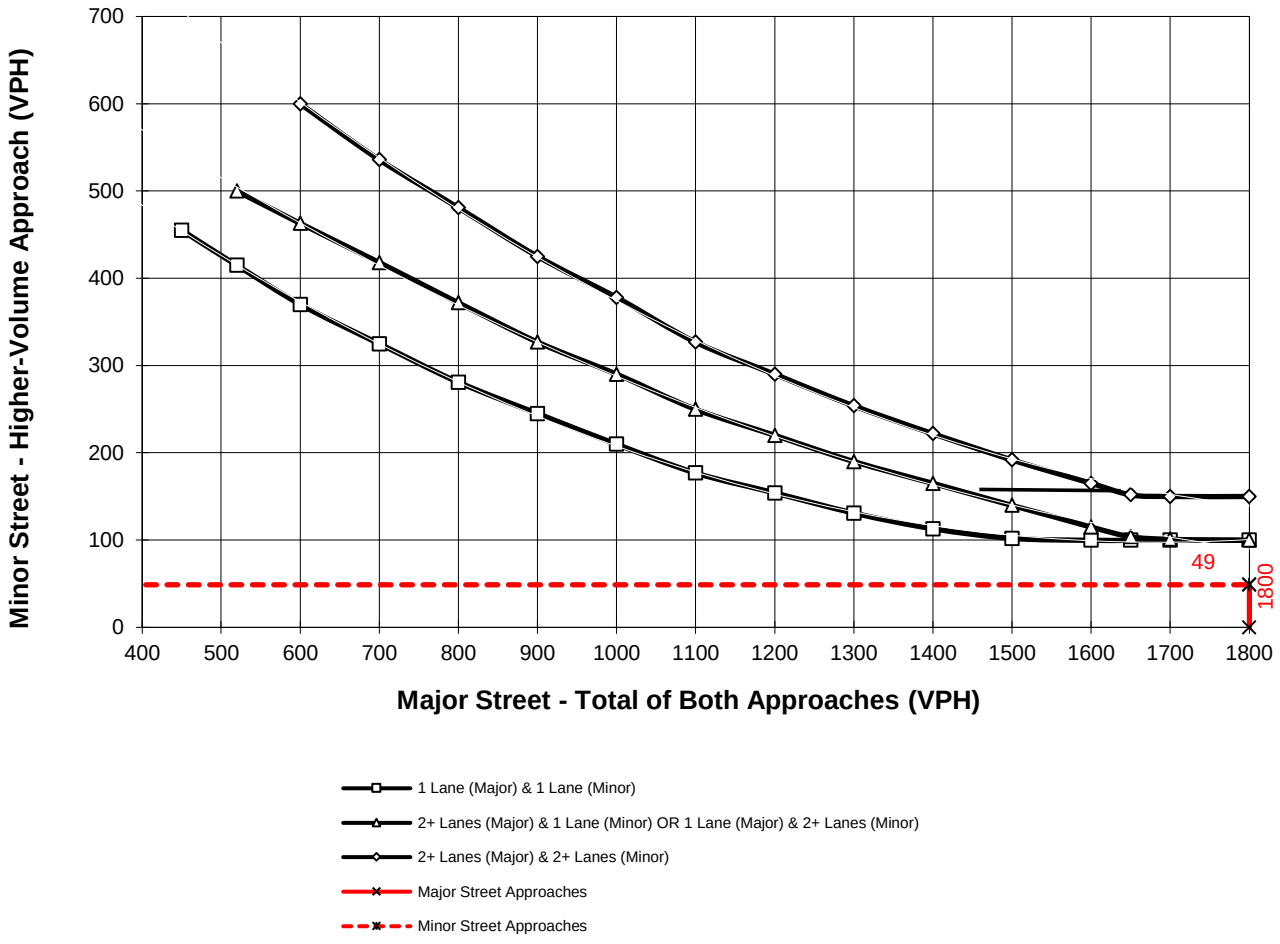
Major Street Name = **Palm Dr.**

Total of Both Approaches (VPH) = **2,459**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Park Ln.**

High Volume Approach (VPH) = **49**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

Intersection ID: #2

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2027) AM PEAK HOUR WARRANTS**

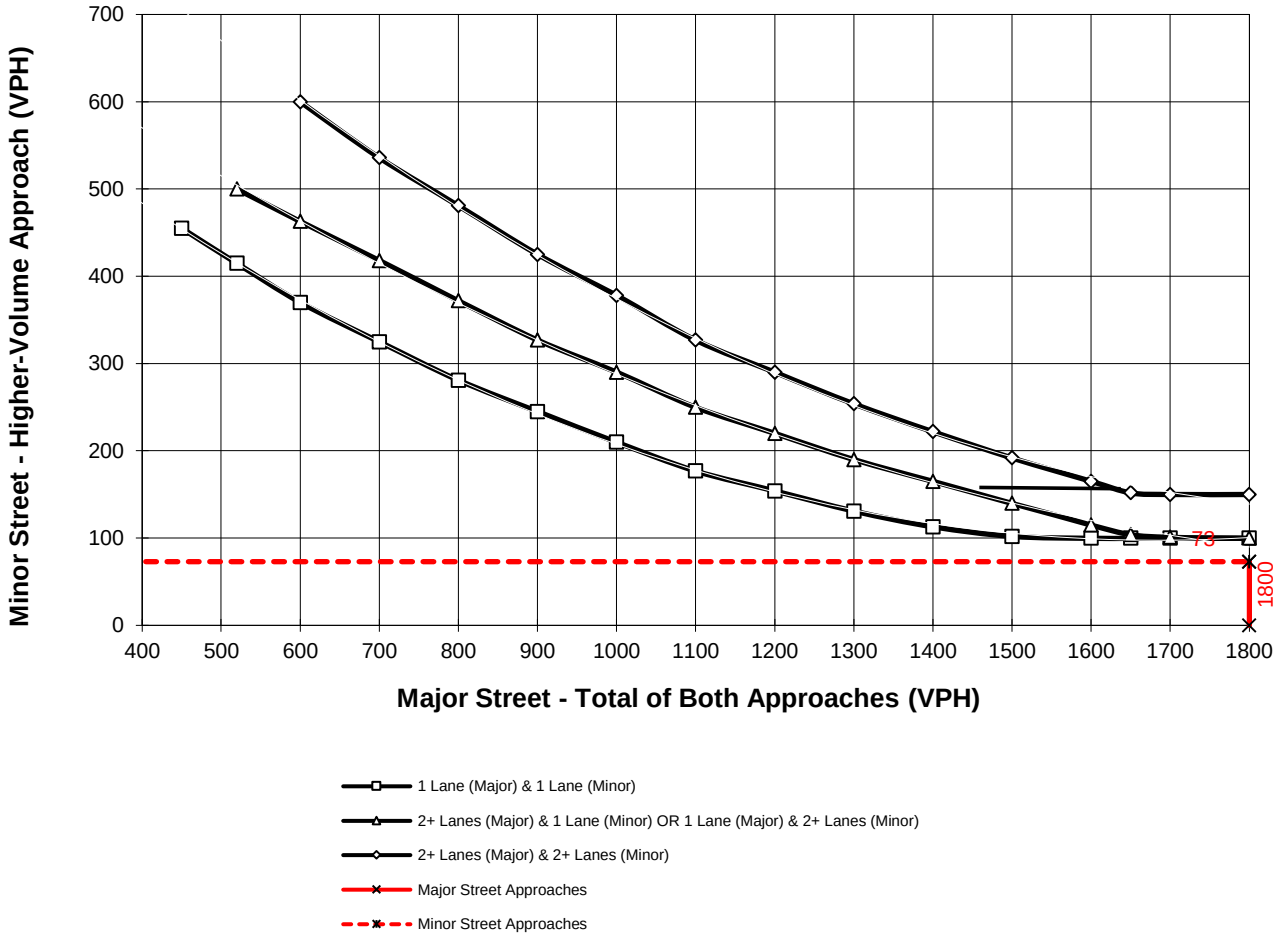
Major Street Name = **Palm Dr.**

Total of Both Approaches (VPH) = **2,241**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Park Ln.**

High Volume Approach (VPH) = **73**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

Intersection ID: #2

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2027) PM PEAK HOUR WARRANTS**

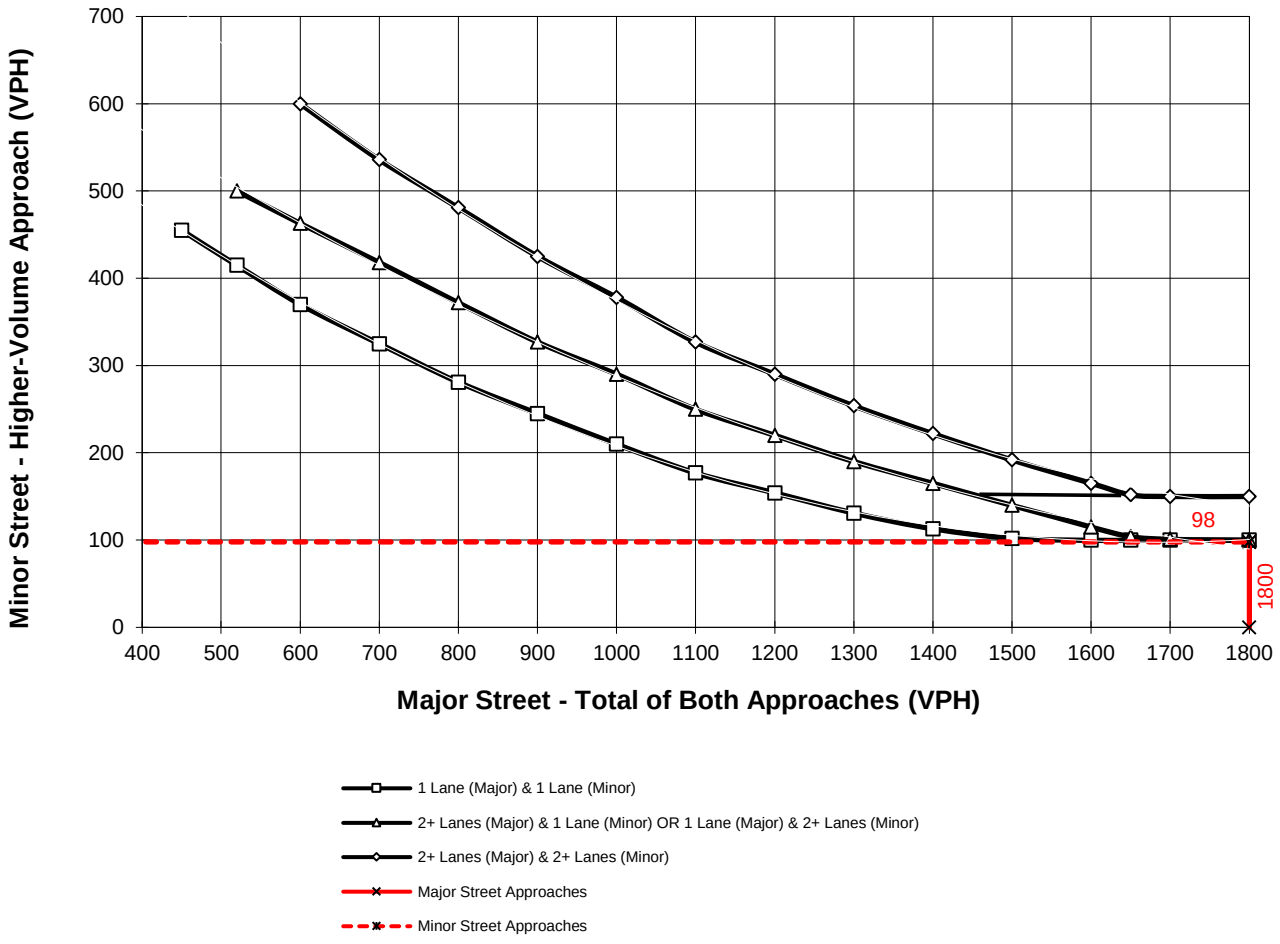
Major Street Name = **Palm Dr.**

Total of Both Approaches (VPH) = **2,612**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Park Ln.**

High Volume Approach (VPH) = **98**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

Intersection ID: #2

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2027) AM PEAK HOUR WARRANTS**

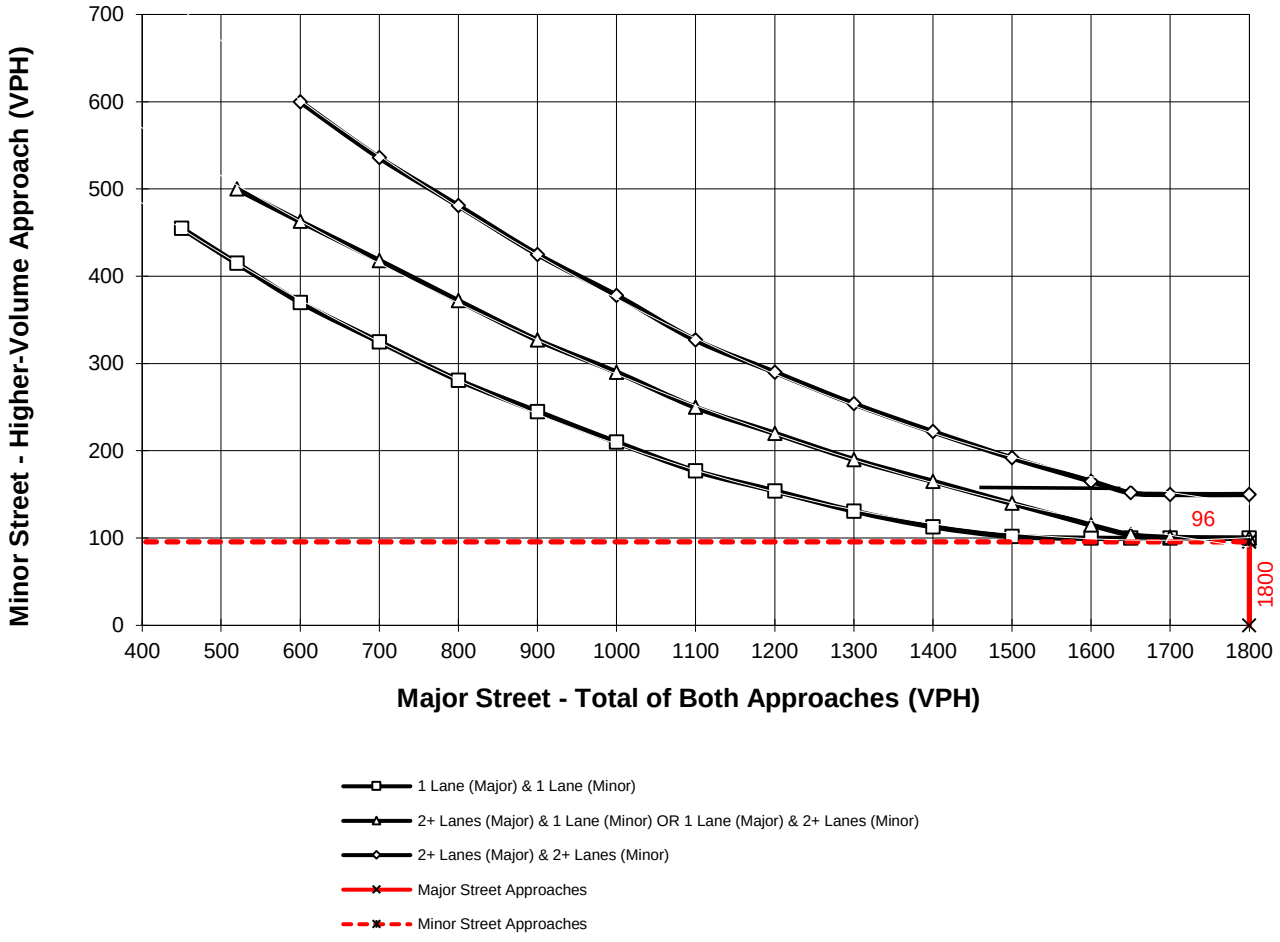
Major Street Name = **Palm Dr.**

Total of Both Approaches (VPH) = **2,649**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Park Ln.**

High Volume Approach (VPH) = **96**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

Intersection ID: #2

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2027) PM PEAK HOUR WARRANTS**

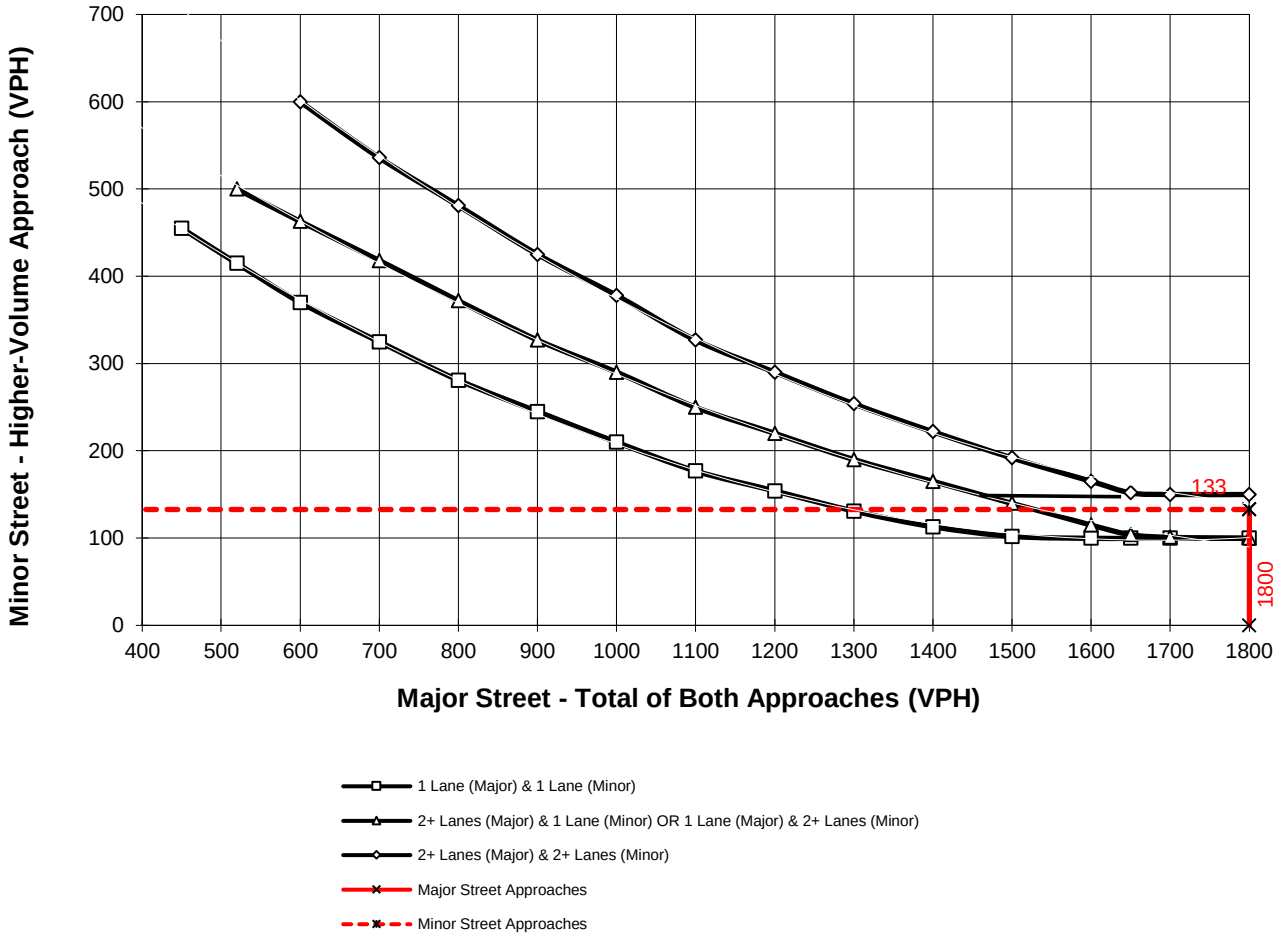
Major Street Name = **Palm Dr.**

Total of Both Approaches (VPH) = **3,102**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Park Ln.**

High Volume Approach (VPH) = **133**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



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

Intersection ID: #2

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		EAP (2027)
				CALC	JC	DATE	03/07/25
Jurisdiction:	City of Desert Hot Springs			CHK		DATE	
Major Street:	Park Ln.				Critical Approach Speed (Major)		35 mph
Minor Street:	W. Access				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **1,521** vpd Minor Street Future ADT = **235** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements ADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **1,521** / *1* **235**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **1,521** / *1* **235**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 10% **B** 13%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		EAP (2027)
				CALC	JC	DATE	03/07/25
Jurisdiction:	City of Desert Hot Springs			CHK		DATE	
Major Street:	Park Ln.				Critical Approach Speed (Major)		35 mph
Minor Street:	E. Access				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **591** vpd Minor Street Future ADT = **235** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **591**	*1* **235**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **591**	*1* **235**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 7% **B** 5%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

___ DIST	___ CO	___ RTE	___ PM		TRAFFIC CONDITIONS		**EAPC (2027)**
				CALC	JC	DATE	03/07/25
Jurisdiction:	**City of Desert Hot Springs**			CHK		DATE	
Major Street:	**Park Ln.**				Critical Approach Speed (Major)		35 mph
Minor Street:	**W. Access**				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **1,956** vpd Minor Street Future ADT = **235** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. or In built up area of isolated community of < 10,000 population …….. **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,956**	*1* **235**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,956**	*1* **235**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 10% **B** 16%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		EAPC (2027)
				CALC	JC	DATE	03/07/25
Jurisdiction:	City of Desert Hot Springs			CHK		DATE	
Major Street:	Park Ln.				Critical Approach Speed (Major)		35 mph
Minor Street:	E. Access				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **723** vpd Minor Street Future ADT = **235** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **723**	*1* **235**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **723**	*1* **235**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 9% **B** 6%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 5.1: EAP (2027) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

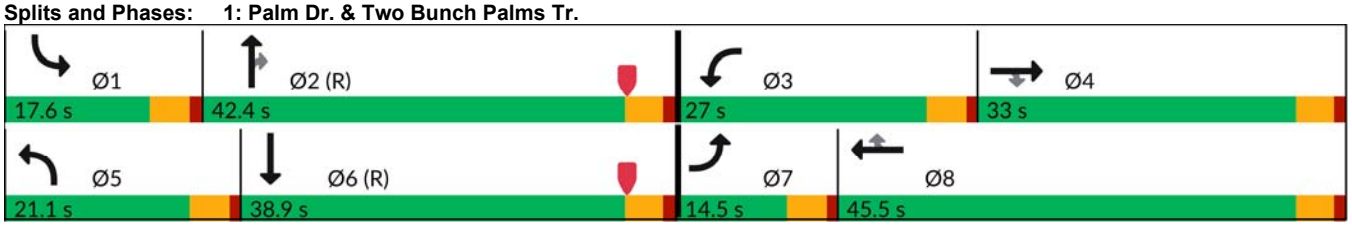
This Page Intentionally Left Blank

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	187	338	239	135	85	170	548	200	89	735	31
Future Volume (vph)	43	187	338	239	135	85	170	548	200	89	735	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0	70		35	100		50	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		692			663			1297			626	
Travel Time (s)		11.8			11.3			22.1			12.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	14.5	33.0	33.0	14.5	22.5	22.5	14.5	22.5	22.5	14.5	22.5	
Total Split (s)	14.5	33.0	33.0	27.0	45.5	45.5	21.1	42.4	42.4	17.6	38.9	
Total Split (%)	12.1%	27.5%	27.5%	22.5%	37.9%	37.9%	17.6%	35.3%	35.3%	14.7%	32.4%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max	Max	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 95
Control Type: Actuated-Coordinated

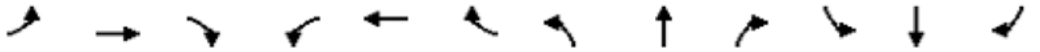
Splits and Phases: 1: Palm Dr. & Two Bunch Palms Tr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	187	338	239	135	85	170	548	200	89	735	31
Future Volume (veh/h)	43	187	338	239	135	85	170	548	200	89	735	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	201	363	257	145	91	183	589	215	96	790	33
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	444	374	285	622	525	208	1323	586	142	1166	49
Arrive On Green	0.07	0.24	0.24	0.16	0.33	0.33	0.23	0.74	0.74	0.08	0.34	0.34
Sat Flow, veh/h	1781	1870	1575	1781	1870	1578	1781	3554	1574	1781	3475	145
Grp Volume(v), veh/h	46	201	363	257	145	91	183	589	215	96	404	419
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1578	1781	1777	1574	1781	1777	1843
Q Serve(g_s), s	3.0	11.0	27.4	17.0	6.7	4.9	11.9	7.6	5.8	6.3	23.4	23.5
Cycle Q Clear(g_c), s	3.0	11.0	27.4	17.0	6.7	4.9	11.9	7.6	5.8	6.3	23.4	23.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	116	444	374	285	622	525	208	1323	586	142	596	619
V/C Ratio(X)	0.40	0.45	0.97	0.90	0.23	0.17	0.88	0.45	0.37	0.67	0.68	0.68
Avail Cap(c_a), veh/h	148	444	374	334	639	539	246	1323	586	194	596	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	39.1	45.3	49.4	29.0	28.4	45.2	10.6	10.4	53.7	34.3	34.3
Incr Delay (d2), s/veh	2.2	3.3	39.7	23.8	0.2	0.2	25.9	1.1	1.8	5.4	6.1	5.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	5.4	14.5	9.3	3.0	1.8	6.0	2.5	1.9	3.0	11.0	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.0	42.4	85.0	73.2	29.2	28.5	71.1	11.7	12.1	59.1	40.3	40.1
LnGrp LOS	E	D	F	E	C	C	E	B	B	E	D	D
Approach Vol, veh/h		610			493			987			919	
Approach Delay, s/veh		68.8			52.0			22.8			42.2	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	49.2	23.7	33.0	18.5	44.8	12.3	44.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.1	37.9	22.5	28.5	16.6	34.4	10.0	41.0
Max Q Clear Time (g_c+I1), s	8.3	9.6	19.0	29.4	13.9	25.5	5.0	8.7
Green Ext Time (p_c), s	0.1	4.8	0.2	0.0	0.1	3.3	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	42.8
HCM 7th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	3	26	32	5	36	5	929	24	44	1238	1
Future Volume (vph)	4	3	26	32	5	36	5	929	24	44	1238	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		229			596			1360			1297	
Travel Time (s)		5.2			13.5			23.2			22.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	3	26	32	5	36	5	929	24	44	1238	1
Future Vol, veh/h	4	3	26	32	5	36	5	929	24	44	1238	1
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	3	28	34	5	38	5	988	26	47	1317	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1929	2446	669	1775	2433	517	1323	0	0	1019	0	0
Stage 1	1416	1416	-	1017	1017	-	-	-	-	-	-	-
Stage 2	512	1029	-	759	1417	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	40	31	400	52	31	503	518	-	-	677	-	-
Stage 1	144	202	-	255	313	-	-	-	-	-	-	-
Stage 2	513	309	-	365	202	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	28	28	396	40	28	498	516	-	-	674	-	-
Mov Cap-2 Maneuver	28	28	-	40	28	-	-	-	-	-	-	-
Stage 1	134	187	-	250	307	-	-	-	-	-	-	-
Stage 2	456	303	-	309	187	-	-	-	-	-	-	-

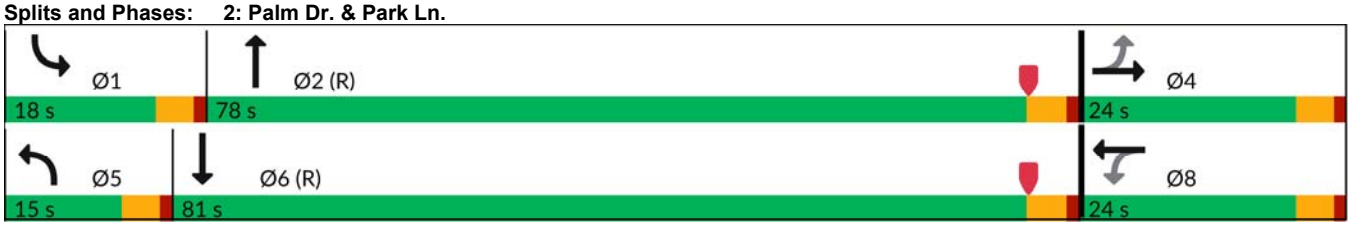
Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	49.04	250.16	0.23	0.37
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	18	-	-	28	396	69	674	-	-
HCM Lane V/C Ratio	0.01	-	-	0.268	0.07	1.125	0.069	-	-
HCM Ctrl Dly (s/v)	12.1	0.2	-	176.3	14.8	250.2	10.7	-	-
HCM Lane LOS	B	A	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.2	6	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	3	26	32	5	36	5	929	24	44	1238	1
Future Volume (vph)	4	3	26	32	5	36	5	929	24	44	1238	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	30		0	100		0	100		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		229			596			1360			1297	
Travel Time (s)		5.2			13.5			23.2			22.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		14.5	22.5		14.5	22.5	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	78.0		18.0	81.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		12.5%	65.0%		15.0%	67.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Palm Dr. & Park Ln.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	3	26	32	5	36	5	929	24	44	1238	1
Future Volume (veh/h)	4	3	26	32	5	36	5	929	24	44	1238	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	3	28	34	5	38	5	988	26	47	1317	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	14	132	161	17	129	23	2580	68	117	2852	2
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.01	0.73	0.73	0.07	0.78	0.78
Sat Flow, veh/h	1345	153	1431	1359	185	1405	1781	3537	93	1781	3644	3
Grp Volume(v), veh/h	4	0	31	34	0	43	5	496	518	47	642	676
Grp Sat Flow(s),veh/h/ln	1345	0	1585	1359	0	1590	1781	1777	1853	1781	1777	1870
Q Serve(g_s), s	0.3	0.0	2.2	2.9	0.0	3.0	0.3	12.6	12.6	3.0	14.8	14.8
Cycle Q Clear(g_c), s	3.4	0.0	2.2	5.0	0.0	3.0	0.3	12.6	12.6	3.0	14.8	14.8
Prop In Lane	1.00		0.90	1.00		0.88	1.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h	150	0	146	161	0	146	23	1296	1352	117	1391	1463
V/C Ratio(X)	0.03	0.00	0.21	0.21	0.00	0.29	0.22	0.38	0.38	0.40	0.46	0.46
Avail Cap(c_a), veh/h	245	0	258	256	0	258	156	1296	1352	200	1391	1463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.85	0.85	0.85	0.57	0.57	0.57
Uniform Delay (d), s/veh	52.4	0.0	50.4	52.8	0.0	50.8	58.6	6.1	6.1	53.8	4.4	4.4
Incr Delay (d2), s/veh	0.1	0.0	0.7	0.6	0.0	1.1	4.0	0.7	0.7	1.3	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.9	1.0	0.0	1.3	0.2	4.2	4.3	1.4	4.2	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.5	0.0	51.2	53.4	0.0	51.9	62.7	6.8	6.8	55.0	5.1	5.0
LnGrp LOS	D		D	D		D	E	A	A	E	A	A
Approach Vol, veh/h		35			77			1019			1365	
Approach Delay, s/veh		51.3			52.6			7.1			6.8	
Approach LOS		D			D			A			A	

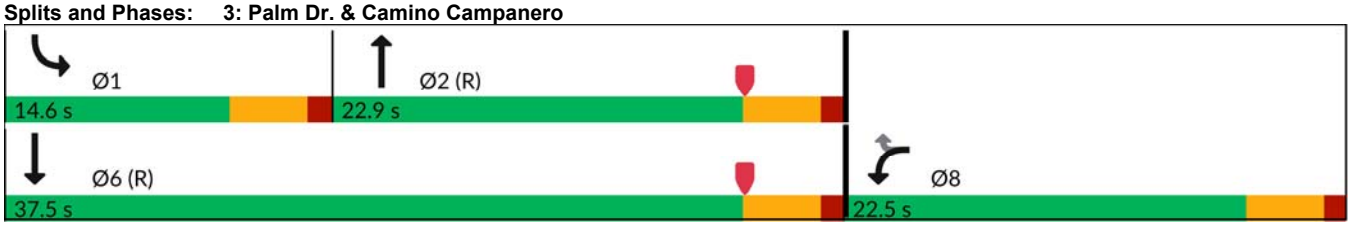
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	92.0		15.5	6.0	98.4		15.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	13.5	73.5		19.5	10.5	76.5		19.5				
Max Q Clear Time (g_c+I1), s	5.0	14.6		5.4	2.3	16.8		7.0				
Green Ext Time (p_c), s	0.0	7.6		0.1	0.0	11.7		0.2				

Intersection Summary			
HCM 7th Control Delay, s/veh		8.9	
HCM 7th LOS		A	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	25	190	651	43	184	1188
Future Volume (vph)	25	190	651	43	184	1188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	80	
Storage Lanes	1	1		0	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	30		45			40
Link Distance (ft)	1008		299			1360
Travel Time (s)	22.9		4.5			23.2
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0		10.0	10.0
Minimum Split (s)	22.5	22.5	22.5		14.5	22.5
Total Split (s)	22.5	22.5	22.9		14.6	37.5
Total Split (%)	37.5%	37.5%	38.2%		24.3%	62.5%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 11.4 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Palm Dr. & Camino Campanero



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	190	651	43	184	1188
Future Volume (veh/h)	25	190	651	43	184	1188
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	202	693	46	196	1264
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	290	258	1527	101	286	2441
Arrive On Green	0.16	0.16	0.45	0.45	0.16	0.69
Sat Flow, veh/h	1781	1585	3475	224	1781	3647
Grp Volume(v), veh/h	27	202	364	375	196	1264
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1829	1781	1777
Q Serve(g_s), s	0.8	7.3	8.5	8.5	6.2	10.4
Cycle Q Clear(g_c), s	0.8	7.3	8.5	8.5	6.2	10.4
Prop In Lane	1.00	1.00		0.12	1.00	
Lane Grp Cap(c), veh/h	290	258	803	826	286	2441
V/C Ratio(X)	0.09	0.78	0.45	0.45	0.69	0.52
Avail Cap(c_a), veh/h	534	476	803	826	300	2441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	24.1	11.3	11.3	23.8	4.6
Incr Delay (d2), s/veh	0.1	5.1	1.8	1.8	6.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.9	2.9	3.0	2.8	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.5	29.2	13.2	13.1	29.8	5.4
LnGrp LOS	C	C	B	B	C	A
Approach Vol, veh/h	229		739			1460
Approach Delay, s/veh	28.3		13.2			8.6
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.1	31.6			45.7	14.3
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	10.1	18.4			33.0	18.0
Max Q Clear Time (g_c+I1), s	8.2	10.5			12.4	9.3
Green Ext Time (p_c), s	0.1	2.6			9.1	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	11.9
HCM 7th LOS	B

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	24	41	1	1	27
Future Volume (vph)	16	24	41	1	1	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30	30		30	
Link Distance (ft)		596	261		245	
Travel Time (s)		13.5	5.9		5.6	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	24	41	1	1	27
Future Vol, veh/h	16	24	41	1	1	27
Conflicting Peds, #/hr	5	0	0	5	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	26	45	1	1	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	51	0	-	0	116	55
Stage 1	-	-	-	-	50	-
Stage 2	-	-	-	-	66	-
Critical Hdwy	4.12	10	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1556	-	-	-	880	1012
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	957	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1548	-	-	-	862	1002
Mov Cap-2 Maneuver	-	-	-	-	862	-
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	952	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	2.94	0	8.73
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	720	-	-	-	996
HCM Lane V/C Ratio	0.011	-	-	-	0.031
HCM Ctrl Dly (s/v)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	7	1	1	13	1	1	1	1	1	1	27
Future Volume (vph)	16	7	1	1	13	1	1	1	1	1	1	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			357			170			231	
Travel Time (s)		5.9			8.1			3.9			5.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	7	1	1	13	1	1	1	1	1	1	27
Future Vol, veh/h	16	7	1	1	13	1	1	1	1	1	1	27
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	60	60	60	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	12	2	2	22	2	2	2	2	2	2	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	28	0	0	18	0	0	102	103	23	102	103	33
Stage 1	-	-	-	-	-	-	71	71	-	31	31	-
Stage 2	-	-	-	-	-	-	31	32	-	71	72	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1585	-	-	1598	-	-	879	788	1054	879	788	1041
Stage 1	-	-	-	-	-	-	939	836	-	986	869	-
Stage 2	-	-	-	-	-	-	986	869	-	939	835	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1578	-	-	1591	-	-	816	766	1044	852	766	1031
Mov Cap-2 Maneuver	-	-	-	-	-	-	816	766	-	852	766	-
Stage 1	-	-	-	-	-	-	919	818	-	980	864	-
Stage 2	-	-	-	-	-	-	935	864	-	915	817	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	4.88	0.48	9.21	8.74
HCM LOS			A	A

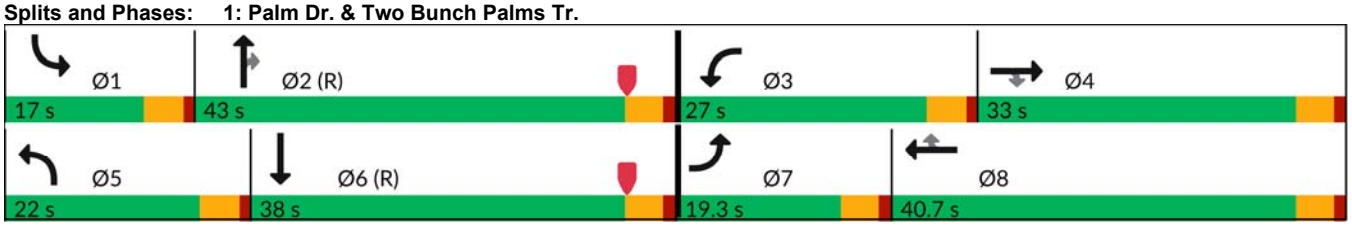
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	860	1171	-	-	118	-	-	1012
HCM Lane V/C Ratio	0.006	0.017	-	-	0.001	-	-	0.048
HCM Ctrl Dly (s/v)	9.2	7.3	0	-	7.3	0	-	8.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	190	325	234	172	86	169	856	151	111	700	31
Future Volume (vph)	98	190	325	234	172	86	169	856	151	111	700	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0	70		35	100		50	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		692			663			1297			626	
Travel Time (s)		11.8			11.3			22.1			12.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	14.5	33.0	33.0	14.5	22.5	22.5	14.5	22.5	22.5	14.5	22.5	
Total Split (s)	19.3	33.0	33.0	27.0	40.7	40.7	22.0	43.0	43.0	17.0	38.0	
Total Split (%)	16.1%	27.5%	27.5%	22.5%	33.9%	33.9%	18.3%	35.8%	35.8%	14.2%	31.7%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max	Max	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 1: Palm Dr. & Two Bunch Palms Tr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	190	325	234	172	86	169	856	151	111	700	31
Future Volume (veh/h)	98	190	325	234	172	86	169	856	151	111	700	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	207	353	254	187	93	184	930	164	121	761	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	444	374	283	590	497	209	1319	585	147	1166	52
Arrive On Green	0.08	0.24	0.24	0.16	0.32	0.32	0.23	0.74	0.74	0.08	0.34	0.34
Sat Flow, veh/h	1781	1870	1575	1781	1870	1578	1781	3554	1574	1781	3464	155
Grp Volume(v), veh/h	107	207	353	254	187	93	184	930	164	121	390	405
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1578	1781	1777	1574	1781	1777	1842
Q Serve(g_s), s	7.0	11.4	26.4	16.8	9.1	5.1	12.0	17.0	4.1	8.0	22.4	22.4
Cycle Q Clear(g_c), s	7.0	11.4	26.4	16.8	9.1	5.1	12.0	17.0	4.1	8.0	22.4	22.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	144	444	374	283	590	497	209	1319	585	147	598	620
V/C Ratio(X)	0.74	0.47	0.94	0.90	0.32	0.19	0.88	0.70	0.28	0.82	0.65	0.65
Avail Cap(c_a), veh/h	220	444	374	334	590	497	260	1319	585	186	598	620
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	39.2	45.0	49.5	31.3	29.9	45.1	11.9	10.2	54.2	33.8	33.9
Incr Delay (d2), s/veh	7.3	3.5	34.3	23.3	0.3	0.2	23.8	3.2	1.2	20.6	5.5	5.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	5.6	13.6	9.2	4.1	1.9	6.0	4.3	1.4	4.4	10.4	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.2	42.7	79.2	72.9	31.6	30.1	69.0	15.1	11.4	74.7	39.3	39.1
LnGrp LOS	E	D	E	E	C	C	E	B	B	E	D	D
Approach Vol, veh/h		667			534			1278			916	
Approach Delay, s/veh		65.0			51.0			22.4			43.9	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	49.1	23.5	33.0	18.6	44.9	14.2	42.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	38.5	22.5	28.5	17.5	33.5	14.8	36.2
Max Q Clear Time (g_c+I1), s	10.0	19.0	18.8	28.4	14.0	24.4	9.0	11.1
Green Ext Time (p_c), s	0.1	6.7	0.3	0.0	0.2	3.2	0.1	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	41.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	5	36	39	3	56	17	1286	41	53	1213	2
Future Volume (vph)	4	5	36	39	3	56	17	1286	41	53	1213	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		229			596			1360			1297	
Travel Time (s)		5.2			13.5			23.2			22.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	81.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	5	36	39	3	56	17	1286	41	53	1213	2
Future Vol, veh/h	4	5	36	39	3	56	17	1286	41	53	1213	2
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	5	40	43	3	62	19	1413	45	58	1333	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2206	2956	678	2269	2935	739	1340	0	0	1463	0	0
Stage 1	1456	1456	-	1478	1478	-	-	-	-	-	-	-
Stage 2	751	1501	-	791	1457	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	25	14	395	~ 22	15	360	510	-	-	458	-	-
Stage 1	136	193	-	132	188	-	-	-	-	-	-	-
Stage 2	369	183	-	349	193	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	13	12	391	~ 9	12	356	508	-	-	455	-	-
Mov Cap-2 Maneuver	13	12	-	~ 9	12	-	-	-	-	-	-	-
Stage 1	118	167	-	123	176	-	-	-	-	-	-	-
Stage 2	280	171	-	263	167	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	132.63	$ 2215.62	0.87	0.59
HCM LOS	F	F		

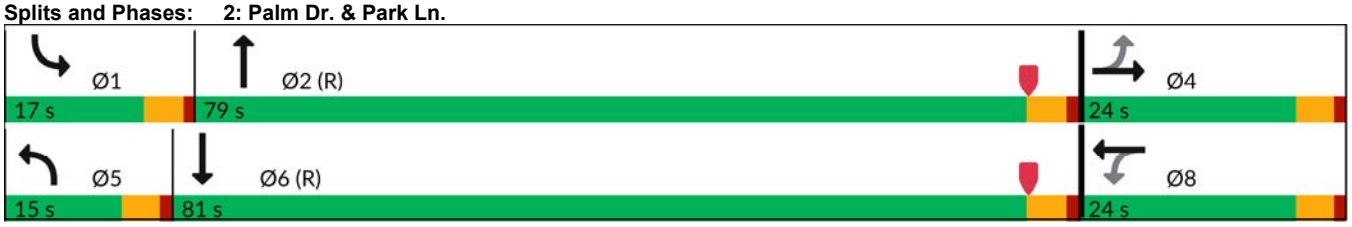
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	44	-	-	12	391	21	455	-	-
HCM Lane V/C Ratio	0.037	-	-	0.825	0.101	5.106	0.128	-	-
HCM Ctrl Dly (s/v)	12.4	0.7	-	-$ 602.2	15.8	$ 2215.6	14.1	-	-
HCM Lane LOS	B	A	-	F	C	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.8	0.3	13.8	0.4	-	-

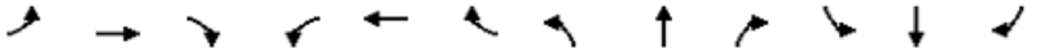
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	5	36	39	3	56	17	1286	41	53	1213	2
Future Volume (vph)	4	5	36	39	3	56	17	1286	41	53	1213	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	30		0	100		0	100		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		229			596			1360			1297	
Travel Time (s)		5.2			13.5			23.2			22.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		14.5	22.5		14.5	22.5	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	79.0		17.0	81.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		12.5%	65.8%		14.2%	67.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Palm Dr. & Park Ln.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	5	36	39	3	56	17	1286	41	53	1213	2
Future Volume (veh/h)	4	5	36	39	3	56	17	1286	41	53	1213	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	5	40	43	3	62	19	1413	45	58	1333	2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	16	132	150	7	140	70	2541	81	127	2749	4
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.04	0.72	0.72	0.07	0.76	0.76
Sat Flow, veh/h	1321	177	1412	1343	73	1499	1781	3515	112	1781	3641	5
Grp Volume(v), veh/h	4	0	45	43	0	65	19	713	745	58	651	684
Grp Sat Flow(s),veh/h/ln	1321	0	1589	1343	0	1572	1781	1777	1850	1781	1777	1869
Q Serve(g_s), s	0.3	0.0	3.2	3.7	0.0	4.7	1.2	22.3	22.4	3.8	17.0	17.0
Cycle Q Clear(g_c), s	5.0	0.0	3.2	6.9	0.0	4.7	1.2	22.3	22.4	3.8	17.0	17.0
Prop In Lane	1.00		0.89	1.00		0.95	1.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	132	0	148	150	0	147	70	1284	1337	127	1342	1411
V/C Ratio(X)	0.03	0.00	0.30	0.29	0.00	0.44	0.27	0.56	0.56	0.46	0.48	0.48
Avail Cap(c_a), veh/h	223	0	258	243	0	255	156	1284	1337	186	1342	1411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.57	0.57	0.57	0.60	0.60	0.60
Uniform Delay (d), s/veh	53.8	0.0	50.8	54.0	0.0	51.4	56.0	7.7	7.7	53.5	5.7	5.7
Incr Delay (d2), s/veh	0.1	0.0	1.1	1.0	0.0	2.1	1.2	1.0	1.0	1.5	0.8	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.3	1.3	0.0	1.9	0.6	7.4	7.7	1.7	5.2	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.9	0.0	51.9	55.0	0.0	53.5	57.2	8.7	8.7	55.0	6.4	6.4
LnGrp LOS	D		D	E		D	E	A	A	E	A	A
Approach Vol, veh/h		49			108			1477			1393	
Approach Delay, s/veh		52.1			54.1			9.3			8.4	
Approach LOS		D			D			A			A	

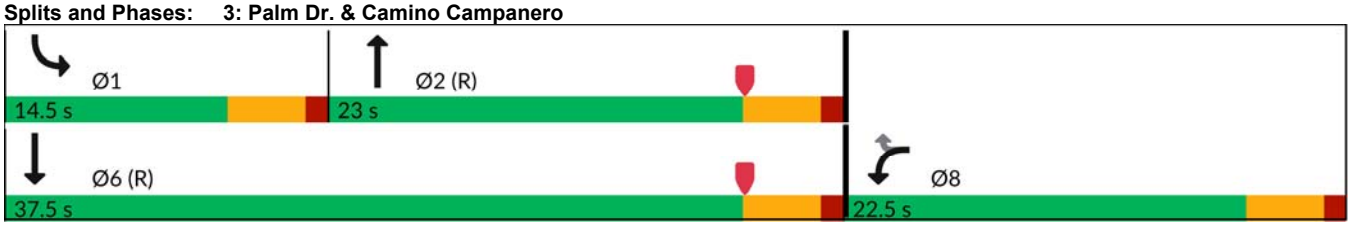
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.1	91.2		15.7	9.2	95.1		15.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	12.5	74.5		19.5	10.5	76.5		19.5				
Max Q Clear Time (g_c+I1), s	5.8	24.4		7.0	3.2	19.0		8.9				
Green Ext Time (p_c), s	0.0	13.9		0.1	0.0	12.0		0.3				

Intersection Summary		
HCM 7th Control Delay, s/veh	11.2	
HCM 7th LOS	B	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	16	164	1180	19	174	1101
Future Volume (vph)	16	164	1180	19	174	1101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	80	
Storage Lanes	1	1		0	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	30		45			40
Link Distance (ft)	1008		299			1360
Travel Time (s)	22.9		4.5			23.2
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0		10.0	10.0
Minimum Split (s)	22.5	22.5	22.5		14.5	22.5
Total Split (s)	22.5	22.5	23.0		14.5	37.5
Total Split (%)	37.5%	37.5%	38.3%		24.2%	62.5%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 10.4 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Palm Dr. & Camino Campanero



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	16	164	1180	19	174	1101
Future Volume (veh/h)	16	164	1180	19	174	1101
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	174	1255	20	185	1171
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	285	253	1633	26	283	2453
Arrive On Green	0.16	0.16	0.46	0.46	0.16	0.69
Sat Flow, veh/h	1781	1585	3673	57	1781	3647
Grp Volume(v), veh/h	17	174	623	652	185	1171
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1860	1781	1777
Q Serve(g_s), s	0.5	6.2	17.6	17.6	5.8	9.1
Cycle Q Clear(g_c), s	0.5	6.2	17.6	17.6	5.8	9.1
Prop In Lane	1.00	1.00		0.03	1.00	
Lane Grp Cap(c), veh/h	285	253	811	848	283	2453
V/C Ratio(X)	0.06	0.69	0.77	0.77	0.65	0.48
Avail Cap(c_a), veh/h	534	476	811	848	297	2453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	23.8	13.7	13.7	23.7	4.3
Incr Delay (d2), s/veh	0.1	3.3	6.9	6.6	4.7	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.4	6.8	7.1	2.6	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.5	27.1	20.6	20.3	28.4	5.0
LnGrp LOS	C	C	C	C	C	A
Approach Vol, veh/h	191		1275			1356
Approach Delay, s/veh	26.6		20.4			8.2
Approach LOS	C		C			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.0	31.9			45.9	14.1
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	10.0	18.5			33.0	18.0
Max Q Clear Time (g_c+I1), s	7.8	19.6			11.1	8.2
Green Ext Time (p_c), s	0.1	0.0			8.5	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	15.0
HCM 7th LOS	B

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	28	37	49	1	1	24
Future Volume (vph)	28	37	49	1	1	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30	30		30	
Link Distance (ft)		596	261		245	
Travel Time (s)		13.5	5.9		5.6	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	37	49	1	1	24
Future Vol, veh/h	28	37	49	1	1	24
Conflicting Peds, #/hr	5	0	0	5	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	40	53	1	1	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	59	0	-	0	165	64
Stage 1	-	-	-	-	59	-
Stage 2	-	-	-	-	106	-
Critical Hdwy	4.12	10	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1544	-	-	-	826	1001
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	918	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1537	-	-	-	801	991
Mov Cap-2 Maneuver	-	-	-	-	801	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	914	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	3.18	0	8.77
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	775	-	-	-	982
HCM Lane V/C Ratio	0.02	-	-	-	0.028
HCM Ctrl Dly (s/v)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	3	6	4	8	1	17	1	2	1	1	24
Future Volume (vph)	28	3	6	4	8	1	17	1	2	1	1	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			357			170			231	
Travel Time (s)		5.9			8.1			3.9			5.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	3	6	4	8	1	17	1	2	1	1	24
Future Vol, veh/h	28	3	6	4	8	1	17	1	2	1	1	24
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	4	8	5	11	1	23	1	3	1	1	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	17	0	0	17	0	0	115	115	18	111	119	21
Stage 1	-	-	-	-	-	-	88	88	-	27	27	-
Stage 2	-	-	-	-	-	-	27	28	-	84	92	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1600	-	-	1600	-	-	862	775	1061	867	772	1056
Stage 1	-	-	-	-	-	-	920	822	-	990	873	-
Stage 2	-	-	-	-	-	-	990	872	-	924	819	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1593	-	-	1593	-	-	804	747	1050	832	744	1046
Mov Cap-2 Maneuver	-	-	-	-	-	-	804	747	-	832	744	-
Stage 1	-	-	-	-	-	-	894	799	-	982	866	-
Stage 2	-	-	-	-	-	-	951	865	-	894	796	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	5.54	2.24	9.54	8.65
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	820	1202	-	-	542	-	-	1020
HCM Lane V/C Ratio	0.033	0.023	-	-	0.003	-	-	0.034
HCM Ctrl Dly (s/v)	9.5	7.3	0	-	7.3	0	-	8.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.1

APPENDIX 6.1: EAPC (2027) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

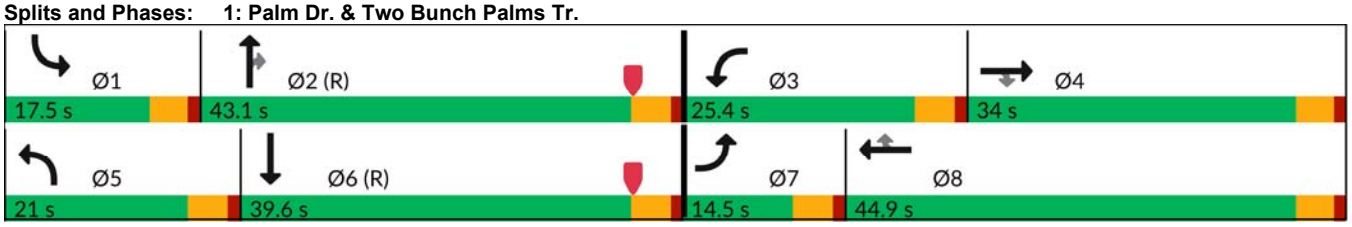
This Page Intentionally Left Blank

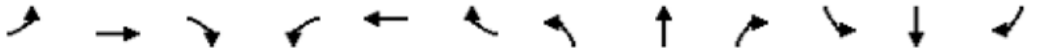
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	191	360	266	146	86	205	665	238	90	879	39
Future Volume (vph)	46	191	360	266	146	86	205	665	238	90	879	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0	70		35	100		50	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		692			663			1297			626	
Travel Time (s)		11.8			11.3			22.1			12.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	14.5	34.0	34.0	14.5	22.5	22.5	14.5	22.5	22.5	14.5	22.5	
Total Split (s)	14.5	34.0	34.0	25.4	44.9	44.9	21.0	43.1	43.1	17.5	39.6	
Total Split (%)	12.1%	28.3%	28.3%	21.2%	37.4%	37.4%	17.5%	35.9%	35.9%	14.6%	33.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max	Max	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: Palm Dr. & Two Bunch Palms Tr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	191	360	266	146	86	205	665	238	90	879	39
Future Volume (veh/h)	46	191	360	266	146	86	205	665	238	90	879	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	205	387	286	157	92	220	715	256	97	945	42
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	460	387	310	660	557	242	1244	551	143	1018	45
Arrive On Green	0.07	0.25	0.25	0.17	0.35	0.35	0.27	0.70	0.70	0.08	0.29	0.29
Sat Flow, veh/h	1781	1870	1575	1781	1870	1578	1781	3554	1574	1781	3465	154
Grp Volume(v), veh/h	49	205	387	286	157	92	220	715	256	97	485	502
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1578	1781	1777	1574	1781	1777	1842
Q Serve(g_s), s	3.2	11.1	29.5	19.0	7.1	4.8	14.3	12.1	8.7	6.4	31.8	31.8
Cycle Q Clear(g_c), s	3.2	11.1	29.5	19.0	7.1	4.8	14.3	12.1	8.7	6.4	31.8	31.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	119	460	387	310	660	557	242	1244	551	143	522	541
V/C Ratio(X)	0.41	0.45	1.00	0.92	0.24	0.17	0.91	0.57	0.46	0.68	0.93	0.93
Avail Cap(c_a), veh/h	148	460	387	310	660	557	245	1244	551	193	522	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	38.3	45.2	48.7	27.4	26.7	42.9	13.5	13.0	53.7	41.1	41.1
Incr Delay (d2), s/veh	2.2	3.1	45.6	31.6	0.2	0.1	33.8	1.9	2.8	5.7	25.0	24.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.4	16.1	11.0	3.2	1.8	7.5	3.7	2.8	3.1	17.3	17.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.9	41.4	90.8	80.4	27.6	26.8	76.8	15.5	15.8	59.4	66.2	65.6
LnGrp LOS	E	D	F	F	C	C	E	B	B	E	E	E
Approach Vol, veh/h		641			535			1191			1084	
Approach Delay, s/veh		72.3			55.7			26.9			65.3	
Approach LOS		E			E			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	46.5	25.4	34.0	20.8	39.8	12.5	46.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.0	38.6	20.9	29.5	16.5	35.1	10.0	40.4
Max Q Clear Time (g_c+I1), s	8.4	14.1	21.0	31.5	16.3	33.8	5.2	9.1
Green Ext Time (p_c), s	0.1	5.8	0.0	0.0	0.0	0.8	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	51.8
HCM 7th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	3	26	53	5	38	5	1117	51	50	1425	1
Future Volume (vph)	4	3	26	53	5	38	5	1117	51	50	1425	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		229			596			1360			1297	
Travel Time (s)		5.2			13.5			23.2			22.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	49.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	3	26	53	5	38	5	1117	51	50	1425	1
Future Vol, veh/h	4	3	26	53	5	38	5	1117	51	50	1425	1
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	3	28	56	5	40	5	1188	54	53	1516	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2240	2886	769	2102	2859	631	1522	0	0	1248	0	0
Stage 1	1628	1628	-	1231	1231	-	-	-	-	-	-	-
Stage 2	612	1258	-	871	1628	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	23	16	344	~ 30	17	424	434	-	-	554	-	-
Stage 1	106	159	-	188	248	-	-	-	-	-	-	-
Stage 2	447	241	-	312	159	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	12	14	341	~ 19	15	420	432	-	-	551	-	-
Mov Cap-2 Maneuver	12	14	-	~ 19	15	-	-	-	-	-	-	-
Stage 1	95	143	-	183	242	-	-	-	-	-	-	-
Stage 2	386	235	-	252	143	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	114.2	$ 1381.29	0.3	0.41
HCM LOS	F	F		

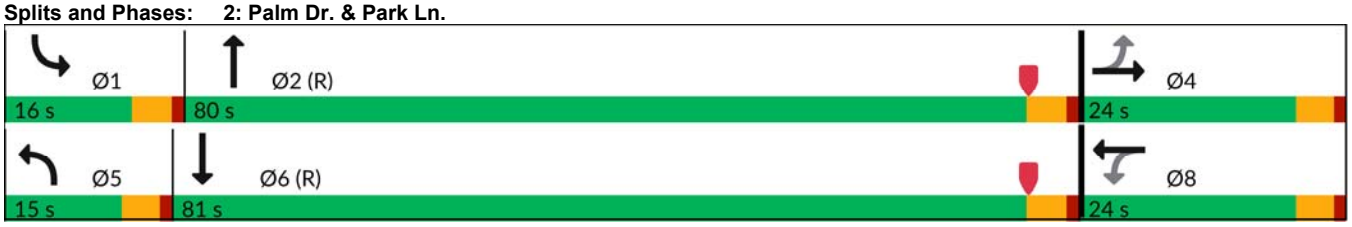
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	14	-	-	13	341	30	551	-	-
HCM Lane V/C Ratio	0.012	-	-	0.58	0.081	3.453	0.097	-	-
HCM Ctrl Dly (s/v)	13.4	0.3	-	-$ 477.1	16.5	$ 1381.3	12.2	-	-
HCM Lane LOS	B	A	-	F	C	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.4	0.3	12.2	0.3	-	-

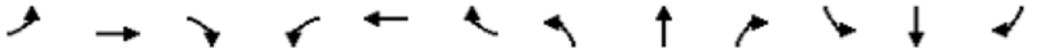
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	3	26	53	5	38	5	1117	51	50	1425	1
Future Volume (vph)	4	3	26	53	5	38	5	1117	51	50	1425	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	30		0	100		0	100		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		229			596			1360			1297	
Travel Time (s)		5.2			13.5			23.2			22.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		14.5	22.5		14.5	22.5	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	80.0		16.0	81.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		12.5%	66.7%		13.3%	67.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Palm Dr. & Park Ln.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	3	26	53	5	38	5	1117	51	50	1425	1
Future Volume (veh/h)	4	3	26	53	5	38	5	1117	51	50	1425	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	3	28	56	5	40	5	1188	54	53	1516	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	14	133	162	16	131	23	2511	114	123	2849	2
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.01	0.73	0.73	0.07	0.78	0.78
Sat Flow, veh/h	1343	153	1432	1359	177	1412	1781	3461	157	1781	3644	2
Grp Volume(v), veh/h	4	0	31	56	0	45	5	610	632	53	739	778
Grp Sat Flow(s),veh/h/ln	1343	0	1585	1359	0	1589	1781	1777	1841	1781	1777	1870
Q Serve(g_s), s	0.3	0.0	2.2	4.8	0.0	3.2	0.3	17.2	17.2	3.4	18.7	18.7
Cycle Q Clear(g_c), s	3.5	0.0	2.2	6.9	0.0	3.2	0.3	17.2	17.2	3.4	18.7	18.7
Prop In Lane	1.00		0.90	1.00		0.89	1.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	149	0	147	162	0	148	23	1289	1336	123	1389	1462
V/C Ratio(X)	0.03	0.00	0.21	0.35	0.00	0.30	0.22	0.47	0.47	0.43	0.53	0.53
Avail Cap(c_a), veh/h	243	0	258	256	0	258	156	1289	1336	171	1389	1462
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	0.34	0.34	0.34
Uniform Delay (d), s/veh	52.4	0.0	50.3	53.6	0.0	50.8	58.6	6.9	6.9	53.6	4.9	4.9
Incr Delay (d2), s/veh	0.1	0.0	0.7	1.3	0.0	1.1	4.2	1.1	1.1	0.8	0.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.9	1.7	0.0	1.3	0.2	5.8	6.0	1.5	5.2	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.5	0.0	51.0	54.8	0.0	51.9	62.9	8.0	8.0	54.4	5.4	5.4
LnGrp LOS	D		D	D		D	E	A	A	D	A	A
Approach Vol, veh/h		35			101			1247			1570	
Approach Delay, s/veh		51.2			53.5			8.2			7.0	
Approach LOS		D			D			A			A	

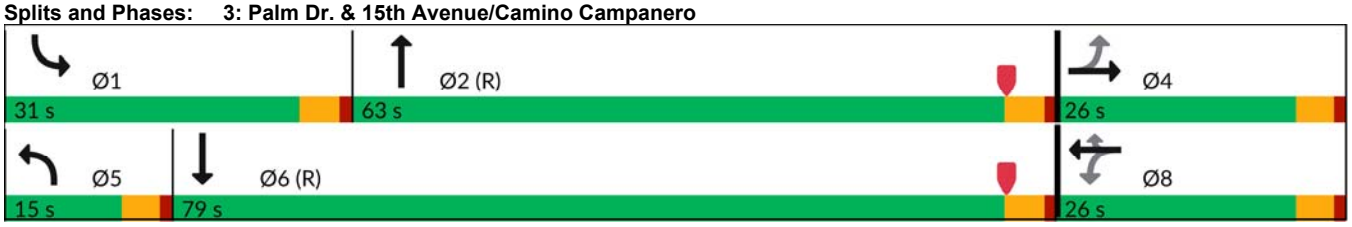
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.8	91.5		15.7	6.0	98.3		15.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	11.5	75.5		19.5	10.5	76.5		19.5				
Max Q Clear Time (g_c+I1), s	5.4	19.2		5.5	2.3	20.7		8.9				
Green Ext Time (p_c), s	0.0	10.6		0.1	0.0	15.3		0.2				

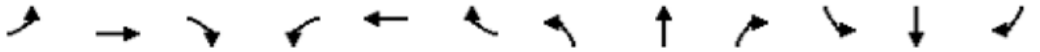
Intersection Summary			
HCM 7th Control Delay, s/veh		9.6	
HCM 7th LOS		A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	6	61	45	2	191	20	811	67	184	1378	18
Future Volume (vph)	54	6	61	45	2	191	20	811	67	184	1378	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	80		0	80		0
Storage Lanes	0		0	1		2	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			45			40	
Link Distance (ft)		493			1008			368			1360	
Travel Time (s)		11.2			22.9			5.6			23.2	
Confl. Peds. (#/hr)				5		5			5	5		
Peak Hour Factor	0.92	0.92	0.92	0.94	0.92	0.94	0.92	0.94	0.94	0.94	0.94	0.92
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	4	4		8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	22.5	22.5		22.5	22.5	22.5	14.5	22.5		14.5	22.5	
Total Split (s)	26.0	26.0		26.0	26.0	26.0	15.0	63.0		31.0	79.0	
Total Split (%)	21.7%	21.7%		21.7%	21.7%	21.7%	12.5%	52.5%		25.8%	65.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Palm Dr. & 15th Avenue/Camino Campanero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	6	61	45	2	191	20	811	67	184	1378	18
Future Volume (veh/h)	54	6	61	45	2	191	20	811	67	184	1378	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	7	66	48	2	203	22	863	71	196	1466	20
Peak Hour Factor	0.92	0.92	0.92	0.94	0.92	0.94	0.92	0.94	0.94	0.94	0.94	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	27	104	229	274	229	77	2039	168	227	2505	34
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.04	0.61	0.61	0.13	0.70	0.70
Sat Flow, veh/h	529	183	712	1327	1870	1569	1781	3323	273	1781	3589	49
Grp Volume(v), veh/h	132	0	0	48	2	203	22	461	473	196	725	761
Grp Sat Flow(s),veh/h/ln	1424	0	0	1327	1870	1569	1781	1777	1820	1781	1777	1861
Q Serve(g_s), s	7.7	0.0	0.0	0.0	0.1	15.2	1.4	16.3	16.3	12.9	25.0	25.1
Cycle Q Clear(g_c), s	10.2	0.0	0.0	5.0	0.1	15.2	1.4	16.3	16.3	12.9	25.0	25.1
Prop In Lane	0.45		0.50	1.00		1.00	1.00		0.15	1.00		0.03
Lane Grp Cap(c), veh/h	252	0	0	229	274	229	77	1090	1117	227	1240	1299
V/C Ratio(X)	0.52	0.00	0.00	0.21	0.01	0.88	0.29	0.42	0.42	0.86	0.58	0.59
Avail Cap(c_a), veh/h	297	0	0	272	335	281	156	1090	1117	393	1240	1299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	0.0	0.0	45.9	43.8	50.2	55.6	12.1	12.1	51.3	9.3	9.3
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.5	0.0	23.4	2.0	1.2	1.2	9.3	2.0	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.0	1.3	0.1	7.5	0.7	6.2	6.3	6.3	8.9	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.6	0.0	0.0	46.3	43.8	73.7	57.6	13.3	13.3	60.7	11.3	11.2
LnGrp LOS	D			D	D	E	E	B	B	E	B	B
Approach Vol, veh/h		132			253			956			1682	
Approach Delay, s/veh		49.6			68.2			14.3			17.0	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.8	78.1		22.1	9.7	88.3		22.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	26.5	58.5		21.5	10.5	74.5		21.5				
Max Q Clear Time (g_c+I1), s	14.9	18.3		12.2	3.4	27.1		17.2				
Green Ext Time (p_c), s	0.4	6.3		0.4	0.0	14.3		0.3				

Intersection Summary			
HCM 7th Control Delay, s/veh		21.9	
HCM 7th LOS		C	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	35	44	1	1	27
Future Volume (vph)	16	35	44	1	1	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30	30		30	
Link Distance (ft)		596	261		245	
Travel Time (s)		13.5	5.9		5.6	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	35	44	1	1	27
Future Vol, veh/h	16	35	44	1	1	27
Conflicting Peds, #/hr	5	0	0	5	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	38	48	1	1	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	54	0	-	0	131	58
Stage 1	-	-	-	-	53	-
Stage 2	-	-	-	-	78	-
Critical Hdwy	4.12	10	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1551	-	-	-	863	1008
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	945	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1544	-	-	-	845	998
Mov Cap-2 Maneuver	-	-	-	-	845	-
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	941	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	2.31	0	8.75
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	565	-	-	-	992
HCM Lane V/C Ratio	0.011	-	-	-	0.031
HCM Ctrl Dly (s/v)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	18	1	1	16	1	1	1	1	1	1	27
Future Volume (vph)	16	18	1	1	16	1	1	1	1	1	1	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			357			170			231	
Travel Time (s)		5.9			8.1			3.9			5.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	18	1	1	16	1	1	1	1	1	1	27
Future Vol, veh/h	16	18	1	1	16	1	1	1	1	1	1	27
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	60	60	60	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	30	2	2	27	2	2	2	2	2	2	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	33	0	0	37	0	0	125	126	41	125	126	38
Stage 1	-	-	-	-	-	-	89	89	-	36	36	-
Stage 2	-	-	-	-	-	-	36	37	-	89	90	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1578	-	-	1574	-	-	849	765	1030	849	765	1035
Stage 1	-	-	-	-	-	-	918	821	-	980	865	-
Stage 2	-	-	-	-	-	-	980	864	-	918	820	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1571	-	-	1567	-	-	787	743	1020	822	743	1025
Mov Cap-2 Maneuver	-	-	-	-	-	-	787	743	-	822	743	-
Stage 1	-	-	-	-	-	-	898	803	-	974	860	-
Stage 2	-	-	-	-	-	-	929	859	-	895	802	-

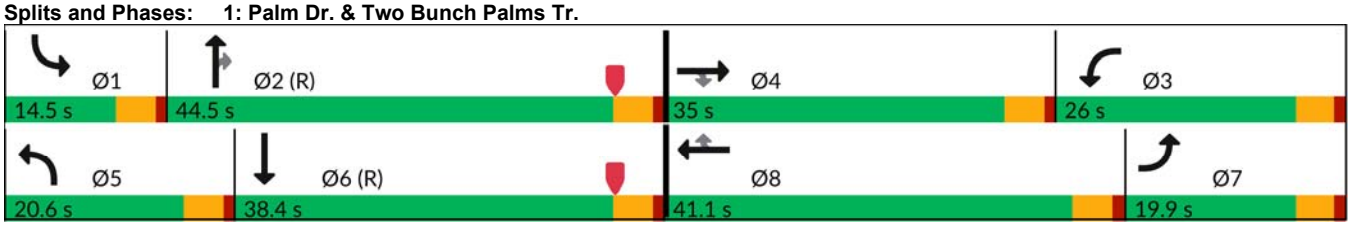
Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	3.35	0.41	9.34	8.77
HCM LOS			A	A

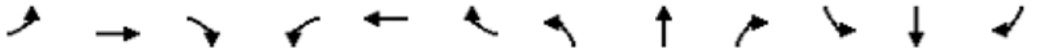
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	835	814	-	-	99	-	-	1003
HCM Lane V/C Ratio	0.006	0.017	-	-	0.001	-	-	0.048
HCM Ctrl Dly (s/v)	9.3	7.3	0	-	7.3	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	202	366	276	180	87	199	1029	186	112	852	37
Future Volume (vph)	107	202	366	276	180	87	199	1029	186	112	852	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0	70		35	100		50	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		692			663			1297			626	
Travel Time (s)		11.8			11.3			22.1			12.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	14.5	35.0	35.0	14.5	22.5	22.5	14.5	22.5	22.5	14.5	22.5	
Total Split (s)	19.9	35.0	35.0	26.0	41.1	41.1	20.6	44.5	44.5	14.5	38.4	
Total Split (%)	16.6%	29.2%	29.2%	21.7%	34.3%	34.3%	17.2%	37.1%	37.1%	12.1%	32.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max	Max	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Palm Dr. & Two Bunch Palms Tr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	202	366	276	180	87	199	1029	186	112	852	37
Future Volume (veh/h)	107	202	366	276	180	87	199	1029	186	112	852	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	220	398	300	196	95	216	1118	202	122	926	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	536	475	400	319	247	207	238	1187	525	147	981	42
Arrive On Green	0.30	0.25	0.25	0.18	0.13	0.13	0.27	0.67	0.67	0.08	0.28	0.28
Sat Flow, veh/h	1781	1870	1576	1781	1870	1567	1781	3554	1573	1781	3469	150
Grp Volume(v), veh/h	116	220	398	300	196	95	216	1118	202	122	474	492
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1870	1567	1781	1777	1573	1781	1777	1842
Q Serve(g_s), s	5.8	11.9	21.8	19.9	12.2	5.5	14.1	33.8	4.3	8.1	31.3	31.3
Cycle Q Clear(g_c), s	5.8	11.9	21.8	19.9	12.2	5.5	14.1	33.8	4.3	8.1	31.3	31.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	536	475	400	319	247	207	238	1187	525	147	503	521
V/C Ratio(X)	0.22	0.46	0.99	0.94	0.79	0.46	0.91	0.94	0.38	0.83	0.94	0.94
Avail Cap(c_a), veh/h	536	475	400	319	570	478	239	1187	525	148	503	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	37.8	23.2	48.6	50.5	32.2	43.2	18.9	5.5	54.2	42.1	42.1
Incr Delay (d2), s/veh	0.2	3.2	43.5	34.9	5.7	1.6	34.2	15.5	2.1	30.5	28.3	27.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	5.8	12.6	11.8	6.0	2.6	7.5	9.2	2.3	4.8	17.4	18.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.5	41.0	66.6	83.5	56.1	33.8	77.4	34.3	7.6	84.7	70.4	69.8
LnGrp LOS	C	D	E	F	E	C	E	C	A	F	E	E
Approach Vol, veh/h		734			591			1536			1088	
Approach Delay, s/veh		53.4			66.5			36.9			71.7	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	44.6	26.0	35.0	20.6	38.4	40.6	20.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.0	40.0	21.5	30.5	16.1	33.9	15.4	36.6
Max Q Clear Time (g_c+I1), s	10.1	35.8	21.9	23.8	16.1	33.3	7.8	14.2
Green Ext Time (p_c), s	0.0	2.8	0.0	1.5	0.0	0.3	0.1	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	54.0
HCM 7th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	5	36	69	3	61	17	1519	63	54	1447	2
Future Volume (vph)	4	5	36	69	3	61	17	1519	63	54	1447	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		229			596			1360			1297	
Travel Time (s)		5.2			13.5			23.2			22.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	5	36	69	3	61	17	1519	63	54	1447	2
Future Vol, veh/h	4	5	36	69	3	61	17	1519	63	54	1447	2
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	5	40	76	3	67	19	1669	69	59	1590	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2594	3496	806	2668	3462	879	1597	0	0	1743	0	0
Stage 1	1715	1715	-	1746	1746	-	-	-	-	-	-	-
Stage 2	879	1781	-	921	1716	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	12	6	325	~ 11	7	291	406	-	-	356	-	-
Stage 1	94	144	-	89	139	-	-	-	-	-	-	-
Stage 2	309	133	-	291	143	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 3	~ 5	322	-	5	288	404	-	-	355	-	-
Mov Cap-2 Maneuver	~ 3	~ 5	-	-	5	-	-	-	-	-	-	-
Stage 1	78	119	-	81	126	-	-	-	-	-	-	-
Stage 2	209	121	-	202	119	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 529.46		1.35	0.62
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	36	-	-	4	322	-	355	-	-
HCM Lane V/C Ratio	0.046	-	-	2.746	0.123	-	0.167	-	-
HCM Ctrl Dly (s/v)	14.3	1.3		$ 2576.3	17.7	-	17.2	-	-
HCM Lane LOS	B	A	-	F	C	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.4	0.4	-	0.6	-	-

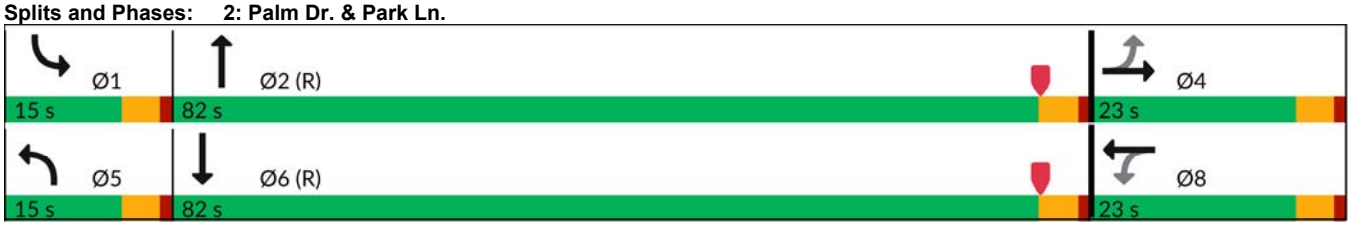
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

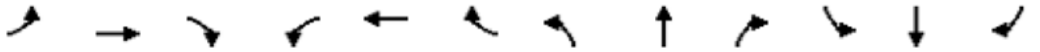
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	5	36	69	3	61	17	1519	63	54	1447	2
Future Volume (vph)	4	5	36	69	3	61	17	1519	63	54	1447	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	30		0	100		0	100		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		229			596			1360			1297	
Travel Time (s)		5.2			13.5			23.2			22.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		14.5	22.5		14.5	22.5	
Total Split (s)	23.0	23.0		23.0	23.0		15.0	82.0		15.0	82.0	
Total Split (%)	19.2%	19.2%		19.2%	19.2%		12.5%	68.3%		12.5%	68.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 2: Palm Dr. & Park Ln.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	5	36	69	3	61	17	1519	63	54	1447	2
Future Volume (veh/h)	4	5	36	69	3	61	17	1519	63	54	1447	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	5	40	76	3	67	19	1669	69	59	1590	2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	19	152	170	7	162	70	2463	101	128	2698	3
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.04	0.71	0.71	0.07	0.74	0.74
Sat Flow, veh/h	1317	177	1415	1345	67	1507	1781	3478	143	1781	3642	5
Grp Volume(v), veh/h	4	0	45	76	0	70	19	849	889	59	776	816
Grp Sat Flow(s),veh/h/ln	1317	0	1592	1345	0	1574	1781	1777	1844	1781	1777	1870
Q Serve(g_s), s	0.3	0.0	3.1	6.6	0.0	5.0	1.2	32.0	32.6	3.8	24.1	24.1
Cycle Q Clear(g_c), s	5.3	0.0	3.1	9.7	0.0	5.0	1.2	32.0	32.6	3.8	24.1	24.1
Prop In Lane	1.00		0.89	1.00		0.96	1.00		0.08	1.00		0.00
Lane Grp Cap(c), veh/h	147	0	171	170	0	169	70	1258	1306	128	1316	1385
V/C Ratio(X)	0.03	0.00	0.26	0.45	0.00	0.41	0.27	0.67	0.68	0.46	0.59	0.59
Avail Cap(c_a), veh/h	208	0	245	232	0	243	156	1258	1306	156	1316	1385
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.69	0.69	0.69	0.32	0.32	0.32
Uniform Delay (d), s/veh	52.5	0.0	49.2	53.6	0.0	50.0	56.0	9.8	9.9	53.5	7.2	7.2
Incr Delay (d2), s/veh	0.1	0.0	0.8	1.8	0.0	1.6	1.4	2.0	2.0	0.8	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.3	2.3	0.0	2.0	0.6	11.1	11.7	1.7	7.6	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.6	0.0	50.0	55.5	0.0	51.6	57.4	11.8	11.9	54.3	7.8	7.8
LnGrp LOS	D		D	E		D	E	B	B	D	A	A
Approach Vol, veh/h		49			146			1757			1651	
Approach Delay, s/veh		50.2			53.6			12.3			9.4	
Approach LOS		D			D			B			A	

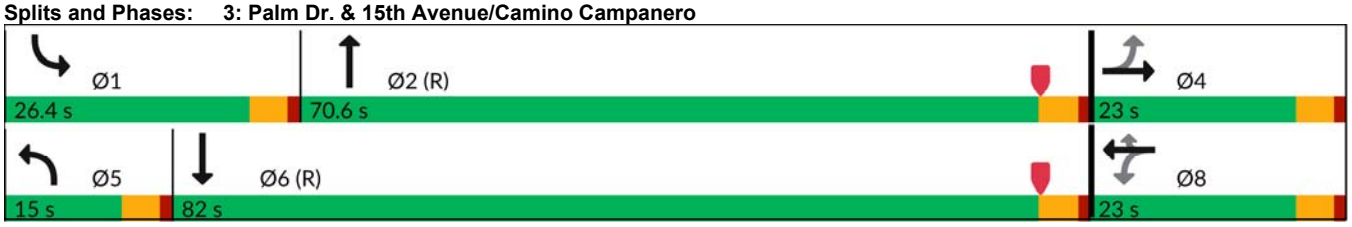
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.1	89.5		17.4	9.2	93.4		17.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	77.5		18.5	10.5	77.5		18.5				
Max Q Clear Time (g_c+I1), s	5.8	34.6		7.3	3.2	26.1		11.7				
Green Ext Time (p_c), s	0.0	18.7		0.1	0.0	16.6		0.3				

Intersection Summary			
HCM 7th Control Delay, s/veh		13.2	
HCM 7th LOS		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	4	38	44	6	164	65	1401	42	174	1307	58
Future Volume (vph)	34	4	38	44	6	164	65	1401	42	174	1307	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	80		0	80		0
Storage Lanes	0		0	1		2	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			45			40	
Link Distance (ft)		493			1008			368			1360	
Travel Time (s)		11.2			22.9			5.6			23.2	
Confl. Peds. (#/hr)				5		5			5	5		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	4	4		8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	22.5	22.5		22.5	22.5	22.5	14.5	22.5		14.5	22.5	
Total Split (s)	23.0	23.0		23.0	23.0	23.0	15.0	70.6		26.4	82.0	
Total Split (%)	19.2%	19.2%		19.2%	19.2%	19.2%	12.5%	58.8%		22.0%	68.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Palm Dr. & 15th Avenue/Camino Campanero



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	4	38	44	6	164	65	1401	42	174	1307	58
Future Volume (veh/h)	34	4	38	44	6	164	65	1401	42	174	1307	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	4	40	47	6	174	69	1490	45	185	1390	62
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	25	92	234	239	200	134	2251	68	215	2373	106
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.07	0.64	0.64	0.12	0.68	0.68
Sat Flow, veh/h	527	194	721	1362	1870	1566	1781	3521	106	1781	3465	154
Grp Volume(v), veh/h	80	0	0	47	6	174	69	751	784	185	712	740
Grp Sat Flow(s),veh/h/ln	1442	0	0	1362	1870	1566	1781	1777	1851	1781	1777	1842
Q Serve(g_s), s	3.4	0.0	0.0	0.0	0.3	13.1	4.5	31.7	31.8	12.2	25.3	25.4
Cycle Q Clear(g_c), s	5.8	0.0	0.0	3.7	0.3	13.1	4.5	31.7	31.8	12.2	25.3	25.4
Prop In Lane	0.45		0.50	1.00		1.00	1.00		0.06	1.00		0.08
Lane Grp Cap(c), veh/h	227	0	0	234	239	200	134	1136	1183	215	1217	1262
V/C Ratio(X)	0.35	0.00	0.00	0.20	0.03	0.87	0.52	0.66	0.66	0.86	0.58	0.59
Avail Cap(c_a), veh/h	264	0	0	270	288	241	156	1136	1183	325	1217	1262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	0.0	0.0	47.3	45.8	51.4	53.4	13.5	13.6	51.8	9.9	10.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.4	0.0	24.1	3.1	3.0	2.9	13.8	2.1	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	1.3	0.2	6.5	2.1	11.9	12.5	6.2	9.2	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.0	0.0	0.0	47.7	45.9	75.4	56.5	16.5	16.5	65.6	12.0	12.0
LnGrp LOS	D			D	D	E	E	B	B	E	B	B
Approach Vol, veh/h		80			227			1604			1637	
Approach Delay, s/veh		49.0			68.9			18.2			18.0	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	81.2		19.8	13.5	86.7		19.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	21.9	66.1		18.5	10.5	77.5		18.5				
Max Q Clear Time (g_c+I1), s	14.2	33.8		7.8	6.5	27.4		15.1				
Green Ext Time (p_c), s	0.3	12.9		0.2	0.0	13.9		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh	22.1	
HCM 7th LOS	C	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	28	38	58	1	1	24
Future Volume (vph)	28	38	58	1	1	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30	30		30	
Link Distance (ft)		596	261		245	
Travel Time (s)		13.5	5.9		5.6	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	38	58	1	1	24
Future Vol, veh/h	28	38	58	1	1	24
Conflicting Peds, #/hr	5	0	0	5	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	41	63	1	1	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	69	0	-	0	176	74
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	107	-
Critical Hdwy	4.12	10	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1532	-	-	-	814	988
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	917	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1524	-	-	-	790	979
Mov Cap-2 Maneuver	-	-	-	-	790	-
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	913	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	3.14	0	8.82
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	764	-	-	-	970
HCM Lane V/C Ratio	0.02	-	-	-	0.028
HCM Ctrl Dly (s/v)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	4	6	4	17	1	17	1	2	1	1	24
Future Volume (vph)	28	4	6	4	17	1	17	1	2	1	1	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			357			170			231	
Travel Time (s)		5.9			8.1			3.9			5.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	28	4	6	4	17	1	17	1	2	1	1	24
Future Vol, veh/h	28	4	6	4	17	1	17	1	2	1	1	24
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	5	8	5	23	1	23	1	3	1	1	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	29	0	0	18	0	0	128	129	19	125	132	33
Stage 1	-	-	-	-	-	-	89	89	-	39	39	-
Stage 2	-	-	-	-	-	-	39	40	-	86	93	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1584	-	-	1598	-	-	845	762	1059	849	759	1040
Stage 1	-	-	-	-	-	-	918	821	-	976	862	-
Stage 2	-	-	-	-	-	-	976	862	-	922	818	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1577	-	-	1591	-	-	788	734	1049	815	731	1030
Mov Cap-2 Maneuver	-	-	-	-	-	-	788	734	-	815	731	-
Stage 1	-	-	-	-	-	-	892	798	-	968	855	-
Stage 2	-	-	-	-	-	-	937	855	-	892	795	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	5.41	1.32	9.63	8.71
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	805	1184	-	-	324	-	-	1004
HCM Lane V/C Ratio	0.033	0.024	-	-	0.003	-	-	0.035
HCM Ctrl Dly (s/v)	9.6	7.3	0	-	7.3	0	-	8.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.1

Intersection: 2: Palm Dr. & Park Ln.

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	30	51	82	89	35	167	161	73	281	291
Average Queue (ft)	10	20	41	40	9	101	103	34	152	170
95th Queue (ft)	29	52	79	83	33	175	167	72	292	310
Link Distance (ft)		182		527		1278	1278		1214	1214
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	30		100		100			100		
Storage Blk Time (%)	11	17	0	1		7			9	
Queuing Penalty (veh)	4	1	0	1		0			5	

Intersection: 2: Palm Dr. & Park Ln.

Movement	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	52	101	77	51	279	272	74	329	315
Average Queue (ft)	31	64	35	25	202	203	45	211	214
95th Queue (ft)	59	98	74	61	307	302	78	366	369
Link Distance (ft)	182		527		1278	1278		1214	1214
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)		100		100			100		
Storage Blk Time (%)	20	0	0	0	20		0	15	
Queuing Penalty (veh)	1	0	0	2	4		0	9	