

# Traffic Impact Study for Los Pinos Apartments



Prepared for the County of Sonoma

Submitted by **W-Trans** 

August 27, 2020





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# **Project Information**

File Number: DRH19-0014

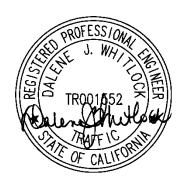
Address: 3496 Santa Rosa Avenue, Santa Rosa CA

APN: 134-132-015

**Project Name: Los Pinos Apartments** 

Applicant Name: Los Pinos Apartments, LLC.

Property Owner Name: Los Pinos Apartments LLC.





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## **Table of Contents**

Executi	ve Summary	1
Introdu	oction	2
Transpo	ortation Setting	4
Capacit	ry Analysis	8
Alterna	tive Modes	23
Access	and Circulation	25
Parking	J	26
Conclu	sions and Recommendations	27
Study P	Participants and References	28
Figures		
1.	Study Area and Existing Lane Configurations	
2.	Existing Traffic Volumes	
3.	Future Traffic Volumes	
4.	Site Plan	
5.	Project Traffic Volumes and Trip Distribution	
6. 7.	Existing plus Project Traffic Volumes Future plus Project Traffic Volumes	
Tables		
1.	Collision Rates at the Study Intersections	5
2.	Bicycle Facility Summary	
3.	Signalized Intersection Level of Service Criteria	
4.	Existing Peak Hour Intersection Levels of Service	
5.	Future Peak Hour Intersection Levels of Service	
6.	Trip Generation Summary	
7.	Trip Distribution Assumptions	
8.	Existing and Existing plus Project Peak Hour Intersection Levels of Service	
9.	Future and Future plus Project Peak Hour Intersection Levels of Service	
	Maximum Left-Turn Queues	
	Vehicle Miles Traveled Analysis Summary	
	Trip Distribution Assumptions	
	Trip Distribution Assumptions	



#### **Appendices**

- A. Collision Rate Calculations
- B. Traffic Counts
- C. Intersection Level of Service Calculations
- D. Concept Striping Plan from the Final Traffic Impact Study for the Ghilotti Construction Yard
- E. SIMTRAFFIC Projections
- F. VMT Findings



## **Executive Summary**

The proposed project is a 50-unit apartment complex to be located at 3496 Santa Rosa Avenue. The project is expected to add an average of 366 new trips to the surrounding roadway network daily, including 23 new trips during the morning peak hour and 28 trips during the evening peak hour.

Vehicle operations five intersections providing access from the site to US 101 were studied. It was determined that these intersections are operating acceptably under Existing volumes and would be expected to continue operating acceptably under Existing plus Approved volumes as well as with the addition of project-generated traffic.

Under Future volumes the study intersections are expected to operate acceptably both without and with project traffic added except that Santa Rosa Avenue/Todd Road is expected to operate deficiently at LOS E during both peak hours. Adding a second northbound left-turn lane on Santa Rosa Avenue has previously been recommended to achieve acceptable operation. With this improvement and with project trips added, the intersection is expected to operate acceptably.

Queuing analyses were performed for the left-turn pockets at the study intersections. Increases in queueing due to adding project traffic is expected to be within the limits considered acceptable except at South Moorland Avenue/US 101 Overpass. Queuing under Future volumes would be expected to extend beyond the adjacent intersections in both directions along South Moorland Avenue between Todd Road and the US 101 Overpass, requiring capacity improvements to accommodate the project as well as all other development in the area. Because this enhancement is needed without the project, it is recommended that the County establish a fee into which developers can pay a proportional share of the cost for the widening necessary to accommodate future demand and that the applicant pay into this fund.

Existing facilities along Santa Rosa Avenue for pedestrians, cyclists and transit riders are adequate. A midblock crosswalk is not warranted. The project includes 40 bicycle parking spaces on site.

The vehicular and emergency vehicle access to the site are acceptable. Sight distances to the north and south on Santa Rosa Avenue from the project's driveway are adequate. Landscaping within the vision triangle should be planted and maintained to be either low-lying shrubbery less than three feet tall and trees more than seven feet above the ground.

The proposed parking supply satisfies County and City of Santa Rosa requirements.



## Introduction

This report presents an analysis of the potential traffic impacts that would be associated with the proposed construction of a new 50-unit apartment complex to be located at 3496 Santa Rosa Avenue in the County of Sonoma. The traffic study was completed in accordance with the criteria established by the County of Sonoma, reflects a scope of work reviewed and approved by County staff, and is consistent with standard traffic engineering techniques.

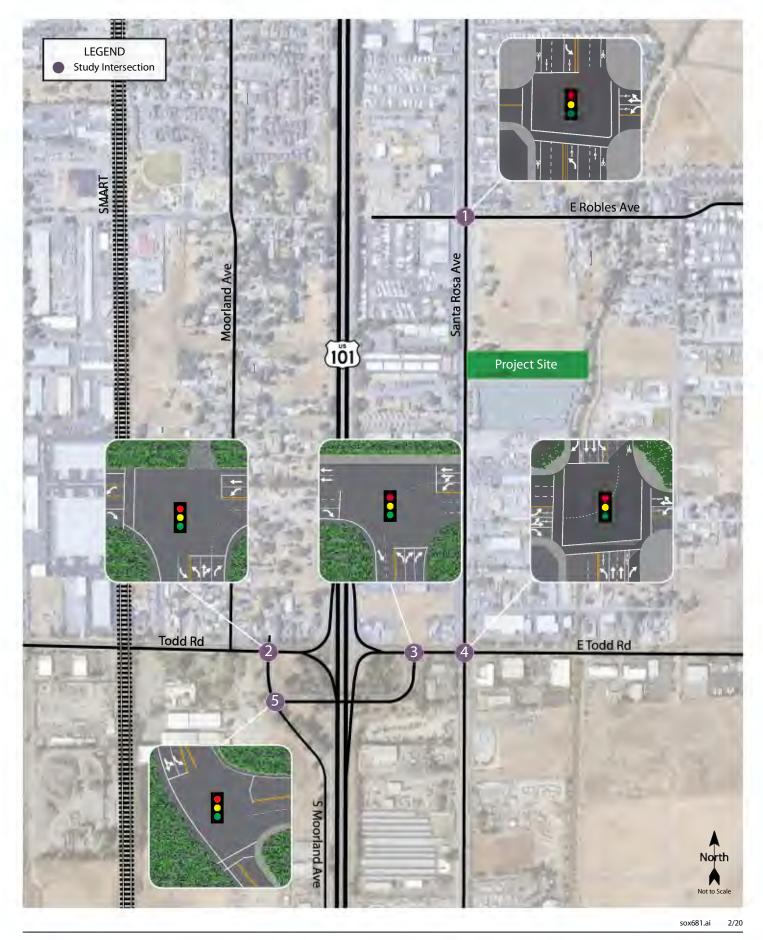
#### **Prelude**

The purpose of a traffic impact study is to provide County staff and policy makers with data they can use to make an informed decision regarding the potential traffic impacts of a proposed project, and any associated improvements that would be required to mitigate these impacts to a level of insignificance as defined by the County's General Plan or other policies. Vehicular traffic impacts are typically evaluated by determining the number of new trips that the proposed use would be expected to generate, distributing these trips to the surrounding street system based on existing travel patterns or anticipated travel patterns specific to the proposed project, then analyzing the impact the new traffic would be expected to have on critical intersections or roadway segments. Impacts relative to access for pedestrians, bicyclists, and to transit are also addressed.

## **Project Profile**

The proposed project is a 50-unit apartment complex that would be constructed on a currently-vacant parcel at 3496 Santa Rosa Avenue in the County of Sonoma, as shown in Figure 1. The site would be accessed via a new driveway on Santa Rosa Avenue, approximately 280 feet south of East Robles Avenue.





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## **Transportation Setting**

#### **Operational Analysis**

#### **Study Area and Periods**

The study area consists of the following intersections:

- 1. Santa Rosa Avenue/East Robles Avenue
- 2. South Moorland Avenue/Todd Road-US 101 South Ramps
- 3. US 101 Overpass/Todd Road
- 4. Santa Rosa Avenue/Todd Road
- 5. South Moorland Avenue/US 101 Overpass

It is noted that the "intersection" created by project driveway at Santa Rosa Avenue was not considered as a study intersection. The *California Vehicle Code* defines an intersection as "the area embraced within the prolongation of the lateral curb lines, or, if none, then the lateral boundary lines of the roadways, of two highways which join one another at approximately right angles or the area within which vehicles traveling upon different highways joining at any other angle may come in conflict." This definition specifies that intersections are created where two "highways," or public streets, intersect. As driveways are not public streets, where they connect with a public road is not an intersection, so it would be unreasonable to evaluate it as such. The driveway connection should, however, be evaluated for operational issues such as adequacy of sight distance, need for turn lanes, and delay may be relevant in some cases, though it would not be associated with a Level of Service.

Operating conditions during the a.m. and p.m. peak periods were evaluated to capture the highest potential impacts for the proposed project as well as the highest volumes on the local transportation network. The morning peak hour occurs between 7:00 and 9:00 a.m. and reflects conditions during the home to work or school commute, while the p.m. peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute.

#### **Study Intersections**

**Santa Rosa Avenue/East Robles Avenue** is a signalized four-legged intersection. Protected left-turn phasing is provided on the northbound and southbound Santa Rosa Avenue approaches, while the eastbound and westbound approaches have permitted left-turn phasing. Marked crosswalks and pedestrian countdown signal heads are present on the east, west, and south legs.

**South Moorland Avenue/Todd Road-US 101 South Ramps** is a signalized tee intersection with left-turn pockets and protected left-turn phasing on the northbound and westbound approaches. A marked crosswalk is present on the west leg.

**US 101 Overpass/Todd Road** is a signalized tee intersection with left-turn pockets and protected left-turn phasing on the northbound and westbound approaches. Additionally, a left-turn lane on the eastbound approach provides access to the service station located northwest of the intersection.

**Santa Rosa Avenue/Todd Road** is a four-legged intersection that is signalized with protected left turns on the northbound and southbound Santa Rosa Avenue approaches. The eastbound and westbound Todd Road approaches are split-phased or are served sequentially. Marked crosswalks and pedestrian countdown signal heads are present on the east, west, and south legs.



**South Moorland Avenue/US 101 Overpass** is a signalized tee intersection with protected left-turn phasing on the northbound and westbound approaches. A marked crosswalk is present on the south leg.

The locations of the study intersections and the existing lane configurations and controls are shown in Figure 1.

## **Collision History**

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The most current five-year period available is September 1, 2014 through August 31, 2019.

As presented in Table 1, the calculated collision rates for the study intersections were compared to average collision rates for similar facilities statewide, as indicated in 2016 Collision Data on California State Highways, California Department of Transportation (Caltrans). The collision rates at the intersections of Santa Rosa Avenue/East Robles Avenue, South Moorland Avenue/Todd Road-US 101 South Ramps, and Santa Rosa Avenue/Todd Road were higher than the statewide average. The US 101 Overpass/Todd Road and South Moorland Avenue/US 101 Overpass intersections had collision rates lower than the statewide average for similar facilities indicating that there are no readily apparent safety issues. The collision rate calculations are provided in Appendix A.

Tal	Table 1 – Collision Rates at the Study Intersections									
Stu	idy Intersection	Number of Collisions (2014-2019)	Calculated Collision Rate (c/mve)	Statewide Average Collision Rate (c/mve)						
1.	Santa Rosa Ave/E Robles Ave	11	0.32	0.24						
2.	S Moorland Ave/Todd Rd-US 101 S Ramps	13	0.39	0.19						
3.	US 101 Overpass/Todd Rd	3	0.09	0.19						
4.	Santa Rosa Ave/Todd Rd	36	0.77	0.24						
5.	S Moorland Ave/US 101 Overpass	12	0.44	0.19						

Note: c/mve = collisions per million vehicles entering; **Bold** = calculated collision rate higher than statewide average

Of the 11 collisions that occurred at Santa Rosa Avenue/East Robles Avenue during the study period, six were rearends, five were broadside, two were head-on, two were hit objects collisions and one was a sideswipe collision. Rear-end and sideswipe crashes are common at signalized intersections during congested conditions and broadsides often occur when motorists try to clear the intersection after the phase has ended. Given the distribution of different types of collisions, there is no clear trend, but the City may wish to review the signal timing at this location to make sure that adequate clearance time is provided.

Further review of collisions at South Moorland Avenue/Todd Road-US 101 South Ramps shows primary collision factors that include five sideswipes, three hit objects, three overturned, one head-on, and one "other". Despite the above-average collision rate, injuries were reported in only 23.1 percent of crashes while statewide the average rate is 46.8 percent. Given the low injury rate, no remedial action is suggested.

For Santa Rosa Avenue/Todd Road the review revealed that the above-average collision rate appears to have been largely due to the proximity of neighboring gas stations. Santa Rosa Avenue/Todd Road has gas stations on the northwest and southwest corners and Todd Road/US 101 North Ramps has a gas station on the northwest corner. The driveways to the gas stations are located within 90 feet of the intersections and create additional conflict zones. Consolidation of the driveways or restricting access to right turns in and out could help to reduce the



incidence of collisions, though as the injury rate was only 16.7 percent compared to the statewide average of 44.7 percent, there does not appear to be a safety concern despite the above-average collision rate.

Of the twelve collisions reported at the intersection of South Moorland Avenue/US 101 Overpass there were five sideswipes, three drivers hit fixed objects, one rear end, two vehicle-pedestrian collisions and one overturned vehicle. A review of the severity of crashes shows that 33.3 percent of crashes resulted in injuries, which is lower than the statewide average of 46.8 percent. The below-average incidence of injuries indicates that there is not a demonstrated safety concern at this location warranting remedial action.

#### **Alternative Modes**

#### **Pedestrian Facilities**

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of sidewalks, crosswalks, pedestrian signals, and curb ramps provide adequate access for pedestrians on Santa Rosa Avenue, but not on East Robles Avenue.

• Santa Rosa Avenue – Continuous sidewalk coverage is provided on both sides of the street on Santa Rosa Avenue between El Portal Way and Todd Road. Curb ramps and marked crosswalks at side street approaches are present throughout the study segment. The Santa Rosa Avenue/East Robles Avenue intersection includes a crosswalk on the southern leg, which provides pedestrians with access to the opposite side of Santa Rosa Avenue. Lighting is provided by overhead streetlights.

#### **Bicycle Facilities**

The Highway Design Manual, Caltrans, 2017, classifies bikeways into four categories:

- **Class I Multi-Use Path** a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- Class II Bike Lane a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway** also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

In the project area, the Class I Hunter Creek Trail exists between Santa Rosa Avenue and Hunter Lane and there are Class II bike lanes on Santa Rosa Avenue between Todd Road and State Route (SR) 12. Bicyclists ride in the roadway along all other streets within the project study area. Class II bike lanes are proposed on Santa Rosa Avenue south of Todd Road that would connect to the Hunter Creek Trail. Table 2 summarizes the existing and planned bicycle facilities in the project vicinity, as contained in the City of Santa Rosa Bicycle & Pedestrian Master Plan Update 2018 and the SCTA Countywide Bicycle and Pedestrian Master Plan.



Status Facility	Class	Length (miles)	Begin Point	End Point
Existing				
Hunter Creek Trail	I	1.5	Santa Rosa Ave	Hunter Ln
Santa Rosa Ave*	II	3.1	SR 12	Todd Rd
Planned				
Bellevue Ave	Ш	0.31	Santa Rosa Ave	Eastern end
Santa Rosa Ave	II	0.4	Todd Rd	Hunter Creek Trail

Notes: \* All or portions of these bikeways are located within the City of Santa Rosa

Source: City of Santa Rosa Bicycle & Pedestrian Master Plan Update 2018, City of Santa Rosa, 2018

SCTA Countywide Bicycle and Pedestrian Master Plan, Sonoma County Transportation Authority, 2014

#### **Transit Facilities**

Sonoma County Transit (SCT) provides fixed route bus service in Sonoma County. Routes 44, 48, and 54 provide regional service to the project site and surrounding communities, with stops in the vicinity of the project on the west and east sides of Santa Rosa Avenue. Both routes stop at the Santa Rosa Avenue/East Robles Avenue and Santa Rosa Avenue/Todd Road intersections, which are within a short walking distance of the project site. Route 44 operates Monday through Friday with approximately 30-minute to 90-minute headways between 5:20 a.m. and 10:30 p.m. Weekend service operates with approximately one- to three-hour headways between 4:20 p.m. and 10:10 p.m. Route 48 operates Monday through Friday with approximately one-half hour to two-hour headways between 6:15 a.m. and 8:00 p.m. Weekend service operates with approximately two- to three-hour headways between 7:00 a.m. and 9:00 p.m. Route 54 operates Monday through Friday with a 30-minute headway between 6:35 a.m. and 7:05 a.m. and 90-minute headway between 4:20 p.m. and 5:50 p.m. There is no weekend service for this route.

Two bicycles can be carried on most Sonoma County Transit buses. Bike rack space is on a first come, first served basis. Additional bicycles are allowed on SCT buses at the discretion of the driver.

Dial-a-ride, also known as paratransit, or door-to-door service, is available for those who are unable to independently use the transit system due to a physical or mental disability. Sonoma County Paratransit is designed to serve the needs of individuals with disabilities within Sonoma County.



## **Capacity Analysis**

## **Intersection Level of Service Methodologies**

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

The study intersections were analyzed using the signalized methodology published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 2010. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle. The signalized methodology is based on factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology. For purposes of this study, delays were calculated using signal timing obtained from the County of Sonoma.

The ranges of delay associated with the various levels of service are indicated in Table 3.

Table 3	– Signalized Intersection Level of Service Criteria
LOS A	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
LOS B	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
LOS C	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
LOS D	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
LOS E	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.
LOS F	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Reference: Highway Capacity Manual, Transportation Research Board, 2010

## **Traffic Operation Standards**

Based on the most recent criteria published by the County of Sonoma in May 2016, as updated in June 2019, the project would have an adverse traffic impact if it results in any of the following conditions.

- 1. **On-site roads and frontage improvements** Proposed on-site circulation and street frontage would not meet the County's minimum standards for roadway or driveway design, or potentially result in safety hazards, as determined by the County in consultation with a registered Traffic Engineer or Civil Engineer.
- 2. **Parking** Proposed on-site parking supply does not meet County standards and does not adequately accommodate parking demand.
- 3. **Emergency Access** The project site would have inadequate emergency access.
- 4. **Alternative Transportation** The project provides inadequate facilities for alternative transportation modes (e.g., bus turnouts, bicycle racks, pedestrian pathways) and/or the project creates potential conflicts with the County's Complete Streets Policy, other adopted policies, plans, or programs supporting alternative transportation.



- 5. **Road Hazards** Road design features that do not meet standards (e.g., sharp curves or skewed intersections) or any perceived incompatible uses (e.g., farm equipment, major bicycle route, rail or pedestrian crossings).
- 6. **Vehicle Queues** An impact on projected 95th percentile queues shall be considered adverse when any of the following occur:
  - A. The projected queue can be accommodated within the available stacking in a dedicated turn lane (defined as the length of the channelized turn pocket together plus 8 feet in length) but would exceed the available stacking upon adding project-generated traffic. Where a left-turn lane transitions into a two-way left-turn lane, the center turn lane is to be considered part of the available stacking space.
  - B. There is adequate sight distance between the end of the queue and following traffic without the project, and the addition of project traffic increases the queue to a point where sight lines are no longer adequate to meet stopping sight distance criteria.
- 7. **Signal Warrants** The addition of the project's vehicle or pedestrian traffic causes an intersection to meet or exceed Caltrans or CA-MUTCD signal warrant criteria.
- 8. **Turn Lanes** The addition of project traffic causes an intersection to meet or exceed criteria for provision of a right or left turn lane on an intersection approach.
- 9. **Sight Lines** The project constructs an unsignalized intersection (including driveways) and/or adds traffic to an existing unsignalized intersection approach that does not have adequate sight lines based upon Caltrans criteria for State highway intersections and AASHTO criteria for County roadway intersections.
- 10. **County Intersection Operations** The County level of service standard for County intersection operations is to maintain a Level of Service D or better pursuant to General Plan Policy CT-4.2. The project would have an adverse traffic impact if the project's traffic would cause an intersection currently operating at an acceptable level of service (LOS D or better) to operate at an unacceptable level (LOS E or worse).

If the intersection currently operates or is projected to operate below the County standard, the project's impact is considered adverse and cumulatively considerable if it causes the average delay to increase by five seconds or more. The delay will be determined by comparing intersection operations with and without the project's traffic for both the existing baseline and projected future conditions.

The above criterion applies to all controlled intersections except for driveways and minor side streets that have less than 30 vehicle trips per hour per approach or exclusive left turn movement.

11. **County Roadway Operations** – The County level of service standard for County roadway operations is to maintain a Level of Service C pursuant to General Plan Policy CT-4.1; or, for specific roadway segments, the level of service standard adopted in the General Plan Figure CT-3. The project would have an adverse traffic impact if the project's traffic would cause a road currently operating at an acceptable level of service (LOS C or better) to operate at an unacceptable level (LOS D or worse).

If a road segment currently operates or is projected to operate below the County standard, the project's impact is considered adverse and cumulatively considerable if it causes the average speed to decrease by 2 mph for a roadway operating at LOS D without the project, 1 mph if existing operation is LOS E, and any reduction in travel speed is adverse for a roadway operating at LOS F. The change will be determined by comparing roadway conditions with and without the project's traffic for both the existing baseline and projected future conditions.



- 12. **State Highways** Caltrans' general level of service policy on State highways is to maintain the level of service at the transition between LOS C and LOS D. However, level of service goals for specific Caltrans facilities should be taken from transportation planning documents for that facility. A project would have an adverse impact if the project traffic would cause the operation of a State highway to operate below LOS C. If a State highway currently operates or is projected to operate below the standard, the project's impact is considered adverse and cumulatively considerable if it does not maintain the existing "measure of effectiveness." Measures of effectiveness are: (a) control delay per vehicle for signalized intersections; (b) average control delay per vehicle for unsignalized intersections; (c) average speed for two-lane highways, and (d) density for multi-lane highways.
- 13. **Mitigation Measures** In order to reduce project impacts to levels of insignificance, the proposed mitigation measures must result in post-development affected intersections and roadways that have an LOS that is no worse than the County General Plan LOS standard for roadways and intersections, reduce safety impacts to insignificance by bringing the site up to Caltrans or AASHTO design standards, and provide adequate parking and alternative transportation facilities consistent with County plans and policies. The scope of the mitigation measures must reduce the project impacts below the identifiable thresholds mentioned.

The payment of County wide traffic impact fees in and of itself may not be adequate to mitigate a project's local impacts if the existing facilities are already below standard, and the required improvements are not fully funded or programmed to be operational at the time of project completion. The timing of the mitigation measure implementation may require construction of off-site improvements by the developer using a Reimbursement Agreement to pay for any oversized facilities associated with the public share of the improvement pursuant to Section 26-670 of the Sonoma County Code. Traffic impact fees do not address specific impacts related to a particular project. Payment of the traffic impact fee only mitigates or addresses cumulative countywide impacts related to projects that are programmed or listed to be funded by the fees on file with DTPW.

The project's contribution to cumulative impacts must also be addressed in proportion to the project's impact. A proportional fair share contribution to a traffic improvement related to a cumulative impact may be required based on the "Methodology for Calculating Equitable Mitigation Measures" included in Caltrans' *Guide for the Preparation of Traffic Impact Studies* as referenced above. Mitigation measures for both project impacts and cumulative impacts must be implemented prior to occurrence of the impact. An analysis of the timing, funding and responsibilities for implementation of mitigation measures should be included in the traffic study.

#### **Caltrans**

In the *Guide for the Preparation of Traffic Impact Studies*, Caltrans indicates that they endeavor to maintain operation at the transition from LOS C to LOS D. The Caltrans criteria was applied to the intersections of South Moorland Avenue/Todd-Road-US 101 S Ramps, US 101 Overpass/Todd Road, and South Moorland Avenue/US 101 Overpass.

## **Existing Conditions**

The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the a.m. and p.m. peak periods. This condition does not include project-generated traffic volumes. Volume data was collected when local schools were in session. Peak hour factors (PHF's) were calculated based on the counts obtained and used in the analysis. Copies of the counts are provided in Appendix B.



#### **Intersection Levels of Service**

Under Existing Conditions, all intersections operate acceptably during the a.m. and p.m. peak hours. A summary of the intersection level of service calculations is contained in Table 4, and copies of the Level of Service calculations are provided in Appendix C. The existing traffic volumes are shown in Figure 2.

Table 4 – Existing Peak Hour Intersection Levels of Service									
Study Intersection		AM F	Peak	PM Peak					
		Delay	LOS	Delay	LOS				
1.	Santa Rosa Ave/E Robles Ave	8.1	Α	8.1	Α				
2.	S Moorland Ave/Todd Rd-US 101 S Ramps	5.3	Α	5.7	Α				
3.	US 101 Overpass/Todd Rd	8.1	Α	8.6	Α				
ŀ.	Santa Rosa Ave/Todd Rd	16.7	В	20.3	С				
5.	S Moorland Ave/US 101 Overpass	15.2	В	16.3	В				

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

#### **Future Conditions**

Segment volumes for the horizon year of 2040 were obtained from the County's gravity demand model maintained by the Sonoma County Transportation Authority (SCTA) and translated to peak hour turning movement volumes at the study intersections using the "Furness" method. The Furness method is an iterative process that employs existing turn movement data, existing link volumes, and future link volumes to project likely future turning movement volumes at intersections.

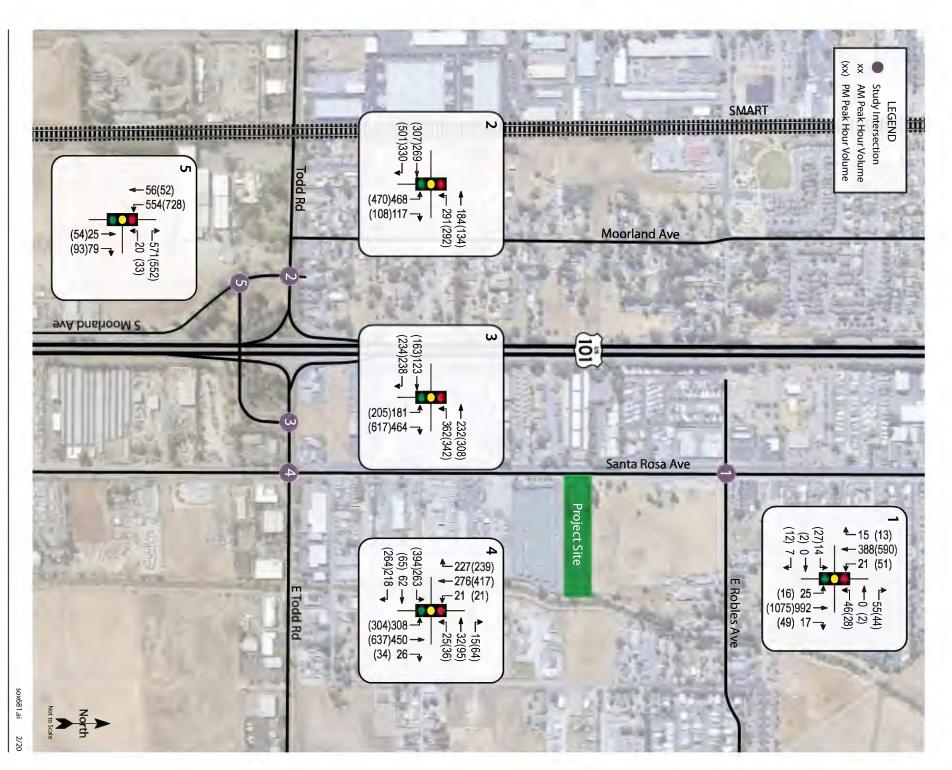
Under the anticipated Future volumes, the study intersections are expected to continue to operate acceptably except for Santa Rosa Avenue/Todd Road which would operate at LOS E during the p.m. peak hour. Operating conditions are summarized in Table 5 and Future volumes are shown in Figure 3.

Table 5 – Future Peak Hour Intersection Levels of Service									
Study Intersection		AM I	Peak	PM Peak					
		Delay	LOS	Delay	LOS				
1. Santa	Rosa Ave/E Robles Ave	8.2	Α	8.4	Α				
2. S Moc	orland Ave/Todd Rd-US 101 S Ramps	6.6	А	18.9	В				
3. US 10	1 Overpass/Todd Rd	13.7	В	9.7	Α				
4. Santa	Rosa Ave/Todd Rd	43.8	D	71.3	E				
Dual N	NB left-turn lanes	22.2	С	31.8	C				
5. S Moc	orland Ave/US 101 Overpass	31.4	С	40.7	D				

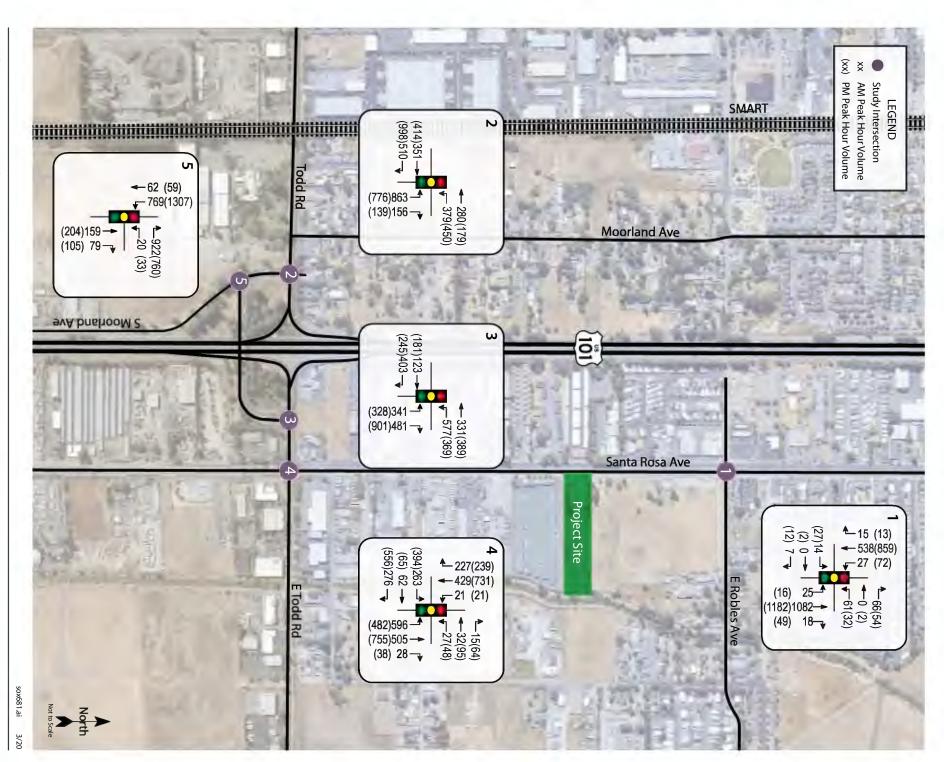
Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; **Bold** text = deficient operation; Shaded cells = conditions with recommended improvements

As noted in traffic studies completed for other developments in the area, the northbound approach to Todd Road/Santa Rosa Avenue would need to be restriped to provide two left-turn lanes to accommodate the large increase in traffic anticipated for this movement. This improvement could be accomplished by restriping the western through lane into a second left-turn lane and converting the dedicated right-turn lane into a shared through/right-turn lane. This configuration would result in two left-turn lanes, a single through lane, and a shared











through/right-turn lane within the street width that currently exists. A conceptual striping plan for this improvement that was prepared for the *Final Traffic Impact Study for the Ghilotti Construction Yard* is contained in Appendix D.

## **Project Description**

The proposed project is a 50-unit apartment complex that would be constructed on a currently vacant parcel at 3496 Santa Rosa Avenue in the County of Sonoma. The site would be accessed via a new driveway on Santa Rosa Avenue, approximately 280 feet south of East Robles Avenue. The proposed project site plan is shown in Figure 4.

## **Trip Generation**

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10<sup>th</sup> Edition, 2017 for Multifamily Housing (Low-Rise) (Land Use #220). The proposed project is expected to generate an average of 366 trips per day, including 23 a.m. peak hour trips and 28 trips during the p.m. peak hour. These results are summarized in Table 6.

Table 6 – Trip Generation Summary											
Land Use	Units	Daily	Trips	AM Peak Hour PM Peak Hou			Hour				
		Rate	Trips	Rate	Trips	ln	Out	Rate	Trips	ln	Out
Multifamily Housing (Low-Rise)	50 du	7.32	366	0.46	23	5	18	0.56	28	18	10

Note: du = dwelling units

## **Trip Distribution**

The suggested pattern to allocate new project trips to the street network was determined based on existing turning movement data, local knowledge of the study area, and likely origins/destinations for residents of the project. The applied assumptions are shown in Table 7.

Table 7 – Trip Distribution Assumptions							
Route	Percent						
To/from the north on Santa Rosa Ave	40						
To/from the south on Santa Rosa Ave	10						
To/from the south on US 101	50						
TOTAL	100						

## **Intersection Operation**

## **Existing plus Project Conditions**

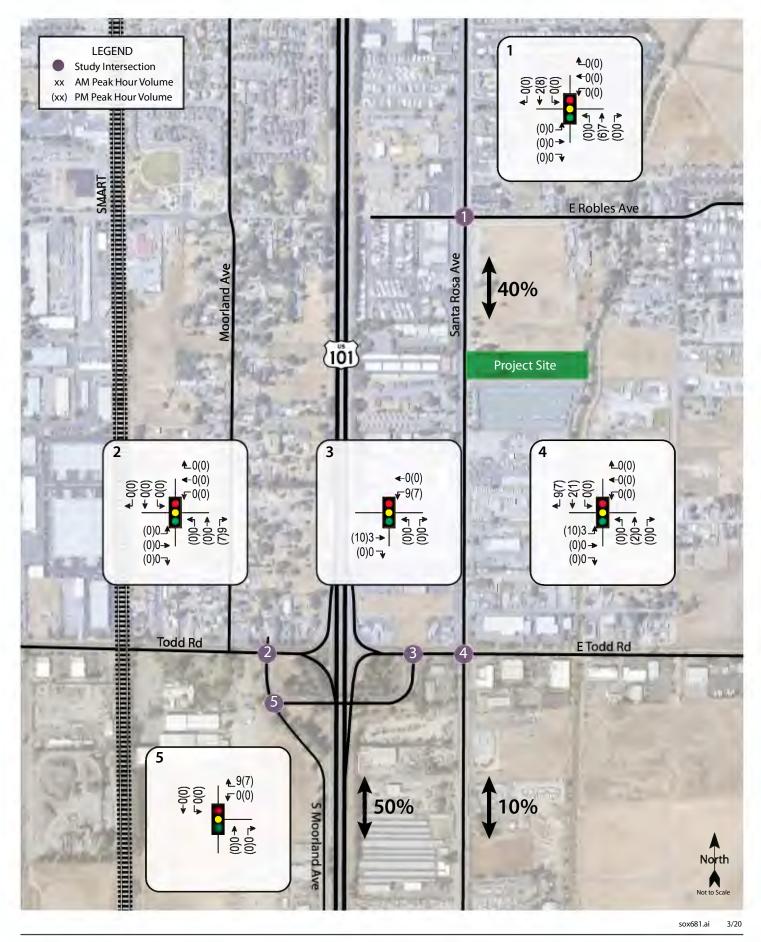
Upon the addition of project-related traffic to existing volumes the study intersections are expected to continue operating at the same Levels of Service as without the project. Project traffic volumes are shown in Figure 5 and Existing plus Project traffic volumes are shown in Figure 6. These results are summarized in Table 8.



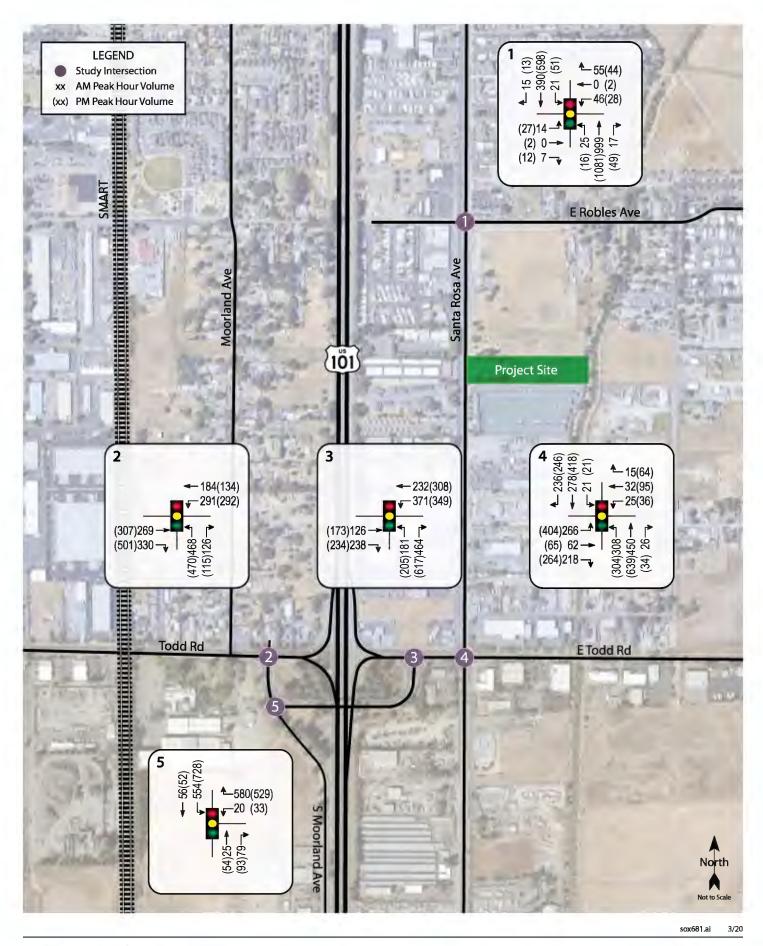


Source: Huffman-Broadway Group, Inc









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Tal	Table 8 – Existing and Existing plus Project Peak Hour Intersection Levels of Service										
Study Intersection		Exi	sting Co	ondition	s	Exis	ting p	lus Proje	ect		
		АМ Р	eak	РМ Р	eak	AM P	eak	PM Peak			
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS		
1.	Santa Rosa Ave/E Robles Ave	8.1	Α	8.1	Α	8.1	Α	8.1	Α		
2.	S Moorland Ave/Todd Rd-US 101 S Ramps	5.3	Α	5.7	Α	5.3	Α	5.7	Α		
3.	US 101 Overpass/Todd Rd	8.1	Α	8.6	Α	8.2	Α	8.6	Α		
4.	Santa Rosa Ave/Todd Rd	16.7	В	20.3	C	16.8	В	20.5	С		
5.	S Moorland Ave/US 101 Overpass	15.2	В	16.3	В	15.3	В	16.3	В		

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

**Finding** – The study intersections are expected to continue operating acceptably at the same levels of service upon the addition of project-generated traffic.

#### **Future plus Project Conditions**

Upon the addition of project-generated traffic to the anticipated Future volumes, the study intersections are expected to operate at the same service levels as without project-added trips. The Future plus Project operating conditions are summarized in Table 9. Future plus Project traffic volumes are shown in Figure 7.

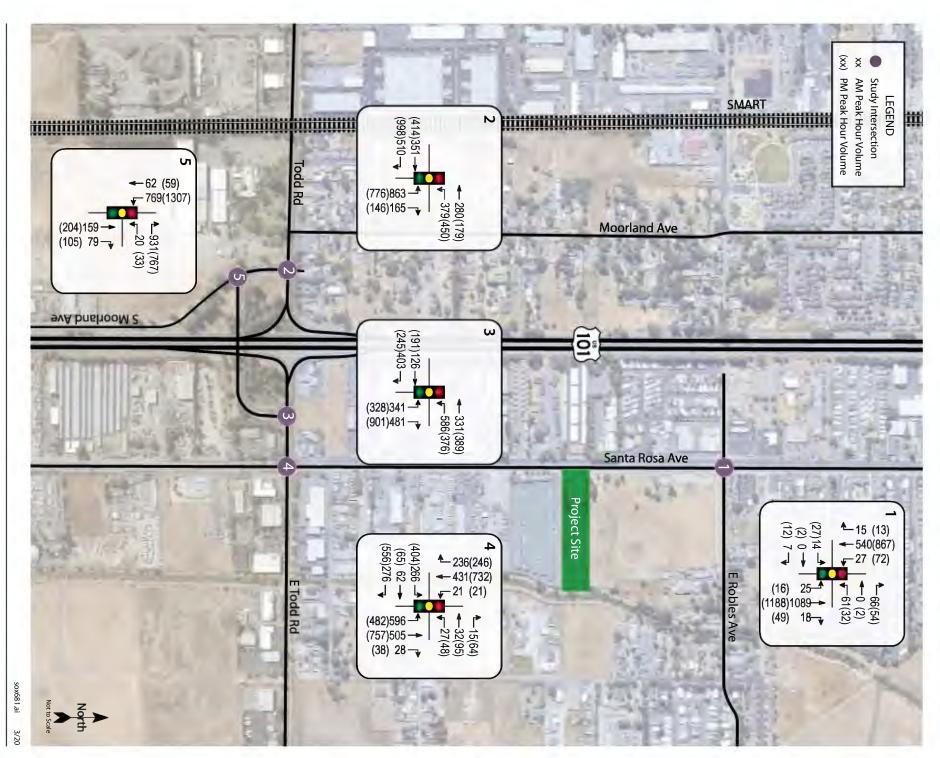
Ta	Table 9 – Future and Future plus Project Peak Hour Intersection Levels of Service										
Study Intersection		F	uture (	Conditio	ns	Fut	ture pl	us Proje	roject		
		AM P	AM Peak PM Peak		AM Peak		PM Peak				
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS		
1.	Santa Rosa Ave/E Robles Ave	8.2	Α	8.4	Α	8.2	Α	8.4	Α		
2.	S Moorland Ave/Todd Rd-US 101 S Ramps	6.6	Α	18.9	В	9.1	Α	18.9	В		
3.	US 101 Overpass/Todd Rd	13.7	В	9.7	Α	13.7	В	9.8	Α		
4.	Santa Rosa Ave/Todd Rd	43.8	D	71.3	E	43.9	D	71.2	E		
	Dual NB left-turn lanes	22.2	C	31.8	C	22.2	C	31.9	C		
5.	S Moorland Ave/US 101 Overpass	31.4	С	40.7	D	32.2	С	40.7	D		

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; **Bold** text = deficient operation; Shaded cells = conditions with recommended improvements

It should be noted that with the addition of project-related traffic volumes, average delay at Santa Rosa Avenue/Todd Road decreases slightly during the p.m. peak hour. While this is counter-intuitive, this condition occurs when a project adds trips to movements that have delays that are below the intersection average, resulting in a better balance between movements and lower average delay for the intersection. At this location, the project adds trips to the southbound through and right-turn movements, which have delays that are lower than the intersection average, resulting in a slight reduction in the average delay.

**Finding** – Although Santa Rosa Avenue/Todd Road is expected to operate at LOS E under Future Conditions, the addition of project traffic would result in less than a five-second increase in delay, making the impact acceptable under the County's criteria.







## Queuing

Under each scenario, projected 95<sup>th</sup> percentile queues in left-turn pockets were determined using the SimTraffic application of Synchro and averaging the 95<sup>th</sup> percentile for each of five runs. The study intersections were evaluated with their existing controls and lane configurations under all scenarios. Summarized in Table 10 are the predicted queue lengths for the left-turn lanes at all five study intersections. Copies of the SIMTRAFFIC projections are contained in Appendix E.

Tal	Table 10 – Maximum Left-Turn Queues											
Stu	udy Intersection	Available				Maximu	m Queu	es				
	Approach	Storage		AM Pe	ak Hour							
			E	E+P	F	F+P	E	E+P	F	F+P		
1.	Santa Rosa Ave/E Robles	Ave										
	Westbound	100	32	50	63	63	52	46	53	62		
	Northbound	100	39	22	36	39	45	46	31	32		
	Southbound	100	21	24	51	42	52	51	62	64		
2.	S Moorland Ave/Todd Rd	- -US 101 S Rar	nps									
	Westbound	280	130	237	324	320	319	235	321	322		
	Northbound	200	251	300	282	283	307	295	290	281		
3.	US 101 Overpass/Todd Rd						<u> </u>					
	Westbound	190	141	145	237	244	141	136	259	272		
	Northbound	100	137	162	186	195	119	126	135	119		
4.	Santa Rosa Ave/Todd Rd					,						
	Eastbound	190	69	97	107	129	150	152	106	130		
	Westbound	85	32	32	80	86	51	71	80	76		
	Northbound	350*	141	176	341	343	190	263	341	340		
	Southbound	205	18	19	35	30	47	25	29	40		
5.	S Moorland Ave/US 101 (	Overpass										
	Westbound	100	15	76	232	247	245	247	239	237		
	Southbound	205	189	303	291	305	302	331	317	295		

otes: Maximum Queue based on the average of the maximum value from five SIMTRAFFIC runs; all distances are measured in feet; E = existing conditions; E+P = existing plus project conditions; F = future conditions; F+P = future plus project conditions; **Bold** text = queue length exceeds available storage; \* indicates that the turn pocket leads into a two-way left-turn lane that extends the available queuing space

Queuing is expected to exceed available stacking space at numerous locations, though in most cases the project would only add to a queue that is already beyond the stacking space and the additional length would not cause any new queuing issues (it would not cause extension to a point where stopping sight distance is no longer adequate) so the impact is considered less than significant (LTS). The impacts at locations identified in Table 10 as having excessive queuing are as follows; if "LTS" is indicated, it is for the reasons stated above.

- South Moorland Avenue/Todd Road-US 101 South Ramps
  - Westbound, Future, a.m. and p.m. peak hours: LTS.
  - Northbound, all scenarios: LTS.



- US 101 Overpass/Todd Road
  - Westbound, Future, both peak hours: LTS.
  - Northbound, Existing, both peak hours, Future, a.m. peak hour: While the queue will extend beyond the
    end of the left-turn pocket, the adjacent lane is a right-turn lane, so all traffic is slowing to turn. Because
    there is no potential for conflict with higher speed traffic, the impact is LTS.
- South Moorland Avenue/US 101 Overpass
  - Westbound, Existing p.m. peak hour, Future, a.m. and p.m. peak hours: LTS.
  - Southbound, Existing a.m. peak hour: the increase in queueing would be less than is anticipated under Future volumes but would occur in the short term. The stacking deficiencies between this intersection and South Moorland Avenue/Todd Road are directly associated with the close spacing of these intersections and while some relief can be achieved with improved phasing, additional capacity is needed to accommodate long-term growth in traffic volumes. The southbound queueing could be reduced by widening on the north side of the overpass to provide separate left-turn and right-turn lanes, thereby allowing implementation of a right-turn overlap phase. These changes require approval by Caltrans. Further, these improvements are needed to accommodate future increases in traffic, regardless of whether the project goes forward or not. Given the magnitude of the improvements needed as well as the need for them without the project, it appears most reasonable for these improvements to be made part of a County-sponsored project with fees established for all developments contributing to this need.
  - o Southbound, Existing p.m. peak hour, Future a.m. peak hour: LTS.

**Finding** – The project would impact queueing on the southbound South Moorland Avenue approach to the US 101 Overpass. Though the project's impact is not significant at the South Moorland Avenue/Todd Road-US 101 South Ramps intersection, queuing at that location could be reduced by converting the northbound approach to a left-turn/through lane and a right-turn lane with overlap signal phasing. Improvements are needed to the two South Moorland Avenue intersections to accommodate future growth without the project. Such improvements should be coordinated by the County to achieve Caltrans concurrence, and funds should be collected from all developments in the area as the costs are more than a single, small development can incur.

**Recommendation** – The County should establish a fee program to pay for capacity and operational improvements needed at South Moorland Avenue/Todd Road-US 101 South Ramps and South Moorland Avenue/US 101 Overpass.

#### **Vehicle Miles Traveled (VMT)**

Senate Bill (SB) 743 established a change in the metric to be applied for determining traffic impacts associated with development projects. Rather than the delay-based criteria associated with a Level of Service analysis, the increase in Vehicle Miles Traveled (VMT) as a result of a project is now the basis for determining transportation impacts. Because the County of Sonoma has not yet adopted standards of significance for evaluating VMT, guidance provided by the California Governor's Office of Planning and Research (OPR) in the publication *Technical Advisory on Evaluating Transportation Impacts in CEQA*, 2018, was used. This document indicates that a residential project generating vehicle travel that is 15 or more percent below the existing countywide residential VMT per capita may indicate a less-than-significant transportation impact.

Based on data from the recently updated Sonoma County Transportation Authority (SCTA) travel demand model, the County of Sonoma has a baseline average residential VMT of 15.56 miles per capita. Applying OPR's guidance, a residential project generating a VMT that is 15 percent or more below this value, or no more than 13.23 miles per capita, would have a less-than-significant VMT impact. The SCTA model includes traffic analysis zones (TAZ) covering geographic areas throughout Sonoma County. The Los Pinos Apartments project site is located within TAZ 569, which has a baseline VMT per capita of 13.59 miles.

The VMT associated with a development project is influenced by factors including density and the provision of on-site affordable housing. The publication *Quantifying Greenhouse Gas Mitigation Measures*, California Air



Pollution Control Officers Association (CAPCOA), 2010, includes a methodology to determine the VMT reductions associated with increases in residential density using conventional single-family home development as a baseline. For the proposed Los Pinos Apartments project, which has a residential density of 20 units per acre, an 11.5 percent reduction in VMT is projected. A methodology published in *Income, Location Efficiency, and VMT: Affordable Housing as a Climate Strategy*, The California Housing Partnership, 2015, was used to determine the VMT reductions associated with provision of on-site affordable housing (this method is also currently being used by the City of San Jose). The Los Pinos Apartments project would designate two apartments as "very low income" deed-restricted affordable units. The corresponding reduction in the project's VMT is projected to be 1.0 percent.

Combined, the project's proposed density and provision of on-site affordable housing would reduce its per capita VMT by 12.5 percent, thereby resulting in a project-specific rate of 11.89 VMT per capita. This is below the applied VMT significance threshold of 13.23 VMT per capita. Accordingly, the project as proposed would be expected to result in a less-than-significant VMT impact. The VMT findings are summarized in Table 11, and information including a summary of the input variables and adjustments is included in Appendix F.

Table 11 – Vehicle Miles Traveled Analysis Summary										
VMT Metric	Baseline VMT Rate	Significance Threshold	Project VMT Rate							
	(Countywide Average)	(15% Below Countywide Average)	Base Unadjusted (TAZ 569)	With Adjustments	Significance Finding					
Residential VMT per Capita (Countywide Baseline)	15.56	13.23	13.59	11.89	Less than significant					

Note: VMT Rate is measured in VMT per Capita, or the number of daily miles driven per resident; TAZ=Traffic Analysis Zone

**Finding** – The project would be expected to have a less-than-significant transportation impact on vehicle miles traveled.



## **Alternative Modes**

#### **Pedestrian Facilities**

Sidewalks exist along the project frontage with Santa Rosa Avenue, providing connectivity to nearby transit stops. Given the proximity of a variety of land uses in all directions from the project site uses including commercial, industrial, residential, and an elementary school, it is reasonable to assume that some project patrons and employees will want to walk, bicycle, and/or use transit to reach the project site.

Though nearby transit stops are located adjacent to signalized intersections, at the request of County staff the need for a midblock pedestrian crossing south of the project sight was evaluated. The potential volume of pedestrian traffic that the project would generate was estimated using standard person-trip rates published in the *Trip Generation Manual* for Multifamily Housing (Low-Rise) (Land Use #220). As shown in Table 12, application of these rates indicates that the project would be expected to generate approximately 18 pedestrian trips during the morning peak hour, and 27 person-trips during the evening peak hour.

Table 12 – Person Trip Generation Summary									
Land Use	Units	AM Peak Hour			PM Peak Hour				
		Rate	Trips	ln	Out	Rate	Trips	ln	Out
Multifamily Housing (Low-Rise)	50 du	0.36	18	3	15	0.53	27	16	11

Note: du = dwelling units

To be consistent with the distribution used for vehicle trips, it was assumed that 60 percent of these person trips would be to and from the south where the midblock crossing would be located. Of these, only the 9 outbound trips during the morning and 7 outbound evening peak hour trips would be expected to use the crossing. This distribution is shown in Table 13.

Table 13 – Person Trip Distribution Assumptions								
Route	Percent	AM Pe	ak Hour	PM Peak Hour				
		ln	Out	In	Out			
To/from the north on Santa Rosa Ave	40	1	6	6	4			
To/from the south on Santa Rosa Ave	60	2	9	10	7			
TOTAL	100	3	15	16	11			

Given the speed and volume of traffic on Santa Rosa Avenue, an unprotected midblock crossing would generally be inappropriate. The need for such a crossing was therefore evaluated within the context of warrants indicating when enhancements such as rectangular rapid flashing beacons (RRPBs) or a more restrictive device such as a HAWK would be appropriate. Based on criteria prescribed in the *California Manual on Uniform Traffic Control Devices* (MUTCD), and standards published by the National Cooperative Highway Research Program (NCHRP), a minimum of 20 pedestrian crossings per hour are needed to trigger warrants for any of the enhanced crossing devices. The project would generate an estimated maximum of 9 pedestrian crossings during either peak hour, with is only 45 percent of the number needed to meet the minimum volume warrant. As the project would not generate sufficient pedestrian traffic to warrant crossing treatments such as RRFBs, a midblock crosswalk is not recommended.

**Finding** – Pedestrian facilities serving the project site are generally adequate, though the nearest location where there is a marked crossing of Santa Rosa Avenue is about 800 feet north of the site at East Robles Avenue. Though consideration was given to installing a midblock crossing, given the nominal volume of traffic that the project would generate, one is not warranted and therefore not recommended.

#### **Bicycle Facilities**

There are existing bike lanes on Santa Rosa Avenue that connect the site to the nearby Hunter Creek Trail. The project plans indicate that 24 bicycle parking spaces would be provided on-site. This is more than adequate to meet the supply of one space for every four units that do not have a garage or other locations to store bicycles, or a requirement of facilities to store 13 bikes.

**Finding** – Existing bicycle facilities, together with shared use of minor streets provide adequate access for bicyclists. The proposed bike parking supply is adequate to meet City requirements.

#### **Transit**

Existing transit routes are adequate to accommodate project-generated transit trips and stops are within a generally acceptable walking distance of the site. There is a northbound stop approximately 400 feet north of the project site, and a southbound stop approximately 100 feet north of the project site; however, to reach the southbound bus stop the pedestrian would need to walk 800 feet north to East Robles Avenue, and then back south 700 feet to the bus stop. While this is slightly greater than one quarter of a mile, it is still an acceptable walking distance for most patrons. Because the stops for SCT are not located proximate to the signalized crossing at East Robles Avenue, the County may wish to consider relocating their stops to make crossings more accessible.

**Finding** – Transit facilities serving the project site are adequate.



## **Access and Circulation**

#### **Site Access**

The site would take access from one new driveway on Santa Rosa Avenue approximately 1,000 feet south of East Robles Avenue.

#### **Sight Distance**

Adequacy of sight distances along Santa Rosa Avenue at the proposed driveway location were evaluated based on sight distance criteria contained in *A Policy on Geometric Design on Highways and Streets* published by American Association of State Highway and Transportation Officials (AASHTO). These guidelines include recommended stopping sight distances for drivers traveling along the major approaches to driveways and for drivers of stopped vehicles at the minor street approaches and driveways based upon approach travel speeds. Sight distance should be measured from a 3.5-foot height at the location of the driver on the minor road to a 3.5-foot object height in the center of the approaching lane of the major road. Set-back for the driver on the crossroad shall be 14.5 feet, measured from the edge of the traveled way.

Based on the posted 40-mph speed limit on Santa Rosa Avenue, the minimum stopping sight distance needed is 305 feet. Sight distance extends more than 600 feet in each direction along Santa Rosa Avenue which is more than adequate for the posted speed limit. Additionally, Santa Rosa Avenue is straight and flat in the project vicinity so adequate sight distance is available for following drivers to see and react to a vehicle slowing to move into the center turn lane on Santa Rosa.

While sight distance is currently adequate, landscaping or signs placed along the project frontage can obstruct clear sight lines, so the design should include consideration of avoiding creating sight obstructions.

Finding - Adequate sight distance is available at the project driveway to accommodate all turns.

**Recommendation** – Landscaping near the driveways should be maintained such that foliage stays above seven feet or below three feet from the pavement level. Signs or monuments to be installed along the project frontage should be placed so that sight lines are not obstructed.

#### **Emergency Access**

As proposed, all interior drive aisles are of sufficient width to meet County of Sonoma design standards and there would be no anticipated issues with emergency response vehicles navigating the site.

**Finding** – Access for emergency vehicles is expected to be adequate.



## **Parking**

Because the project site is just outside of Santa Rosa City limits, both Sonoma County and the City of Santa Rosa will be reviewing the report, therefore parking was examined under the policies for both jurisdictions.

## **Required Parking**

#### **Sonoma County**

The project was analyzed to determine whether the proposed parking supply would be sufficient to satisfy County requirements. Chapter 26-86-010 of the *Sonoma County Municipal Code* requires multifamily housing developments to provide parking at a rate of one covered space per unit. To meet requirements, the proposed project would need to provide 50 covered spaces. The site plan shows 113 parking spaces, 58 of which would be covered so the proposed number of parking spaces exceeds County requirements.

#### Santa Rosa

Section 20-36.040 of the City of Santa Rosa Zoning Code indicates that multifamily housing developments are required to provide parking at a rate of one space per unit plus one space per unit with two or more bedrooms and one-half space per unit for guests. To meet requirements, the proposed project would need to provide at least 50 covered parking spaces and 63 uncovered spaces. The site plan shows 113 parking spaces, 58 of which would be covered so the proposed number of parking spaces meets the City requirements.

The parking requirements are summarized in Table 14.

Unit Size Un	Units	Supply	County	Requirements	City Requirements		
		(spaces)	Rate	<b>Spaces Required</b>	Rate	<b>Spaces Required</b>	
Two Bedrooms	38 du	95 (45 covered)	1.5 spaces/du	63 (38 covered)	1 covered space plus 1.5 visitor spaces per unit	95 (38 covered)	
One-Bedroom	12 du	18 (12 covered)	1 space/du	12 (12 covered)	1 covered space plus 0.5 visitor spaces per unit	18 (12 covered)	
Total		113 (50 covered)		75 (50 covered)		113 (50 covered)	

Notes: du = dwelling unit

**Finding** – The proposed parking supply satisfies County and City requirements.



## **Conclusions and Recommendations**

#### **Conclusions**

- The project is expected to generate an average of 366 new trips per day including 23 trips during the a.m. peak hour and 28 trips during the p.m. peak hour.
- Under Existing Conditions, the study intersections operate acceptably at LOS C or better during both peak hours evaluated and they would be expected continue operating at the same Levels of Service upon the addition of project-related traffic.
- Under Future Conditions, the study intersections are expected to operate acceptably except for Santa Rosa Avenue/Todd Road, which would deteriorate to LOS E during the p.m. peak hour. Upon the addition of project-related traffic, the study intersections would continue to operate at the same service levels during both peak hours and although Santa Rosa Avenue/Todd Road would operate unacceptably the project would reduce the intersection's average delay, so the impact would be acceptable under the County's policy.
- The project would cause queuing to increase in numerous locations where the available stacking length
  would be exceeded without the project; this is considered an acceptable impact. Queuing under Future
  volumes would be expected to extend beyond the adjacent intersections in both directions along South
  Moorland Avenue between Todd Road and the US 101 Overpass, requiring capacity improvements to
  accommodate the project as well as all other development in the area.
- As proposed, pedestrian, bicycle and transit facilities serving the project site are adequate. Though consideration was given to potential need for a midblock crosswalk, based on the volume of pedestrian traffic that the project would be expected to generate one is not warranted.
- Adequate sight distance is available at the proposed access point provided that trees and other landscaping are placed out of the vision triangles or maintained adequately.
- Access for emergency vehicles, as well as passenger vehicles, is expected to be adequate.
- The proposed parking supply of 113 spaces exceeds County requirements and meets the City of Sonoma Requirements.

#### Recommendations

- The project applicant should contribute to a funding program for capacity-increasing improvements needed at South Moorland Avenue/Todd Road-US 101 South Ramps and South Moorland Avenue/US 101 Overcrossing.
- Landscaping should be planted and maintained such that foliage stays above seven feet and below three feet from the surface of the road. Signs or monuments to be installed along the project frontage should be placed so that sight distance is not obstructed at the project driveways.



## **Study Participants and References**

#### **Study Participants**

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SOX681



# **Appendix A**

**Collision Rate Calculations** 





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#### Intersection Collision Rate Calculations

#### **Los Pinos Apartments TIS**

Intersection # 1: Santa Rosa Avenue & East Robles Avenue

Date of Count: Tuesday, March 03, 2020

Number of Collisions: 11 Number of Injuries: 7 Number of Fatalities: 0 ADT: 19100

Start Date: September 1, 2014 End Date: August 31, 2019

Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Urban

collision rate = Number of Collisions x 1 Million

ADT x 365 Days per Year x Number of Years

collision rate =  $\frac{11}{19,100} \frac{x}{x} \frac{1,000,000}{365} \frac{x}{x} \frac{5}{5}$ 

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	0.32 c/mve	0.0%	63.6%
Statewide Average*	0.24 c/mve	0.5%	44.6%

ADT = average daily total vehicles entering intersection c/mve = collisions per million vehicles entering intersection

\* 2016 Collision Data on California State Highways, Caltrans

Intersection # 2: Todd Road & South Moorland Avenue

Date of Count: Monday, April 22, 2019

Number of Collisions: 13 Number of Injuries: 3 Number of Fatalities: 0 ADT: 18100

Start Date: September 1, 2014 End Date: August 31, 2019 Number of Years: 5

Intersection Type: Tee
Control Type: Signals
Area: Urban

collision rate = Number of Collisions x 1 Million
ADT x 365 Days per Year x Number of Years

collision rate = 13 x 1,000,000 18,100 x 365 x 5

 Study Intersection Statewide Average\*
 Collision Rate | Fatality Rate | Injury Rate |
 Injury Rate |

 0.39 c/mve | 0.0% | 23.1% |
 23.1% |

 0.19 c/mve | 0.4% |
 46.8% |

ADT = average daily total vehicles entering intersection c/mve = collisions per million vehicles entering intersection 
\* 2016 Collision Data on California State Highways, Caltrans

#### **Intersection Collision Rate Calculaions**

#### Los Pinos Apartments TIS

Intersection # 3: Todd Road & US 101 Overpass

Date of Count: Monday, April 22, 2019

Number of Collisions: 3 Number of Injuries: 1 Number of Fatalities: 0 **ADT**: 18700

Start Date: September 1, 2014 End Date: August 31, 2019

Number of Years: 5

Intersection Type: Tee
Control Type: Signals Area: Urban

> Number of Collisions x 1 Million collision rate = ADT x 365 Days per Year x Number of Years

> collision rate =  $\frac{3}{18,700} \times \frac{1,000,000}{x}$

 Study Intersection Statewide Average\*
 Collision Rate | Fatality Rate | Injury Rate | 0.09 c/mve | 0.0% | 33.3% | 46.8%

ADT = average daily total vehicles entering intersection c/mve = collisions per million vehicles entering intersection \* 2016 Collision Data on California State Highways, Caltrans

Intersection # 4: Santa Rosa Avenue & Todd Road

Date of Count: Monday, April 22, 2019

Number of Collisions: 36 Number of Injuries: 6 Number of Fatalities: 0

ADT: 25700 Start Date: September 1, 2014 End Date: August 31, 2019
Number of Years: 5

Intersection Type: Four-Legged Control Type: Signals

collision rate = Number of Collisions x 1 Million
ADT x 365 Days per Year x Number of Years

collision rate =  $\frac{36}{25,700} \times \frac{1,000,000}{365} \times \frac{1}{x}$ 

Collision Rate Fatality Rate

0.77 c/mve 0.0% Study Intersection Statewide Average\* 0.24 c/mve

ADT = average daily total vehicles entering intersection c/mve = collisions per million vehicles entering intersection
\* 2016 Collision Data on California State Highways, Caltrans

#### Intersection Collision Rate Calculaions

#### Los Pinos Apartments TIS

Intersection # 5: South Moorland Avenue & US 101 Overpass

Date of Count: Monday, April 22, 2019

Number of Collisions: 12 Number of Injuries: 4 Number of Fatalities: 0 ADT: 14800

Start Date: September 1, 2014 End Date: August 31, 2019

Number of Years: 5

Intersection Type: Tee
Control Type: Signals
Area: Urban

collision rate = Number of Collisions x 1 Million

ADT x 365 Days per Year x Number of Years

 Study Intersection Statewide Average\*
 Collision Rate / 0.44 c/mve
 Fatality Rate / 0.0%
 Injury Rate / 33.3%

 0.44 c/mve
 0.0%
 33.3%

 0.19 c/mve
 0.4%
 46.8%

ADT = average daily total vehicles entering intersection c/mve = collisions per million vehicles entering intersection

\* 2016 Collision Data on California State Highways, Caltrans



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# **Appendix B**

**Traffic Counts** 



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# W-Trans

Weekday AM Peak Santa Rosa Ave at E Robles SOX681 County of Sonoma

File Name: SRAve at ERobles\_AM Site Code: 43218765 Start Date: 3/3/2020 Page No: 1

								Ġ	oups Prin	Groups Printed- Unshifted - Bank	ifted - Ba	nk 1									
		San	Santa Rosa Ave	Ave			) E	E. Robles				Sant	Santa Rosa Ave	'e			В	E. Robles			
		Š	Southbound	μ			×	Westbound	q			Š	Northbound				Ea	Eastbound			
Start Time	Right	Thru	Left	U- Turns	App. Total	Right	Thru	Left	U- Turns	App. Total	Right	Thru	Left	U- Turns	App. Total	Right	Thru		U- Turns	App. Total	Int. Total
08:30 AM	0	58	9	0	49	12	0	12	0	24	-	71	2	0	74	Т	0	2	0	3	165
08:45 AM	0	87	2	0	88	15	0	11	0	26	4	100	1	0	105	4	0	5	0	6	229
Total	0	145	∞	0	153		0	23	0	50	5	171	3	0	179	5	0	7	0	12	394
MA 00:00	0	1111	4	0	115		0	15	0	4	2	200	П	0	203	4	1	6	0	14	376
09:15 AM	9	26	5	0	108	31	0	12	0	43	5	261	0	0	566	2	0	∞	0	10	427
09:30 AM	5	103	∞	0	116	5	0	20	0	25	3	234	1	0	238	0	0	2	0	7	381
09:45 AM	3	101	2	0	106	10	0	S	0	15	9	234	21	0	261	2	0	_	0	æ	385
Total	14	412	19	0	445	75	0	52	0	127	16	929	23	0	896	8	1	20	0	29	1569
10:00 AM		87	9	0	94	6	0	6	0	18	co	263	æ	0	569	ĸ	0	æ	0	9	387
10:15 AM	0	106	5	0	1111	10	0	9	0	16	5	186	1	0	192	33	0	-	0	4	323
Grand Total	15	750	38	0	803	121	0	90	0	211	56	1549	30	0	1608	19	1	31	0	51	2673
Apprch %	1.9	93.4	4.7	0		57.3	0	42.7	0		1.8	96.3	1.9	0		37.3	7	8.09	0		
Total %	9.0	28.1	1.4	0	30	4.5	0	3.4	0	7.9	1.1	57.9	1.1	0	60.2	0.7	0	1.2	0	1.9	
Unshifted	15	750	38	0	803		0	06	0	211	53	1549	30	0	1608	19	-	31	0	51	2673
% Unshifted	100	100	100	0	100		0	100	0	100	100	100	100	0	100	100	100	100	0	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		Sant	Santa Rosa Ave	ve			E	E. Robles				Sants	Santa Rosa Ave	ve			Ā	E. Robles			
		$S_0$	Southbound	F			M	estbound				No	Northbound	_			Es	Eastbound			
Start Time Right	Right	Thru	Left	U- Turns	App. Total	Right	Thru	Left	U- Turns	App. Total	Right	Thru	Left	U- Turns	App. Total	Right	Thru	Left	U- Turns	App. Total	Int. Total
Peak Hour Analysis From 08:30 AM to 10:15 AM - Peak 1 of 1	is From 08	3:30 AM t	o 10:15 A	M - Peak	1 of 1																
Peak Hour for Entire Intersection Begins at 09:15 AM	ire Interse	ction Begi	ns at 09:1	5 AM																	
09:15 AM	9	26	5	0	108	31	0	12	0	43	5	261	0	0	566	2	0	œ	0	10	427
09:30 AM	5	103	œ		116	5	0	70	0	25	æ	234	-	0	238	0	0	7	0	7	381
09:45 AM	3	101	2	0	106	10	0	5	0	15	9		21	0	261	2	0	1	0	m	385
10:00 AM	1	87	9	0	94	6	0	6	0	18	æ	263	æ	0	569	e	0	m	0	9	387
Total Volume	15	388	21	0	424	55	0	46	0	101	17	992	25	0	1034	7	0	14	0	21	1580
% App. Total	3.5	91.5	5	0		54.5	0	45.5	0		1.6	6.56	2.4	0		33.3	0	2.99	0		
PHF	.625	.942	.656	000.	.914	4. 44.	000	.575	000	.587	.708	.943	.298	000.	.961	.583	000.	.438	000	.525	.925

# W-Trans

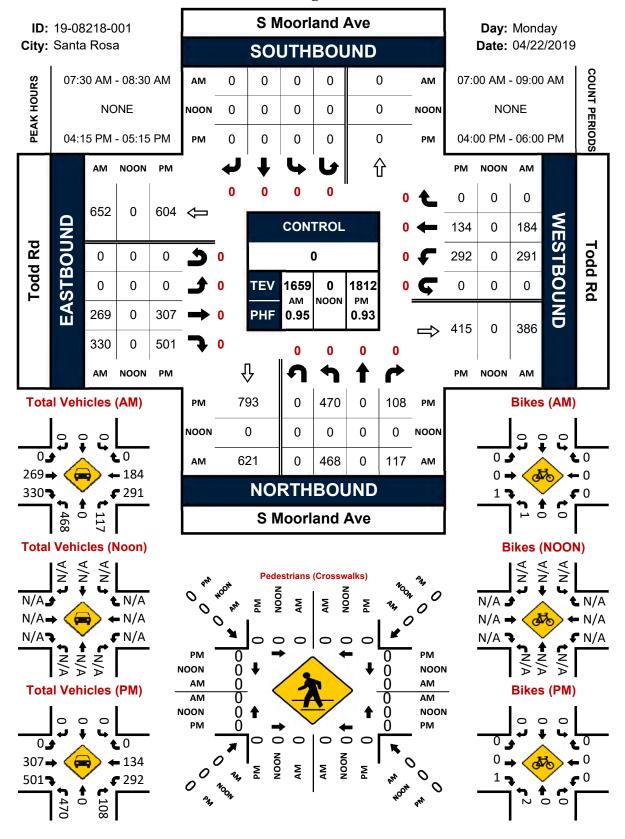
Weekday PM Peak Santa Rosa Ave at E Robles SOX 681 County of Sonoma

File Name: SRAve at ERobles\_PM Site Code: 56781234 Start Date: 3/3/2020 Page No: 1

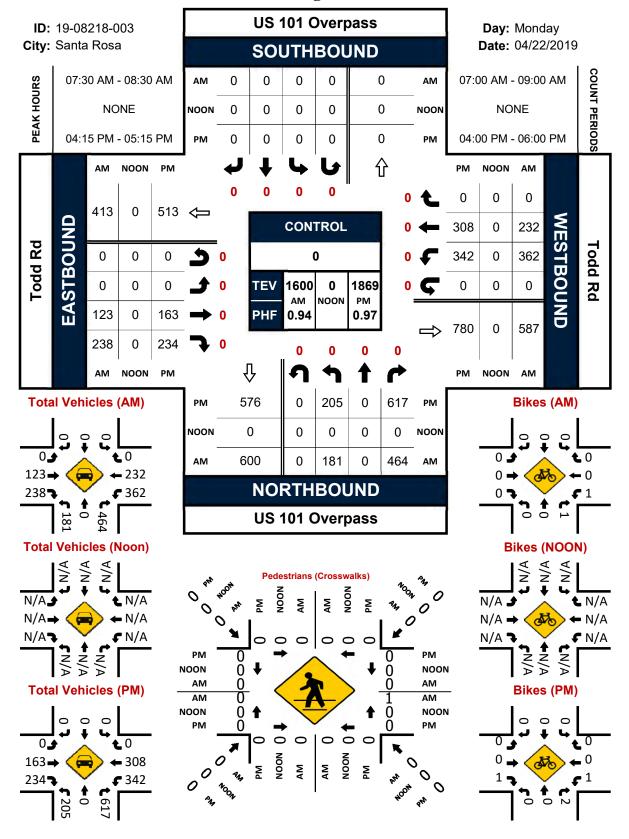
	Int. Total	494	460	954	448	507	482	444 444	1881	440	399	3674			3674	100	0	0
	App. Total	13	S	18	13	10	12	10	45	11	10	84		2.3	84	100	0	0
	U- Turns	0	0	0	0	0	0	0	0	0	1	-	1.2	0	1	100	0	0
E Robles	Left	10	4	14	7	9	6	∞	30	6	6	62	73.8	1.7	62	100	0	0
 	Thru	0	0	0	0	2	0	0	2	0	0	2	2.4	0.1	2	100	0	0
	Right	3	1	4	9	2	3	2	13	2	0		22.6	0.5	19	100	0	0
	App. Total	301	265	999	285	289	269	259	1102	274	229	2171		59.1	2171	100	0	0
lve	U- Turns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Rosa Ave Northbound	Left	2	3	5	∞	33	-	4	16	4	5	30	1.4	0.8	30	100	0	0
<b>-</b>	Thru	284	250	534	264	277	250	239	1030	258	218	2040	94	55.5	2040	100	0	0
Dallited - Dallited	Right		12		13	6	18		99	12		101	4.7	2.7		100	0	0
IIIca - OIII	App. Total	20	17	37	13	24	19	18	74	14	15	140		3.8	140	100	0	0
des des und	U- Tums	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E Robles Westbound	Left	6	∞	17	5	9	5	5	21	S	9	49	35	1.3	49	100	0	0
	Thru	1	0	1	0	1	1	0	2	1	0	4	2.9	0.1	4	100	0	0
	. Right	10	6	19		17	13	, 13	51		6	87	62.1	2.4	87	100	0	0 0
	App. Total	160	173	333	137	184	182	157	099	141	145	1279		34.8	1279	100	0	_
Ave	U- Turns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Rosa Ave Southbound	Left	11	12	23	6	19	∞	15	51		13		7.9	2.7	101	100	0	0
Sa	Thru	146	159		122	163		140	969	120	126	1147	89.7		1147	100	0	0
	Right	3	2	5	9	2	3	2	13	7	9	31	2.4		31	100	0	0
	Start Time	05:30 PM	05:45 PM	Total	06:00 PM	06:15 PM	06:30 PM	06:45 PM	Total	07:00 PM	07:15 PM	Grand Total	Apprch %	Total %	Unshifted	% Unshifted	Bank 1	% Bank 1

		San	Santa Rosa Ave	ve			H	E Robles				Santa	Santa Rosa Ave	e			E	E Robles			
		$S_0$	Southbound	_			M	Westbound				No	Northbound				Ea	Eastbound			
Start Time Right	Right	Thru	Left	U- Turns	App. Total	Right	Thru	Left	U- Furns	App. Total	Right	Thru	Left	U- Turns	App. Total	Right	Thru	Left	U- Turns	App. Total	Int. Total
Peak Hour Analysis From 05:30 PM to 07:15 PM - Peak 1 of 1	is From 0;	5:30 PM to	o 07:15 PM	M - Peak 1	of 1																
Peak Hour for Entire Intersection Begins at 05:30 PM	ire Interse	ction Beg	ins at 05:3	:0 PM																	
05:30 PM	3	146	11	0	160	10	-	6	0	20	15	284	2	0	301	c	0	10	0	13	494
05:45 PM	2	159	12	0	173	6	0	8	0	17	12	250	æ	0	265	-	0	4	0	S	460
06:00 PM	9	122	6	0	137	∞	0	S	0	13	13	264	œ	0	285	9	0	7	0	13	448
06:15 PM	2	163	19		184	17	1	9	0	2	6	277	ĸ	0	586	2	7				207
Total Volume	13	290	51	0	654	44	2	28	0	74	49	1075	16	0	1140	12	2	27	0	41	1909
% App. Total	2	90.2	7.8	0		59.5	2.7	37.8	0		4.3	94.3	1.4	0		29.3	4.9	62.9	0		
PHF	.542	905	.671	000.	688.	.647	.500	.778	000	.771	.817	.946	.500	000	.947	.500	.250	.675	000.	.788	.941

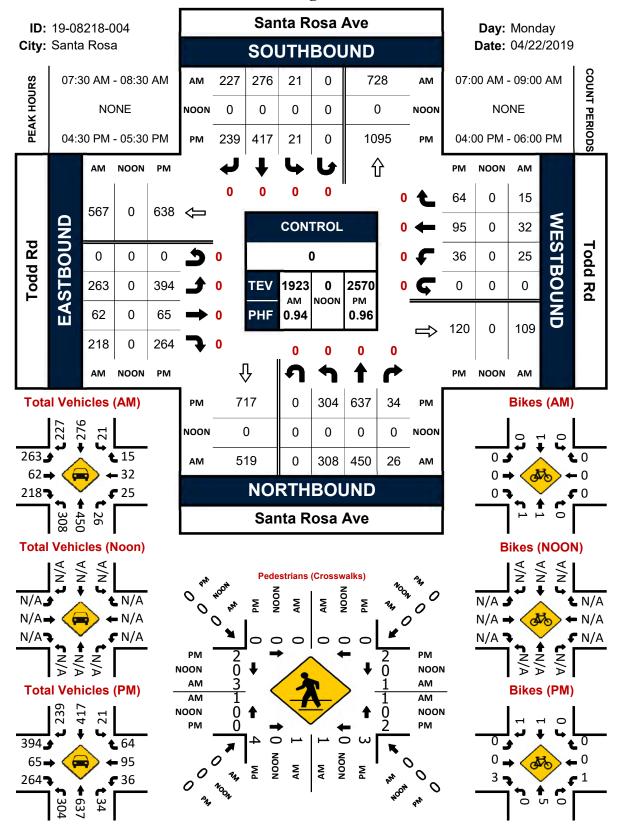
### S Moorland Ave & Todd Rd



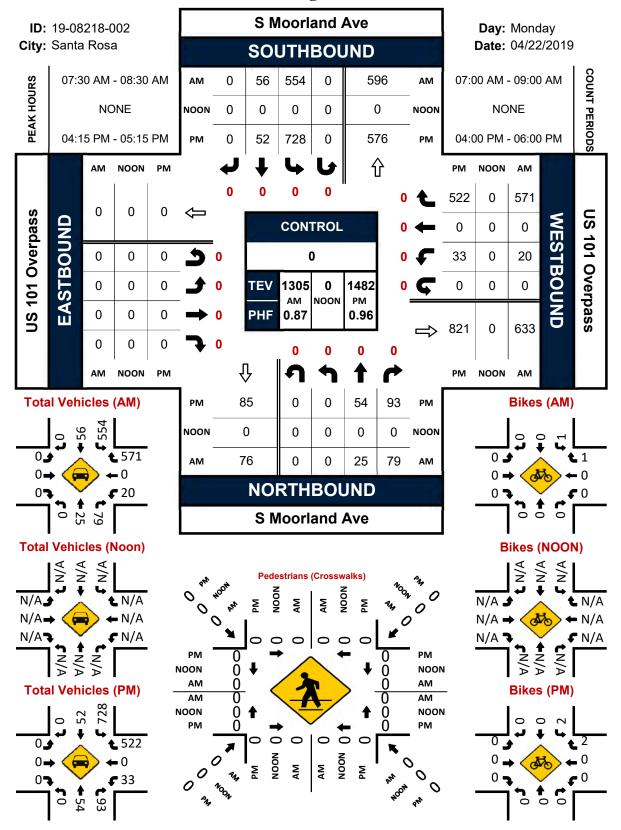
# US 101 Overpass & Todd Rd



#### Santa Rosa Ave & Todd Rd



# S Moorland Ave & US 101 Overpass



# **Appendix C**

**Intersection Level of Service Calculations** 





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HCM 6th Signalized Intersection Summary 1: Santa Rosa Ave & East Robles Ave

Movement Lane Configurations Traffic Volume (veh/h) initial Q (Qb), veh Pool Disc Asi'n ski'n										-		
Lane Configurations Traffic Volume (veh/h) Future Volume (veh/h) Initial Q (Qb), veh	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (veh/h) Future Volume (veh/h) Initial Q (Qb), veh		4		K	42		K	44		*	44	
Future Volume (veh/h) Initial Q (Qb), veh	4	0	7	46	0	22	25	992	17	21	388	15
Initial Q (Qb), veh	4	0	7	46	0	22	22	992	17	21	388	15
The Alice Act	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbi)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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		8			2			%			%	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
	12	0	∞	49	0	29	27	1067	18	23	417	16
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	7
	224	0	17	353	0	110	43	1428	24	37	1381	53
Arrive On Green	0.08	0.00	0.08	0.08	0.00	0.08	0.03	0.44	0.44	0.02	0.44	0.44
Sat Flow, veh/h	400	0	214	1267	0	1402	1603	3217	54	1603	3136	120
Grp Volume(v), veh/h	23	0	0	49	0	26	27	530	222	23	212	221
Grp Sat Flow(s),veh/h/ln	614	0	0	1267	0	1402	1603	1599	1672	1603	1599	1657
Q Serve(g_s), s	0.5	0:0	0.0	0.0	0.0	1.2	0.5	8.5	8.5	0.4	5.6	2.7
c), s	1.8	0.0	0.0	6.0	0.0	1.2	0.5	8.5	8.5	0.4	5.6	2.7
	0.65		0.35	1.00		1.00	1.00		0.03	1.00		0.07
Lane Grp Cap(c), veh/h	241	0	0	353	0	110	43	710	742	37	704	730
	0.10	0.00	0.00	0.14	0.00	0.54	0.63	0.75	0.75	0.62	0.30	0.30
Avail Cap(c_a), veh/h	1483	0	0	1590	0	1479	546	1454	1520	651	1557	1614
.0	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0:0	0.0	13.5	0.0	13.7	14.8	7.1	7.1	14.9	9.6	5.6
Incr Delay (d2), s/veh	0.1	0:0	0.0	0.1	0.0	1.5	5.5	9.0	9.0	6.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0:0	0.0	0.3	0.0	0.4	0.2	1.2	1.3	0.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.6	0.0	0.0	13.6	0.0	15.2	20.3	7.7	7.7	21.0	9.6	5.7
LnGrp LOS	В	A	A	В	A	В	ပ	A	A	ပ	A	⋖
Approach Vol, veh/h		23			108			1112			456	
Approach Delay, s/veh		14.6			14.4			8.0			6.4	
Approach LOS		Ф			Ф			∢			∢	P
Timer - Assigned Phs	_	2		4	2	9		∞				Ī
Phs Duration (G+Y+Rc), s	5.2	18.7		6.9	5.3	18.6		6.9				
Change Period (Y+Rc), s	4.5	2.0		4.5	4.5	2.0		4.5				
Max Green Setting (Gmax), s	12.5	28.0		32.5	10.5	30.0		32.5				١
Max Q Clear Time (g_c+I1), s	2.4	10.5		3.8	2.5	4.7		3.2				
Green Ext Time (p_c), s	0.0	3.0		0.0	0.0	1.1		0.2				
Intersection Summary												Ī
HCM 6th Ctrl Delay			8 4								ı	ı
HCM 6th LOS			5 ⋖									

Los Pinos Apartments TIS W-Trans
AM Existing Page 1

HCM 6th Signalized Intersection Summary 2: S Moorland Ave & Todd Rd/US 101 South Ramps

03/30/2020

03/30/2020

Movement EBI EBI WBI WBI WBI NBI NBI NBI SBI SET SBR Lane Configurations		1	1	-	1	ļ	1	1	<b>—</b>	•	۶	<b>→</b>	*
100   269   330   291   184   0 488   0   117   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
0 289 330 231 184 0 468 0 117 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lane Configurations	k-	+	W	K.	2,		¥.		N. N.		4	
0 269 330 291 184 0 468 0 117 0 0 0 100 100 100 100 100 100 100	Traffic Volume (veh/h)	0	269	330	291	184	0	468	0	117	0	0	0
100 100 100 100 100 100 100 100 100 100	Future Volume (veh/h)	0	569	330	291	184	0	468	0	117	0	0	0
100 100 100 100 100 100 100 100 100 100	Initial Q (Qb), veh	0	0	0	0	0	0	က	0	0	0	0	0
1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   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		0.98	1.00		1.00	1.00		1.00	1.00		1.00
No 1870 1870 1870 1870 1870 1870 1870 1870	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
1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870	Work Zone On Approach		8			S			8			8	
0.0 283 158 306 194 0 493 0 57 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95	Adj Flow Rate, veh/h	0	283	158	306	194	0	493	0	22	0	0	0
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
590 619 513 614 645 0 0 0 0 0 0 10  1781 1870 1459 1781 1870 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	2	2
1781   1870   1549   1781   1870   0 000 0.00 0.00 0.00 0.00 0.00 0.00	Cap, veh/h	230	619	513	614	645	0	0	0	0	0	10	0
1781   1870   1449   1781   1870   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Arrive On Green	0.00	0.33	0.33	0.34	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1781 1870 194 0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sat Flow, veh/h	1781	1870	1549	1781	1870	0		0		0	1870	0
1781   1870   1549   1781   1870   0   0   1870   0   0   0   0   0   0   0   0   0	Grp Volume(v), veh/h	0	283	158	306	194	0		0.0		0	0	0
0,0 2,3 1,5 2,6 1,4 0,0 0,0 0,0 0,0 0,0 0,0 0,0 1,0 1,0 1,0	Grp Sat Flow(s),veh/h/ln	1781	1870	1549	1781	1870	0				0	1870	0
100 2.3 1.5 2.6 1.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Q Serve(g_s), s	0.0	2.3	1.5	5.6	1.4	0.0				0.0	0.0	0.0
1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00	Cycle Q Clear(g_c), s	0.0	2.3	1.5	5.6	1.4	0.0				0.0	0.0	0.0
590         619         513         614         645         0         0         10           500         66         633         0.50         0.00         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Prop In Lane	1.00		1.00	1.00		0.00				0.00		0.00
1938 2035 1685 2795 2936 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Lane Grp Cap(c), veh/h	230	619	513	614	645	0				0	9	0
1938 2035 1885 2795 2935 0 0 0 1859 1100 1.00 1.00 1.00 1.00 1.00 1.00 1.00	V/C Ratio(X)	0.00	0.46	0.31	0.50	0.30	0.00				0.00	0.00	0.00
1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00	Avail Cap(c_a), veh/h	1938	2035	1685	2795	2935	0				0	1859	0
0.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00	HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
0.0 5.0 48 5.0 46 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.00	0.00	0.00
0.0 0.5 0.3 0.6 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Uniform Delay (d), s/veh	0.0	5.0	4.8	2.0	4.6	0.0				0.0	0.0	0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Incr Delay (d2), s/veh	0.0	0.5	0.3	9.0	0.3	0.0				0.0	0.0	0.0
0.0 0.2 0.1 0.2 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	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 5.6 5.1 5.6 4.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	%ile BackOfQ(50%),veh/In	0.0	0.2	0.1	0.2	0.1	0.0				0.0	0.0	0.0
0.0 9.5 9.1 9.6 4.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Unsig. Movement Delay, s/vel	Ш	L	ī	C		d				d	d	d
5.4 A B B S S S S S S S S S S S S S S S S S	LhGrp Delay(d),s/ven	0.0	0.0	- <	0.0	0.4	0.0				0.0	0.0	0.0
5.4 5.3 A A B 8.3 0.0 9.5 9.6 0.0 4.3 3.0 0.0 4.3 4.6 0.0 1.9 2.0	Annmach Vol vehilb	C	441	C	C	2005	C				c	( C	
2 4 A 8 8 8 8 9.0 0.0 9.5 9.6 9.6 9.0 0.0 4.3 3.0 3.0 0.0 0.0 1.9 4.5 4.6 9.0 4.3 4.6 4.6 9.0 4.3 4.6 4.6 9.0 4.3 4.6 4.6 4.6 9.0 4.3 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6	Approach Delay, s/veh		5.4			5.3						0.0	
2 4 0.0 9.5 3.0 3.2 19.0 20.8 0.0 4.3 0.0 1.9 5.3	Approach LOS		A			A							
0.0 9.5 3.0 3.2 19.0 20.8 0.0 4.3 0.0 1.9	Timer - Assigned Phs		2		4				œ				-
3.0 3.2 19.0 20.8 0.0 4.3 0.0 1.9 5.3	Phs Duration (G+Y+Rc), s		0.0		9.2				9.6				
19.0 20.8 0.0 4.3 0.0 1.9 1.9 5.3 A A	Change Period (Y+Rc), s		3.0		3.2				3.0				
0.0 4.3 0.0 1.9 5.3 A A	Max Green Setting (Gmax), s		19.0		20.8				30.0				
0.0 1.9 5.3 A	Max Q Clear Time (g_c+I1), s		0.0		4.3				4.6				
	Green Ext Time (p_c), s		0.0		1.9				2.0				
	Intersection Summary												Ī
	HCM 6th Ctrl Delay			5.3									
	HCM 6th LOS			۵									ľ

Los Pinos Apartments TIS W-Trans
AM Existing Page 2

HCM 6th Signalized Intersection Summary 3: US 101 Overpass & Todd Rd

	1	7	4	ļ	1		
Movement	FBT	FRR	WB	WBT	R	NBR	
l ane Configurations	*	*	je.	40	r	N. N.	
Traffic Volume (veh/h)	123	238	362	232	181	464	
Future Volume (veh/h)	123	238	362	232	181	464	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)		9:	0.1		0.1	9:	
Parking Bus, Adj	0.1	1.00	1:00	9:	9:	1.00	
work zone on Approach	ON OF	7	0107	010	010	0107	
Adj Sat Flow, ven/h/ln	1870	18/0	1870	1870	18/0	18/0	
Adj Flow Kate, ven/n Dook Hour Easter	2 6	200	202	747	28.0	704	
Percent Heavy Veh %	ţ ~	t ~	t ~	t ~	t ~	t ~	
Cap. veh/h	465	207	931	489	406	1364	
Arrive On Green	0.13	0.13	0.26	0.26	0.23	0.23	
Sat Flow, veh/h	3647	1585	3563	1870	1781	2790	
Grp Volume(v), veh/h	131	93	385	247	193	482	
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1870	1781	1395	
Q Serve(g_s), s	6.0	1.5	2.5	3.1	5.6	2.9	
Cycle Q Clear(g_c), s	6.0	1.5	2.5	3.1	5.6	5.9	
Prop In Lane		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	465	207	931	489	406	1364	
V/C Ratio(X)	0.28	0.45	0.41	0.51	0.48	0.35	
Avail Cap(c_a), veh/h	2637	1176	1999	1049	21.9	1789	
HCM Platoon Ratio	1.00	1.00	1:00	1:00	1:00	1.00	
Upstream Filter(I)	00.0	1.00	1.00	1.00	1.00	0:	
Uniform Delay (d), s/veh	10.8	=======================================	8.5	8.7	9.5	4.4	
Incr Delay (d2), s/veh	0.3	1.5	0.3	0.8	6.0	0.2	
Initial Q Delay(d3),S/ven	0.0	0.0	0.0	0.0	0.0	0.0	
Valle BackOrd(30%), Verinin	o	4.0	0.0	0.0	0.7	S: 0	
nGm Delav(d) s/veh	113	126	8 7	9.5	10.1	4.5	
LnGrp LOS	В	ш	⋖	⋖	В	×	
Approach Vol, veh/h	224			632	675		
Approach Delay, s/veh	11.8			9.0	6.1		
Approach LOS	В			∢	∢		
Timer - Assigned Phs		2				9	8
Phs Duration (G+Y+Rc), s		7.1				10.7	8.6
Change Period (Y+Rc), s		3.5				3.5	3.5
Max Green Setting (Gmax), s		20.5				15.5	10.5
Max Q Clear Time (g_c+l1), s		3.5				5.1	4.9
Green Ext Time (p_c), s		6.0				2.1	1.4
Intersection Summary							İ
HCM 6th Ctrl Delay			8.1				
HCM 6th LOS			A				
Notes							

Notes
User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS AM Existing

W-Trans Page 3

HCM 6th Signalized Intersection Summary 4: Santa Rosa Ave & Todd Rd

03/30/2020

03/30/2020

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Movement	EB	FBT	FBR	WBI	WBT	WBR	NBI	NBT	NBR	SBI	SBT	SBR
lane Configurations	K	+	W	N.	4		N.	**	×	*	**	1
Traffe Volume (veh/h)	283	63	218	25	50	7	308	450	90	24	376	700
Fiftine Volume (veh/h)	263	6 6	218	25	3.2	5 4	308	450	26	2 2	276	227
Initial Q (Qb), veh	0	0	0	0	0	0	c	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	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		8			S			8			8	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	175	218	83	27	34	9	331	484	17	23	297	132
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	309	324	270	06	78	14	405	1271	264	40	581	258
Arrive On Green	0.17	0.17	0.17	0.05	0.05	0.05	0.22	0.35	0.35	0.02	0.16	0.16
Sat Flow, veh/h	1781	1870	1557	1781	1547	273	1781	3554	1578	1781	3554	1576
Grp Volume(v), veh/h	175	218	83	27	0	40	331	484	17	23	297	132
Grp Sat Flow(s), veh/h/ln	1781	1870	1557	1781	0	1820	1781	1777	1578	1781	1777	1576
Q Serve(g_s), s	4.0	4.9	2.1	0.7	0.0	1.0	8.0	4.6	0.3	9.0	3.4	3.4
Cycle Q Clear(g_c), s	4.0	4.9	2.1	0.7	0.0	1.0	8.0	4.6	0.3	9.0	3.4	3.4
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	309	324	270	90	0	91	405	1271	264	40	581	258
//C Ratio(X)	0.57	0.67	0.31	0.30	0.00	0.44	0.82	0.38	0.03	0.58	0.51	0.51
Avail Cap(c_a), veh/h	1407	1477	1230	416	0	425	674	3043	1352	416	2569	1140
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
Jpstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	17.6	16.4	20.8	0.0	21.0	16.8	10.8	9.2	22.0	17.4	17.4
incr Delay (d2), s/veh	9.0	0.0	0.2	0.7	0.0	1.2	1.6	0.1	0.0	4.9	0.3	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0:0	0:0	0:0	0:0	0.0
%ile BackOfQ(50%),veh/In	7.	1.9	9.0	0.3	0.0	0.4	3.2	<del>د</del> .	0.1	0.3	1.2	
Unsig. Movement Delay, s/ven		707	4	5	0	c		0		010	71	710
LnGrp Delay(d),s/ven	o. a	0.0 G	0.0 a	C.12	0.0	7.77	20.5	9.0 B. a	o. v	0.12	o a	. a
Approach Vol. veh/h	1	476	1		67			832			452	
Approach Delay, s/veh		17.9			21.9			14.7			18.2	
Approach LOS		В			O			В			В	
Timer - Assigned Phs		2	က	4		9	7	00				
Phs Duration (G+Y+Rc), s		12.3	14.0	11.9		6.8	5.5	20.4				
Change Period (Y+Rc), s		4.5	4.0	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		35.5	17.0	32.5		10.5	10.5	38.5				
Max Q Clear Time (g_c+I1), s		6.9	10.0	5.4		3.0	5.6	9.9				
Green Ext Time (p_c), s		0.8	0.2	1.0		0.0	0.0	1.5				
Intersection Summary												
HCM 6th Ctrl Delay			16.7									
HCM 6th LOS			В									
Notes												

Notes:
User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS AM Existing

HCM Signalized Intersection Capacity Analysis 5: S Moorland Ave & US 101 Overpass

			-	,				
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
l ana Configurations	Þ		4		k	47		
Traffic Volume (vnh)	- 8	571	2,5	52	554	£ 25		
Future Volume (vph)	2 8	571	32	62	554	32.		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width	#	#	12	12	12	12		
Total Lost time (s)	4.5		4.5		4.5	4.5		
Lane Util. Factor	1.00		1.00		0.95	0.95		
Ĭ	0.87		06:0		1.00	1.00		
Fit Protected	1:00		1.00		0.95	96:0		
Satd. Flow (prot)	1563		1672		1681	1700		
FIt Permitted	1:00		1.00		0.95	96.0		
Satd. Flow (perm)	1563		1672		1681	1700		
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87		
Adj. Flow (vph)	23	929	53	91	637	22		
RTOR Reduction (vph)	510	0	8	0	0	0		
Lane Group Flow (vph)	169	0	40	0	320	351		
Turn Type	Prot		ΑN		Split	AN		
Protected Phases	00		2		9	9		
Permitted Phases								
Actuated Green, G (s)	10.5		5.6		17.6	17.6		
Effective Green, g (s)	10.5		5.6		17.6	17.6		
Actuated g/C Ratio	0.22		0.12		0.37	0.37		
Clearance Time (s)	4.5		4.5		4.5	4.5		
Vehicle Extension (s)	3.0		3.0		3.0	3.0		
Lane Grp Cap (vph)	347		198		626	633		
//s Ratio Prot	00.11		c0.02		c0.21	0.21		
//s Ratio Perm								
v/c Ratio	0.49		0.20		0.56	0.55		
Uniform Delay, d1	16.0		18.8		11.7	11.7		
Progression Factor	1.00		1.00		1.00	1.00		
Incremental Delay, d2	1.1		0.5		<del>[</del> :	1.1		
Delay (s)	17.1		19.3		12.8	12.8		
Level of Service	В		Ф		ш	В		
Approach Delay (s)	17.1		19.3			12.8		
Approach LOS	ш		ш			В		
Intersection Summary								
HCM 2000 Control Delay			15.2	ľ	M 2000 I	HCM 2000 Level of Service	В	
HCM 2000 Volume to Capacity ratio	acity ratio		0.48					
Actuated Cycle Length (s)			47.2	Su	Sum of lost time (s)	time (s)	13.5	
Intersection Capacity Utilization	ation		67.4%	ਠ	ICU Level of Service	f Service	O	
Analysis Period (min)			75					
,			2					

Los Pinos Apartments TIS W-Trans AM Existing Page 5

HCM 6th Signalized Intersection Summary 1: Santa Rosa Ave & East Robles Ave

03/31/2020

03/30/2020

	1	Ť	>	*		,	_	-		4	•	'
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		je.	24		¥	4.4		*	44	
Traffic Volume (veh/h)	27	2	12	28	2	44	16	1075	49	21	290	13
Future Volume (veh/h)	27	2	12	28	2	44	16	1075	49	21	290	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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		2			9			8			8	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	53	7	13	30	7	47	17	1144	25	72	628	4
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	7	7	2	2	2	7	2	2	2	7
Cap, veh/h	203	2	=	315	4	84	28	1468	29	9/	1603	99
Arrive On Green	90:0	90.0	90.0	90.0	90:0	90.0	0.02	0.47	0.47	0.05	0.50	0.50
Sat Flow, veh/h	388	27	174	1259	58	1354	1603	3111	141	1603	3196	71
Grp Volume(v), veh/h	44	0	0	30	0	49	17	288	809	54	314	328
Grp Sat Flow(s), veh/h/ln	289	0	0	1259	0	1411	1603	1599	1653	1603	1599	1668
Q Serve(g_s), s	1.0	0.0	0.0	0.0	0.0	<del>[</del> :	0.4	10.3	10.3	<del>1.</del>	4.1	4.1
Cycle Q Clear(g_c), s	2.1	0.0	0.0	9.0	0.0	<del>[</del> -	0.4	10.3	10.3	<del>[</del> -	4.1	4.1
Prop In Lane	99.0		0.30	1.00		96.0	1.00		0.09	1.00		0.0
Lane Grp Cap(c), veh/h	215	0	0	315	0	88	28	755	780	9/	802	837
V/C Ratio(X)	0.20	0.00	0.00	0.10	0.00	0.56	0.61	0.78	0.78	0.71	0.39	0.39
Avail Cap(c_a), veh/h	1386	0	0	1460	0	1372	204	1339	1385	299	1435	1497
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	0.0	12.0	0.0	15.2	16.3	7.4	7.4	15.7	5.5	5.2
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.0	2.1	9.7	0.7	9.0	4.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lin	0.3	0.0	0.0	0.2	0.0	0.3	0.2	1.6	1.6	0.4	0.5	0.5
Unsig. Movement Delay, s/veh	Ш											
LnGrp Delay(d),s/veh	16.5	0.0	0.0	15.0	0.0	17.3	23.9	8.0	8.0	20.3	5.3	5.3
LnGrp LOS	ш	⋖	⋖	m	⋖	ш	O	V	⋖	ပ	⋖	∢
Approach Vol, veh/h		44			79			1213			969	
Approach Delay, s/veh		16.5			16.4			œ .3			6.4	
Approach LOS		m			В			∢			⋖	
Timer - Assigned Phs	1	2		4	5	9		8				٦
Phs Duration (G+Y+Rc), s	6.1	20.8		9.9	5.1	21.8		9.9				
Change Period (Y+Rc), s	4.5	2.0		4.5	4.5	2.0		4.5				
Max Green Setting (Gmax), s	12.5	28.0		32.5	10.5	30.0		32.5				
Max Q Clear Time (g_c+I1), s	3.1	12.3		4.1	2.4	6.1		3.1				
Green Ext Time (p_c), s	0.0	3.4		0.1	0.0	1.7		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			α									
LOW OUT OUT DOING			5									

Los Pinos Apartments TIS W-Trans PM Existing Page 1

HCM 6th Signalized Intersection Summary 2: S Moorland Ave & Todd Rd/US 101 South Ramps

0.3	120	101	20	n
US	/30	١Z١	JZ	U

	*	-	*	1	+	1	4	1	1	1	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lane Configurations	1	<b>+</b>	7	- 1	1		7		16.4		4	
Traffic Volume (veh/h)	0	307	501	292	134	0	470	0	108	0	0	(
Future Volume (veh/h)	0	307	501	292	134	0	470	0	108	0	0	(
Initial Q (Qb), veh	0	1	0	0	0	0	3	0	0	0	0	(
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	330	283	314	144	0	505	0	51	0	0	(
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	0	2	2	2	2
Cap, veh/h	648	680	563	585	614	0	0	0	0	0	9	(
Arrive On Green	0.00	0.36	0.36	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1781	1870	1548	1781	1870	0		0		0	1870	(
Grp Volume(v), veh/h	0	330	283	314	144	0		0.0		0	0	(
Grp Sat Flow(s),veh/h/ln	1781	1870	1548	1781	1870	0				0	1870	(
Q Serve(g_s), s	0.0	2.7	2.9	2.9	1.1	0.0				0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.7	2.9	2.9	1.1	0.0				0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00				0.00		0.00
Lane Grp Cap(c), veh/h	648	680	563	585	614	0				0	9	(
V/C Ratio(X)	0.00	0.49	0.50	0.54	0.23	0.00				0.00	0.00	0.00
Avail Cap(c_a), veh/h	1846	1938	1605	2662	2795	0				0	1770	(
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.0	5.0	5.5	4.9	0.0				0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.7	0.8	0.2	0.0				0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.4	0.1	0.0				0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.5	5.7	6.3	5.1	0.0				0.0	0.0	0.0
LnGrp LOS	Α	Α	Α	Α	Α	Α				Α	Α	P
Approach Vol, veh/h		613			458						0	
Approach Delay, s/veh		5.6			5.9						0.0	
Approach LOS		Α			Α							
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		0.0		10.5				9.6				
Change Period (Y+Rc), s		3.0		3.2				3.0				
Max Green Setting (Gmax), s		19.0		20.8				30.0				
Max Q Clear Time (g_c+l1), s		0.0		4.9				4.9				
Green Ext Time (p_c), s		0.0		2.7				1.7				
Intersection Summary												-
HCM 6th Ctrl Delay			5.7									
HCM 6th LOS			Α									

Los Pinos Apartments TIS W-Trans PM Existing Page 2 HCM 6th Signalized Intersection Summary 3: US 101 Overpass & Todd Rd

03/30/2020

Lane Configurations		-	1	1	+	1	1		
Traffic Volume (vehrh) 163 234 342 308 205 617  Future Volume (vehrh) 163 234 342 308 205 617  Initial Q (Qb), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Traffic Volume (vehrh) 163 234 342 308 205 617  Future Volume (vehrh) 163 234 342 308 205 617  Initial Q (Qb), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lane Configurations	44	1	*	414	*	11		
Future Volume (veh/h)			234						
Initial Q (Qb), veh		163	234	342	308	205	617		
Ped-Bike Adj(A_pbT)									
Parking Bus, Adj 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				_		-			
Work Zone On Approach         No         No         No         Add Sat Flow, vehi/hin         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1870         1871         1870         1871         1870         1871         1870         1871         1870         1871         1870         1871         1870         1871         1870         1871         1870         1871		1.00			1.00				
Adj Flow Rate, veh/h 168 90 374 288 211 589 Percent Heavy Veh, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2									
Adj Flow Rate, veh/h Peak Hour Factor Peak Hour Factor Percent Heavy Veh, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			1870	1870			1870		
Peak Hour Factor 0.97 0.97 0.97 0.97 0.97 0.97 0.97 Percent Heavy Veh, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2									
Percent Heavy Veh, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2									
Cap, veh/h  Afrive On Green  0.14  0.14  0.27  0.27  0.27  0.24  0.24  Sat Flow, veh/h  3647  1585  36363  1870  1781  2790  Grp Volume(v), veh/h  168  90  374  288  211  589  Grp Sat Flow(s), veh/h/ln  1777  1585  1781  1870  1781  1395  Q Serve(g_s), s  1.3  1.6  2.6  4.0  3.1  3.9  Prop In Lane  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00									
Arrive On Green 0.14 0.14 0.27 0.27 0.24 0.24 Sat Flow, veh/h 3647 1585 3563 1870 1781 2790  Grp Volume(v), veh/h 168 90 374 288 211 589  Grp Volume(v), veh/h 1777 1585 1781 1870 1781 1395  Q Serve(g_s), s 1.3 1.6 2.6 4.0 3.1 3.9  Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9  Cycle Q Clear(g_c), veh/h 488 218 965 506 435 1436  V/C Ratio(X) 0.34 0.41 0.39 0.577 0.49 0.41  Average Average Filter(I) 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0									
Sat Flow, veh/h									
Grp Volume(v), veh/h Grp Sat Flow(s), veh/h/ln 1777 1585 1781 1870 1781 1395 Q Serve(g_s), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.0 1.00 Cloud 1.									
Grp Sat Flow(s), veh/h/ln 1777 1585 1781 1870 1781 1395 2 Serve(g.s), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g.c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g.c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g.c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g.c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g.c), veh/h 488 218 965 506 435 1436 Cy/C Ratio(X) 0.34 0.41 0.39 0.57 0.49 0.41 Avail Cap(c.a), veh/h 2413 1076 1829 960 620 1726 Cycle Q Cycle									
Q Serve(g_s), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Cycle Q Clear(g_c), s 1.3 1.6 2.6 4.0 3.1 3.9 Prop In Lane 1.00 1.00 1.00 1.00 Lane Grp Cap(c), veh/h 488 218 965 506 435 1436 V/C Ratio(X) 0.34 0.41 0.39 0.57 0.49 0.41 Avail Cap(c_a), veh/h 2413 1076 1829 960 620 1726 HCM Platon 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 Upstream Filter(I) 1.00 1.00 1.00 1.00 1.00 1.00 Uniform Delay (d), s/veh 11.8 11.9 9.0 9.5 9.8 4.5 Incr Delay (d2), s/veh 0.4 1.3 0.3 1.0 0.8 0.2 Initial Q Delay(d3), s/veh 0.0 0.0 0.0 0.0 0.0 0.0 Sile BackOfQ(50%), veh/ln 0.4 0.5 0.7 1.2 0.9 1.2 Unsig. Movement Delay, s/veh LnGrp Delay (d), s/veh 12.2 13.2 9.2 10.5 10.6 4.7 LnGrp Delay (d), s/veh 12.5 9.8 6.3 Approach Vol, veh/h 258 662 800 Approach LOS B A B B A B B A Approach LOS B A A B B B A  Timer - Assigned Phs 2 6 8  Phs Duration (G+Y+Rc), s 7.6 11.7 10.9 Change Period (Y+Rc), s 3.5 3.5 3.5 Max Green Setting (Gmax), s 20.5 15.5 10.5 Max Q Clear Time (g_c+I1), s 3.6 6.0 5.9 Green Ext Time (p_c, s 1.1 2.2 1.5 Intersection Summary HCM 6th Ctrl Delay 8.6 HCM 6th Ctrl Delay 8.6									
Cycle Q Clear(g_c), s									
Prop In Lane Lane Grp Cap(c), veh/h  488  218  965  506  435  1436  V/C Ratio(X)  0.34  0.41  0.39  0.57  0.49  0.41  Avail Cap(c, a), veh/h  100  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.0									
Lane Grp Cap(c), veh/h 488 218 965 506 435 1436  V/C Ratio(X) 0.34 0.41 0.39 0.57 0.49 0.41  Avail Cap(c_a), veh/h 2413 1076 1829 960 620 1726  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  Upstream Filter(I) 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  Upstream Filter(I) 1.00 1.00 1.00 1.00 1.00  Uniform Delay (d), s/veh 11.8 11.9 9.0 9.5 9.8 4.5  Incr Delay (22), s/veh 0.4 1.3 0.3 1.0 0.8 0.2  Initial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0  Wile BackOfQ(50%), veh/ln 0.4 0.5 0.7 1.2 0.9 1.2  Unsig. Movement Delay, s/veh  LnGrp Delay(d),s/veh 12.2 13.2 9.2 10.5 10.6 4.7  LnGrp Delay(d),s/veh 12.2 13.2 9.2 10.5 10.6 4.7  LnGrp LOS B B A B B A  Approach Vol, veh/h 258 662 800  Approach Delay, s/veh 12.5 9.8 6.3  Approach Delay, s/veh 12.5 9.8 6.3  Approach Delay, s/veh 12.5 9.8 6.3  Approach Delay (SYeh) 12.5 9.8 6.3  Approach Of (Y+Rc), s 7.6 11.7 10.9  Change Period (Y+Rc), s 3.5 3.5 3.5  Max Green Setting (Gmax), s 20.5 15.5 10.5  Max Green Setting (Gmax), s 3.6 6.0 5.9  Green Ext Time (p_c+I), s 3.6 6.0 5.9  Green Ext Time (p_c-I), s 1.1 2.2 1.5  Intersection Summary  HCM 6th Ctrl Delay 8.6  HCM 6th Ctrl Delay 8.6		1.3			4.0				
V/C Ratio(X)		400			FOG				
Avail Cap(c_a), veh/h HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0									
HCM Platon Ratio									
Upstream Filter(I) 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Uniform Delay (d), s/veh 11.8 11.9 9.0 9.5 9.8 4.5 Inter Delay (d2), s/veh 0.4 1.3 0.3 1.0 0.8 0.2 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.									
Uniform Delay (d), s/veh 11.8 11.9 9.0 9.5 9.8 4.5 Incr Delay (d2), s/veh 0.4 1.3 0.3 1.0 0.8 0.2 Incr Delay (d2), s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 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.									
Incr Delay (d2), s/veh									
Initial Q Delay(d3),s/veh									
%ile BackOfQ(50%), veh/ln 0.4 0.5 0.7 1.2 0.9 1.2 Unsig. Movement Delay, s/veh LnGrp Delay(d), s/veh 12.2 13.2 9.2 10.5 10.6 4.7 LnGrp LOS B B A B B A Approach Vol, veh/h 258 662 800 Approach Delay, s/veh 12.5 9.8 6.3 Approach LOS B A A Approach LOS B A A A Timer - Assigned Phs 2 6 8 Timer - Assigned Phs 2 11.7 10.9 Change Period (Y+Rc), s 7.6 11.7 10.9 Change Period (Y+Rc), s 3.5 3.5 3.5 Max Green Setting (Gmax), s 20.5 15.5 10.5 Max Q Clear Time (g_c+l1), s 3.6 6.0 5.9 Green Ext Time (p_c), s 1.1 2.2 1.5 Intersection Summary HCM 6th Ctrl Delay 8.6 HCM 6th LOS A									
Unsig. Movement Delay, s/veh LnGrp Delay(d),s/veh LnGrp LOS B B A B B A B B A A A A A A A A A A A									
LnGrp Delay(d),s/veh LnGrp LOS B B B B A B B B A B B A A A A A A A A			0.5	0.7	1.2	0.9	1.2		
LnGrp LOS B B A B B A Approach Vol, veh/h 258 Approach Delay, s/veh 12.5 9.8 6.3 Approach LOS B A A Approach LOS B A A  Timer - Assigned Phs 2 6 8 Change Period (Y+Rc), s 7.6 11.7 10.9 Change Period (Y+Rc), s 3.5 3.5 3.5 Max Green Setting (Gmax), s 20.5 15.5 10.5 Max Q Clear Time (g_c+11), s 3.6 6.0 5.9 Green Ext Time (p_c), s 1.1 2.2 1.5 Intersection Summary HCM 6th Ctrl Delay 8.6 HCM 6th LOS A			10.0		10 =	10.0			
Approach Vol, veh/h 258 662 800 Approach Delay, s/veh 12.5 9.8 6.3 Approach LOS B A A  Timer - Assigned Phs 2 6 8 Phs Duration (G+Y+Rc), s 7.6 11.7 10.9 Change Period (Y+Rc), s 3.5 3.5 3.5 Max Green Setting (Gmax), s 20.5 15.5 10.5 Max Q Clear Time (g_c+I1), s 3.6 6.0 5.9 Green Ext Time (p_c), s 1.1 2.2 1.5 Intersection Summary HCM 6th Ctrl Delay 8.6 HCM 6th LOS A									
Approach Delay, s/veh         12.5         9.8         6.3           Approach LOS         B         A         A           Timer - Assigned Phs         2         6         8           Phs Duration (G+Y+Rc), s         7.6         11.7         10.9           Change Period (Y+Rc), s         3.5         3.5         3.5           Max Green Setting (Gmax), s         20.5         15.5         10.5           Max Q Clear Time (g_c+If), s         3.6         6.0         5.9           Green Ext Time (p_c), s         1.1         2.2         1.5           Intersection Summary         HCM 6th Ctrl Delay         8.6           HCM 6th LOS         A         A			В	A			A		
Approach LOS B A A  Timer - Assigned Phs 2 6 8  Phs Duration (G+Y+Rc), s 7.6 11.7 10.9  Change Period (Y+Rc), s 3.5 3.5 3.5  Max Green Setting (Gmax), s 20.5 15.5 10.5  Max Q Clear Time (g_c+I1), s 3.6 6.0 5.9  Green Ext Time (p_c), s 1.1 2.2 1.5  Intersection Summary  HCM 6th Ctrl Delay 8.6  HCM 6th LOS A									
Timer - Assigned Phs 2 6 8  Phs Duration (G+Y+Rc), s 7.6 11.7 10.9  Change Period (Y+Rc), s 3.5 3.5 3.5  Max Green Setting (Gmax), s 20.5 15.5 10.5  Max Q Clear Time (g_c+I1), s 3.6 6.0 5.9  Green Ext Time (p_c), s 1.1 2.2 1.5  Intersection Summary  HCM 6th Ctrl Delay 8.6  HCM 6th LOS A									
Phs Duration (G+Y+Rc), s 7.6 11.7 10.9  Change Period (Y+Rc), s 3.5 3.5 3.5  Max Green Setting (Gmax), s 20.5 15.5 10.5  Max Q Clear Time (g_c+I1), s 3.6 6.0 5.9  Green Ext Time (p_c), s 1.1 2.2 1.5  Intersection Summary  HCM 6th Ctrl Delay 8.6  HCM 6th LOS A	Approach LOS	В			Α	Α			
Phs Duration (G+Y+Rc), s 7.6 11.7 10.9  Change Period (Y+Rc), s 3.5 3.5 3.5  Max Green Setting (Gmax), s 20.5 15.5 10.5  Max Q Clear Time (g_c+I1), s 3.6 6.0 5.9  Green Ext Time (p_c), s 1.1 2.2 1.5  Intersection Summary  HCM 6th Ctrl Delay 8.6  HCM 6th LOS A	Timer - Assigned Phs		2				6	8	
Change Period (Y+Rc), s     3.5     3.5     3.5       Max Green Setting (Gmax), s     20.5     15.5     10.5       Max Q Clear Time (g_c+I1), s     3.6     6.0     5.9       Green Ext Time (p_c), s     1.1     2.2     1.5       Intersection Summary       HCM 6th Ctrl Delay     8.6       HCM 6th LOS     A									
Max Green Setting (Gmax), s     20.5     15.5     10.5       Max Q Clear Time (g_c+l1), s     3.6     6.0     5.9       Green Ext Time (p_c), s     1.1     2.2     1.5       Intersection Summary       HCM 6th Ctrl Delay     8.6       HCM 6th LOS     A									
Max Q Clear Time (g_c+l1), s       3.6       6.0       5.9         Green Ext Time (p_c), s       1.1       2.2       1.5         Intersection Summary         HCM 6th Ctrl Delay       8.6         HCM 6th LOS       A									
Green Ext Time (p_c), s         1.1         2.2         1.5           Intersection Summary           HCM 6th Ctrl Delay         8.6           HCM 6th LOS         A									
HCM 6th Ctrl Delay 8.6 HCM 6th LOS A	Green Ext Time (p_c), s								
HCM 6th Ctrl Delay 8.6 HCM 6th LOS A	Intersection Summary								
HCM 6th LOS A				8.6					
				/\					

Notes
User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS PM Existing W-Trans Page 3

HCM 6th Signalized Intersection Summary 4: Santa Rosa Ave & Todd Rd

	1	†	-	-	ļ	1	•	-	*	•	<b>→</b>	*
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	r	4	W.	*	25		K	‡	*	*	‡	*
Traffic Volume (veh/h)	394	92	264	38	92	25	304	637	34	21	417	239
Future Volume (veh/h)	394	92	264	98	92	2	304	637	34	21	417	239
Initial Q (Qb), veh	0	0	0	0	0	0	2	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1:00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		2			2			2			2	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	443	0	114	æ	8	42	317	994	16	22	434	130
Peak Hour Factor	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	604	0	264	197	134	61	377	1331	291	37	684	304
Arrive On Green	0.17	0.00	0.17	0.11	0.11	0.11	0.21	0.37	0.37	0.02	0.19	0.19
Sat Flow, veh/h	3563	0	1557	1781	1216	553	1781	3554	1579	1781	3554	1578
Grp Volume(v), veh/h	443	0	114	88	0	144	317	664	16	22	434	130
Grp Sat Flow(s),veh/h/ln	1781	0	1557	1781	0	1769	1781	1777	1579	1781	1777	1578
Q Serve(q s), s	6.5	0.0	3.6	<del>[</del>	0.0	4.3	9.4	7.9	9.0	0.7	6.2	4.0
Cycle Q Clear(a c). s	6.5	0.0	3.6	<del>-</del>	0.0	4.3	9.4	7.9	0.4	0.7	6.2	4.0
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	604	0	264	197	0	195	377	1331	291	37	684	304
V/C Ratio(X)	0.73	0.00	0.43	0.19	0.00	0.74	0.84	0.50	0.03	09.0	0.63	0.43
Avail Cap(c_a), veh/h	2298	0	1004	340	0	337	220	2486	1104	340	2098	932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	50.6	22.4	0.0	23.9	21.1	13.3	10.9	26.9	20.6	19.7
Incr Delay (d2), s/veh	0.7	0.0	0.4	0.2	0.0	2.0	5.2	0.1	0.0	5.6	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.0	1.2	0.4	0.0	1.8	4.2	5.6	0.1	0.3	2.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	0.0	21.1	22.6	0.0	25.9	27.5	13.4	11.0	32.5	21.0	20.1
LnGrp LOS	ပ	V	ပ	ပ	A	ပ	ပ	В	В	ပ	ပ	O
Approach Vol, veh/h		222			182			266			586	Ī
Approach Delay, s/veh		22.2			25.2			17.9			21.2	
Approach LOS		ပ			ပ			В			ပ	Ī
Timer - Assigned Phs		2	3	4		9	7	8				Ī
Phs Duration (G+Y+Rc), s		13.8	15.5	15.1		10.6	5.6	25.0				
Change Period (Y+Rc), s		4.5	4.0	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		35.5	17.0	32.5		10.5	10.5	38.5				1
Max Q Clear Time (g_c+I1), s	"	8.5	11.4	8.2		6.3	2.7	6.6				
Green Ext Time (p_c), s		0.7	0.2	1.4		0.1	0.0	2.2				Ī
Intersection Summary												Ī
HCM 6th Ctrl Delay			20.3									
HCM 6th LOS			O									

Notes
User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS PM Existing

W-Trans Page 4

HCM Signalized Intersection Capacity Analysis 5: S Moorland Ave & US 101 Overpass

03/30/2020

03/31/2020

WBL WBR NBT NBR	figurations (ych) 33 522 54 93 728 52 4 93 728 52 4 93 728 52 728 728 728 728 728 728 728 728 728 72		Þ		-	•	<b>k</b>	•		
figurations	figurations	Movement	WBL	WBR	NBT	NBR	SBL	SBT		
tume (vph)         33         522         54         93         728         52           slume (vph)         33         522         54         93         728         52           slume (vph)         190         190         190         190         190         190           th         11         12         12         12         12         12           time (s)         45         45         45         45         45         45           time (s)         45         100         190         190         190         190           time (s)         100         100         100         100         100         100         100           ted (c)         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         1	tume (vph)         33         522         54         93         728         52           slume (vph)         33         522         54         93         728         52           slume (vph)         13         522         54         93         728         52           trime (s)         45         45         45         45         45         45           time (s)         45         45         45         45         45         45           time (s)         45         45         45         45         45         45         45           time (s)         45         100         100         100         100         100         100           ted         1,00         1,00         1,00         1,00         100         100         100           ted         1,00         1,00         1,03         106         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.96         0.	Lane Configurations	>		24		r	te		
lume (yph)         33         522         54         93         728         52           v (yphp)         190         1900         1900         1900         1900         1900           v (yphp)         11         11         11         11         11         11         11         11         11         11         11         11         11         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12	lume (vph)         33         552         54         93         78         52           v (vphg)         190         1900         1900         1900         1900         1900           v (vphg)         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145         145	Traffic Volume (vph)	83	522	24	93	728	52		
(v(ph))         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900	time (s) 1900 1900 1900 1900 1900 1900 1900 190	Future Volume (vph)	33	522	24	93	728	52		
trime (s) 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5	the (s) 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5	Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Factor (1,00 1,00 0.95 0.95  Factor (1,00 1,00 0.95 0.95  w (port) 1567 0.91 1.00 1.00  ted 1.00 1.00 0.95 0.96  w (port) 1567 1703 1681 1696  w (port) 1567 1703 173 173 173 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 173 174 174 173 174 173 174 174 174 174 174 173 174 174 174 174 174 174 174 174 174 174	Factor 1,00 1,00 0.95 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.	Lane Width	7	11	12	12	12	12		
Factor 100 100 095 095  red 100 100 100 100  red 100 100 100 100  red 100 100 100  red 100 100 100  red 100 095 096  red 100 096 096 096  red 100 095 096  red 100 096 096  red 100 096  red 1	Fector 100 100 095 095  ted 100 100 100 100 100 100 100 100 100 10	Total Lost time (s)	4.5		4.5		4.5	4.5		
ted 1.08 1.00 1.00 1.00 1.00 1.00 1.00 1.00	ted 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Lane Util. Factor	1.00		1.00		0.95	0.95		
ted 1.00 1.00 0.95 0.96 w (pod) 1.567 1703 1681 1696 (pod) 1.00 1.00 0.95 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96	ted 1.00 1.00 0.95 0.96  W (perm) 1567 1703 1681 1696  W (perm) 1567 1703 168 0.96  W (perm) 141 0 85 0 97 178 54  Prot NA Split	Ĕ	0.87		0.91		1.00	1.00		
w (pact)         1567         1703         1681         1686           k (pacm)         1567         1703         1681         1686           k (pacm)         157         1703         1681         1686           k (pacm)         156         1703         1681         1686           k (pacm)         156         102         1036         1036         1036           k (pacm)         141         0         8         0         0         0           addiction (vph)         437         0         68         0         0         0           Phrases         8         2         6         6         6         10         0           Phrases         8         2         6.8         21.3         21.3         21.3         21.3         21.3         21.3         21.3         21.3         21.3         21.3         21.3 <th< td=""><td>w (pact)         1567         1703         1681         1686           kitch         1100         1100         1103         1686         1686           kitch         1100         1100         1103         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         <th< td=""><td>Fit Protected</td><td>1.00</td><td></td><td>1.00</td><td></td><td>0.95</td><td>96:0</td><td></td><td></td></th<></td></th<>	w (pact)         1567         1703         1681         1686           kitch         1100         1100         1103         1686         1686           kitch         1100         1100         1103         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686         1686 <th< td=""><td>Fit Protected</td><td>1.00</td><td></td><td>1.00</td><td></td><td>0.95</td><td>96:0</td><td></td><td></td></th<>	Fit Protected	1.00		1.00		0.95	96:0		
tied 1.00 1.00 0.95 0.96  w (perm) 1.567 1703 1681 1696  (vpt) 34 544 56 97 758 54  cuction (vpt) 437 0 68 0.0 0.0 0  up Flow (vpt) 437 0 68 0 0.0 0  up Flow (vpt) 437 0 68 0 0.0 0  up Flow (vpt) 437 0 68 0 0.0 0  up Flow (vpt) 437 0 68 0 0.0 0  up Flow (vpt) 437 0 68 0 0.0 0  up Flow (vpt) 437 0 68 0 0.0 0  up Flow (vpt) 437 0 68 0 0.0 0  up Flow (vpt) 437 0 68 0.0 0  Up Flow (vpt) 437 0 68 0.0 0  Up Flow (vpt) 437 0 68 0.0 0  Up Flow (vpt) 430 0.0 0  Up Flow (vpt) 440 0.0 0  Up Flow (vpt)	ted 1.00 1.00 0.95 0.96 (witching) 1.67 1.00 0.95 0.96 (witching) 1.67 1.00 0.95 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96	Satd. Flow (prot)	1567		1703		1681	1696		
w (perm)         1587         1703         1681         1686           rickot, PHF         0.96         0.96         0.96         0.96         0.96           rickoto, PHF         0.96         0.96         0.96         0.96         0.96           rickoton (vph)         34         4.8         6         0         0         0           up Flow (vph)         437         0         85         0         402         410           up Flow (vph)         431         0         85         0         402         410           up Flow (vph)         431         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td>richorny 1567 1703 1681 1696  richor, PHF 0.96 0.96 0.96 0.96 0.96  richor, PHF 0.96 0.96 0.96 0.96 0.96  richor (vph) 437 0 68 0.97 0.96  richor (vph) 437 0 68 0.97 0.96  richor (vph) 437 0 68 0.97 0.97  Phases 8 2 410  Phases 8 2 410  Phases 8 2 410  Phases 9 7 58 54  Phases 9 7 58 0.96  Phases 9 7 58 0.96  Phases 9 7 410  Phases 9 7 411  Phases 9 7 411  Phases 9 8 21.3 21.3  Phases 9 8 2 1.3  Phases 9 7 41  Phases 9 9 9 7 41  Phases 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9</td> <td>Flt Permitted</td> <td>1.00</td> <td></td> <td>1.00</td> <td></td> <td>0.95</td> <td>96:0</td> <td></td> <td></td>	richorny 1567 1703 1681 1696  richor, PHF 0.96 0.96 0.96 0.96 0.96  richor, PHF 0.96 0.96 0.96 0.96 0.96  richor (vph) 437 0 68 0.97 0.96  richor (vph) 437 0 68 0.97 0.96  richor (vph) 437 0 68 0.97 0.97  Phases 8 2 410  Phases 8 2 410  Phases 8 2 410  Phases 9 7 58 54  Phases 9 7 58 0.96  Phases 9 7 58 0.96  Phases 9 7 410  Phases 9 7 411  Phases 9 7 411  Phases 9 8 21.3 21.3  Phases 9 8 2 1.3  Phases 9 7 41  Phases 9 9 9 7 41  Phases 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Flt Permitted	1.00		1.00		0.95	96:0		
r factor, PHF 0.96 0.96 0.96 0.96 0.96 0.90 0.00 0.00	r factor, PHF 0.96 0.96 0.96 0.96 0.96 0.90 0.00 0.00	Satd. Flow (perm)	1567		1703		1681	1696		
(vph)         34         544         56         97         758         54           oduction (vph)         437         0         68         0         0         0           ab Cultural (vph)         437         0         68         0         0         0           ab Phases         P Proft         0         8         0         0         0           ab Phases         8         2         10         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         8         21.3         21.3         21.3         21.3         21.3         21.3         21.3	(vph)         34         544         56         97         758         54           oduction (vph)         437         0         68         0         0         0           auduction (vph)         437         0         68         0         0         0           augh Flow (vph)         41         0         85         0         0         0           augh Flow (vph)         41         0         42         6         8         27.3         21.3           Phases         68         102         6.8         27.3         21.3         21.3           Green, G (s)         102         6.8         27.3         21.3         21.3           Green, G (s)         102         6.8         27.3         21.3         21.3           gC Ratio         0.20         0.13         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41         0.41	Peak-hour factor, PHF	96.0	96.0	96.0	96.0	96.0	96:0		
rotuction (vph) 437 0 68 0 0 0 0 0 0 0 1 141 0 85 0 402 410 141 0 85 0 402 410 141 0 85 0 402 410 141 0 85 0 402 410 141 0 85 0 402 410 141 0 85 0 402 410 141 0 85 0 402 410 141 0 85 0 402 410 141 0 41 141 141 141 141 141 141 14	ouction (vph) 437 0 68 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Adj. Flow (vph)	ਲ	544	26	26	758	54		
up Flow (vgh)         141         0         85         0         402         410           Proses         Prod         NA         Split         NA           Phases         8         2         6         6           Phases         8         21.3         21.3           Geen, G(s)         10.2         6.8         21.3         21.3           Geen, G(s)         10.2         6.8         21.3         21.3           Green, G(s)         10.2         6.8         21.3         21.3           Green, G(s)         10.2         6.8         21.3         21.3           Green, G(s)         10.2         6.8         21.3         21.3           Aden, G(s)         3.0         3.0         3.0         3.0           Cap (vpl)         3.0         22.3         69.1         69.7           Perm         0.46         0.38         0.58         0.59           Perm         0.46         0.38         0.58         0.59           Perm         0.46         0.38         0.58         0.59           Perm         1.1         1.1         1.3         1.3           Aden, deep, deep, deep, deep, deep, deep, deep, de	Up Flow (vph)         141         0         85         0         402         410           Phases         Proof         NA         Splift         NA           Phases         8         2         6         6           Phases         102         6.8         21.3         21.3           Green, g(s)         102         6.8         21.3         21.3           Axersion (s)         3.0         3.0         3.0         3.0           Attension (s)         3.0         3.0         3.0         3.0           Attension (s)         3.0         2.2         6.9         6.5         4.5           Poral (pull)         3.0         2.0         3.0         3.0         3.0         2.0           Poral (pull)         3.0         2.0         3.0         3.0         3.0         3.0         2.0           Perm         0.4         0.38         0.28         0.58         0.58         0.58	RTOR Reduction (vph)	437	0	89	0	0	0		
Prot NA Split NA Split NA Phases 8 2 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Prot   NA   Split   NA	Lane Group Flow (vph)	141	0	85	0	402	410		
Phases	Phases	Turn Type	Prot		NA		Split	NA		
Phases (s) 102 6.8 21.3 21.3 Green, (s) 102 6.4 0.41 0.41 Attacks 3.0 3.0 3.0 Attacksion (s) 4.5 At	Phases (s) 102 6.8 21.3 21.3 Green, (s) 202 0.13 0.41 0.41 Attention, (s) 3.0 3.0 Attention, (s) 4.0 Attention, (s) 4.0 Attention, (s) 4.0 Attention, (s) 4.0 Att	Protected Phases	∞		2		9	9		
Green, G (s) 10.2 6.8 27.3 27.3 (Green, G (s) 10.2 6.1 6.8 27.3 27.3 (Green, G (s) 10.2 6.1 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4	Green, G(s) 10.2 6.8 21.3 21.3 21.3 21.3 21.3 21.3 21.3 21.3	Permitted Phases								
Green, g(s) 10.2 6.8 21.3 21.3 21.3 20.5 20.5 20.5 20.5 20.5 20.5 20.5 20.5	Green, g(s) 10.2 6.8 21.3 21.3 g/C Ratio 0.20 0.13 0.14 0.41 0.41 0.41 0.41 0.41 0.42 0.20 0.13 0.41 0.41 0.41 0.41 0.42 0.20 0.20 0.13 0.41 0.41 0.41 0.41 0.41 0.42 0.20 0.20 0.20 0.20 0.20 0.20 0.20	Actuated Green, G (s)	10.2		8.9		21.3	21.3		
g(C Ratio 0.20 0.13 0.41 0.41  All met (s) 4.5 4.5 4.5  All met (s) 3.0 3.0 3.0  Cap (vph) 308 223 691 697  Prot 0.09 0.05 0.24 0.24  Perm 0.46 0.38 0.58 0.59  Delay, d1 18.4 20.6 11.8 11.8  Ital Delay, d2 1.1 1.1 1.1 1.1 1.3  Evive B C B B B  I Delay (s) 19.4 21.7 13.1  I Delay (s	g/C Ratio 0.20 0.13 0.41 0.41  Alter (s) 4.5 4.5 4.5  Alter (s) 3.0 3.0 3.0 3.0  Cap (vph) 3.08 22.3 691 697  Prot 0.09 0.05 0.24 0.24  Perm 0.46 0.38 0.58 0.59  Delay, d1 18.4 20.6 11.8 11.8 11.8  Indianally d2 1.1 1.1 1.3 1.3  Evice B C B B B  Delay, (s) 19.4 21.7 13.1 13.1  LCS B C B B B  C C B B B  C C B B B  C C B C B	Effective Green, g (s)	10.2		8.9		21.3	21.3		
Attens(s) 4.5 4.5 4.5 4.5 Attens(s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Time (s) 4.5 4.5 4.5 4.5 Atsacration (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Actuated g/C Ratio	0.20		0.13		0.41	0.41		
Axension (s)         3.0         3.0         3.0         3.0           Cap (vph)         3.08         22.3         691         697           Pert         c.0.09         c.0.55         691         697           Perm         c.0.09         c.0.55         691         697           Perm         c.0.6         c.0.24         697         691         697           Perm         c.0.6         c.0.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24         60.24	Axension (s)         3.0         3.0         3.0           Axension (s)         3.0         3.0         3.0           Cap (vph)         3.08         22.3         691         697           Perm         0.09         0.05         0.24         0.024           Perm         0.46         0.38         0.58         0.59           Delay, d1         18.4         20.6         11.8         11.8           An Fachor         1.00         1.00         1.00         1.00           Isal Delay, d2         1.1         1.3         1.3         1.3           Service         B         C         B         B         B           Local Delay, d2         1.94         21.7         13.1         B           Local Delay, d2         1.94         21.7         13.1         B           Local Cambrian         B         C         B         B           C         B         C         B         B           C         B         C         B         C         B           Oycle Length (s)         51.8         Sum of lost time (s)         Savice           Parick (min in Cambri Milization         75.4         CUL Level	Clearance Time (s)	4.5		4.5		4.5	4.5		
Cap (vph)         308         223         691         697           Proft         6.0.95         0.24         c0.24           Perm         0.0.66         0.28         0.58         0.59           Pelay, d1         184         20.6         118         118           Pelay, d1         1.00         1.00         1.00         1.00           Intal Delay, d2         1.1         1.1         1.3         1.3           Service         B         C         B         B           Los         19.4         21.7         13.1         13.1           Los         B         C         B         B           O Control Delay         16.3         HCM 2000 Level of Service         P           O Volume to Capacity ratio         6.52         Sum of lost time (s)           On Control Delay         5.18         Sum of lost time (s)	Cap (vph)         308         223         691         697           Proft         c0.09         c0.05         0.24         c0.24           Perm         0.46         0.38         0.58         0.59           Delay, d1         18.4         20.6         11.8         11.8           No m Factor         1.00         1.00         1.00         1.00           tal Delay, d2         1.1         1.1         1.3         1.3           service         B         C         B         B           LOS         B         C         B         B           O Control Delay         16.3         HCM 2000 Level of Service           Oycle Length (s)         51.8         Sum of lost time (s)           Period (min)         15.4%         ICU Level of Service	Vehicle Extension (s)	3.0		3.0		3.0	3.0		
Prot c0.09 c0.05 0.24 c0.24  Perm 0.46 0.38 0.58 0.59  Delay, d1 18.4 20.6 11.8 11.8  Ital Delay, d2 1.1 1.1 1.1 1.3  Earlie 19.4 21.7 13.1  Delay (s) 19.4	Prot c0.09 c0.05 0.24 c0.24  Perm 0.46 0.38 0.58 0.59  Pelay, d1 18.4 20.6 11.8 11.8  Ital Delay, d2 1.1 1.1 1.3 1.3  Evice B C B B B  C B B B  C C B B B  C C B B B  C C C B C Control Delay  O	Lane Grp Cap (vph)	308		223		691	269		
Perm 0.46 0.38 0.58 0.59  belay, d1 18.4 20.6 11.8 11.8  on Factor 1.00 1.00 1.00 1.00 1.00  tal Delay, d2 1.1 1.1 1.3 1.3  service B C B B B  Delay(s) 19.4 21.7 13.1 13.1  LOS B C B B  O Volume to Capacity ratio 0.55  O) Volume to Capacity rat	Perm         0.46         0.38         0.58         0.59           Pelay, d1         184         20.6         11.8         11.8           Non Factor         1.00         1.00         1.00         1.00           Ital Delay, d2         1.1         1.3         1.3         1.3           Service         B         C         1.3         1.3         1.3           Local Delay, d2         1.1         1.3         1.3         1.3         1.3           Local Delay, d2         19.4         21.7         13.1         B         B         C         B         C         B         C         B         C         A         B         C         C         B         B         C         A         B         C         A         B         C         A         B         C         A         B         C         C         B         B         C         A         B         C         B         B         C         B         B         C         A         B         C         B         B         C         B         B         C         B         C         B         C         C         B         C         C	v/s Ratio Prot	60.00		c0.05		0.24	c0.24		
belay, d1 184 0.38 0.59  belay, d1 184 20.6 11.8 11.8  on Factor 1.00 1.00 1.00  tal Delay, d2 1.1 1.1 1.3 1.3  tal Delay, d2 1.1 1.1 1.3 1.3  belay (s) 194 21.7 13.1 13.1  LOS B C B B  on Summary  O Control Delay 16.3 HCM 2000 Level of Service Oycle Length (s)  O Cold Control Delay 16.3 HCM 2000 Level of Service Oycle Length (s)  O Cold Control Delay 16.3 HCM 2000 Level of Service Oycle Length (s)  O Cold Cold Cold Cold Cold Cold Cold Cold	0.46   0.38   0.59	√s Ratio Perm								
Selay, d1	Delay, d1         184         206         118         118           on Factor         100         100         100         100           tal Delay, d2         1.1         1.1         1.3         1.3           service         B         C         B         B           Delay(s)         19.4         21.7         13.1         13.1           LCS         B         C         B         B           LCS         B         C         B         B           O Control Delay         16.3         HCM 2000 Level of Service           O Volume to Capacity ratio         0.52         Sum of lost time (s)           Oycle Length (s)         51.8         Sum of lost time (s)           Period (min)         15.4%         ICU Level of Service	v/c Ratio	0.46		0.38		0.58	0.59		
on Factor 1.00 1.00 1.00  Ital Delay, d2 1.1 1.3 1.3  Ital Delay, d2 1.1 1.3 1.3  Service B C B B C B B C  Inclos B C B B C B B  Inclos B C C B B B  Inclos B C C B B C C B B  Inclosed Control Delay C C C C C C C C C C C C C C C C C C C	March   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   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, d1	18.4		20.6		11.8	11.8		
tal Delay, d2         1.1         1.1         1.3         1.3           service         B         C         B         B           Delay (s)         19.4         21.7         13.1         13.1           LOS         B         C         B         B           non Summary         C         B         B         B           0 Control Delay         16.3         HCM 2000 Level of Service           0 Coutrol Delay         16.3         HCM 2000 Level of Service           Oycle Length (s)         51.8         Sum of lost time (s)           Oycle Length (s)         51.8         Sum of lost time (s)           nn Capacity Ulization         75.4%         ICU Level of Service	Ital Delay, dz	Progression Factor	1:00		1.00		1.00	1.00		
19.4   21.7   13.1   13.1     Delay (s)	19.4   21.7   13.1   13.1	Incremental Delay, d2	1:		1.1		1.3	1.3		
21.7 13.1  21.7 13.1  3 C B B  6 B  16.3 HCM 2000 Level of Service 0.52 51.8 Sum of lost time (s) 75.4% ICU Level of Service	C B B C B B C C B C C C C C C C C C C C	Delay (s)	19.4		21.7		13.1	13.1		
13.1 (B. 21.7 (B. 20.0 Level of Service 0.52 Sum of lost time (s) 75.4% (CU Level of Service 5.4%)	13.1 C B 16.3 HCM 2000 Level of Service 0.52 Sum of lost time (s) 75.4% IOU Level of Service 15.1 Sum of lost time (s)	Level of Service	œ		O		ш	Ф		
6 B 16.3 HCM 2000 Level of Service 0.52 Sum of lost time (s) 75.4% (DU Level of Service)	16.3 HCM 2000 Level of Service 0.52 Sum of lost time (s) 75.4% ICU Level of Service 1.5	Approach Delay (s)	19.4		21.7			13.1		
16.3 HCM 2000 Level of Service 0.52 51.8 Sum of lost time (s) 75.4%, I'OU Level of Service	16.3 HCM 2000 Level of Service 0.52 51.8 Sum of lost time (s) 75.4% ICU Level of Service 1.5	Approach LOS	В		ပ			В		
16.3 HCM 2000 Level of Service 0.52 Sum of lost time (s) 5.4% ICU Level of Service 75.4%	16.3 HCM 2000 Level of Service 0.52 51.8 Sum of lost time (s) 75.4% ICU Level of Service	Intersection Summary								
0.52 51.8 Sum of lost time (s) 75.4% ICU Level of Service	0.52 51.8 Sum of lost time (s) 75.4% ICU Level of Service 15	HCM 2000 Control Delay			16.3	ĭ	3M 2000	Level of Service	В	
51.8 Sum of lost time (s) 75.4% ICU Level of Service	51.8 Sum of lost time (s) 75.4% ICU Level of Service	HCM 2000 Volume to Capac	city ratio		0.52					
75.4% ICU Level of Service	75.4% ICU Level of Service	Actuated Cycle Length (s)			51.8	S	m of lost	time (s)	13.5	
		Intersection Capacity Utilizal	tion		75.4%	೨	U Level o	f Service	۵	
Analysis Period (min) 15		Analysis Period (min)			15					

Los Pinos Apartments TIS W. Trans PM Existing Page 5

HCM 6th Signalized Intersection Summary 1: Santa Rosa Ave & East Robles Ave

Section   Color   Co		1	1	-	1	1	1	1	4	*	٠	<b>→</b>	*
14 0 7 61 0 66 25 1082 18 27  15 14 0 7 61 0 66 25 1082 18 27  10 0 0 0 0 0 0 0 0 0 0 0  10 0 0 0 0 0	Movement	EB	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
1.00	Lane Configurations		4		K	2		K	<b>*</b>		K	44	
14	Traffic Volume (veh/h)	4	0	7	6	0	99	52	1082	18	27	538	15
nch 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Future Volume (veh/h)	4	0	7	6	0	99	52	1082	9	27	538	15
1.00 0.98 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
ach         No	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
1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683	Work Zone On Approach		8			2			8			8	
14 0 7 61 0 66 25 1082 18 27  15 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
6 100 100 100 100 100 100 100 100 100 10	Adj Flow Rate, veh/h	14	0	7	61	0	99	52	1082	18	27	538	15
6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Peak Hour Factor	1.00	1.00	1.00	1.00	1:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
223 5 19 354 0 119 40 1434 24 43 100 0.09 0.00 0.00 0.00 0.00 0.00 0.00	Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
0.09 0.00 0.09 0.00 0.00 0.02 0.45 0.45 0.03  21 0 61 62 6 25 28 62 1603  21 0 0 1268 0 1402 1603 1899 1672 1603  1.8 0.0 0.0 0.0 0.0 1.1 0.0 1.4 0.5 8.9 8.9 0.5  0.57 0.09 0.00 0.0 1.1 0.0 1.0 1.00 0.03 1.00  1.00 0.00 0.00 0.01 0.0 0.05 0.63 0.75 0.63  1.00 0.00 0.00 0.10 0.00 0.05 0.63 0.75 0.63  1.00 0.00 0.00 0.10 0.00 0.00 0.00 0.0	Cap, veh/h	223	2	19	354	0	119	40	1434	24	43	1420	40
394 53 224 1268 0 1402 1603 3218 54 1603 3 1	Arrive On Green	0.09	0.00	0.09	0.09	0.00	0.09	0.02	0.45	0.45	0.03	0.45	0.45
1	Sat Flow, veh/h	394	23	224	1268	0	1402	1603	3218	54	1603	3175	88
hin 671 0 0 1268 0 1402 1603 1599 1672 1603 1 0.3 0.0 0.0 0.0 0.0 1.4 0.5 8.9 8.9 0.5 0.67 0.33 1.00 1.4 0.5 8.9 8.9 0.5 0.67 0.33 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Grp Volume(v), veh/h	21	0	0	61	0	99	22	538	295	27	271	282
8 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Grp Sat Flow(s),veh/h/ln	671	0	0	1268	0	1402	1603	1599	1672	1603	1599	1664
s 18 0.0 0.0 1.1 0.0 1.4 0.5 8.9 8.9 0.5 etc. 1.8 0.0 0.0 1.1 0.0 1.4 0.5 8.9 8.9 0.5 etc. 1.0 0.5 0.0 0.3 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	1.4	0.5	8.9	8.9	0.5	3.6	3.6
New	Cycle Q Clear(g_c), s	1.8	0.0	0.0	<del>-</del> -	0.0	1.4	0.5	8.9	8.9	0.5	3.6	3.6
hith 247 0 0 354 0 119 40 713 745 43 43 0.00 0.00 0.00 0.055 0.05 0.075 0.053 0.075 0.053 0.00 0.01 0.00 0.01 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	Prop In Lane	0.67		0.33	1.00		1.00	1.00		0.03	1.00		0.05
100   0.00   0.00   0.17   0.00   0.55   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.63   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0.75   0	Lane Grp Cap(c), veh/h	247	0	0	354	0	119	40	713	745	43	715	745
1437	V/C Ratio(X)	0.09	0.00	0.00	0.17	0.00	0.55	0.63	0.75	0.75	0.63	0.38	0.38
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Avail Cap(c_a), veh/h	1437	0	0	1549	0	1441	532	1416	1480	634	1517	1579
100 0.00 0.00 1.00 1.00 1.00 1.00 1.00	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
(d), s/veh 14.2 0.0 0.0 13.8 0.0 13.9 15.3 7.3 7.5 15.2 (d), s/veh 14.2 0.0 0.0 0.1 0.0 15 58 0.6 56 0.6 56 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
I, s/veh         0.1         0.0         0.1         0.0         1.5         5.8         0.6         0.6         5.6           (20/s), sveh         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Uniform Delay (d), s/veh	14.2	0.0	0.0	13.8	0.0	13.9	15.3	7.3	7.3	15.2	5.8	5.8
(30%),vehln 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	1.5	2.8	9.0	9.0	9.6	0.1	0.1
10	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
ent Delay, siveh 14.3 0.0 0.0 13.8 0.0 15.4 21.1 7.9 7.9 20.8 Nisheh 14.3 0.0 0.0 13.8 0.0 15.4 21.1 7.9 7.9 20.8 Nisheh 21 12.7 12.5 A A C C A A A C C A A A C C A A A C C A A A C C A A A C C A A A C C C A A A C C C A A A C C C C C C C C C C C C C C C C C C C C	%ile BackOfQ(50%),veh/ln		0.0	0.0	0.3	0.0	0.4	0.2	1.4	1.4	0.2	0.5	0.5
I)s/veh         14.3         0.0         0.0         138         0.0         154         21.1         7.9         7.9         20.8           verbh         12         A         B         A         B         C         A         A         C           verbh         14.3         14.2         127         1125         A         C         C           verbh         14.3         14.3         14.5         B         A         C         C           sy, s/veh         15         B         B         A         B         A         C           seed Phs         1         2         4         5         6         8         B           G-S-Y-RCi, s         5.3         19.1         72         5.3         192         7.2         A           G-S-Y-RCi, s         4.5         4.5         4.5         5.0         4.5         A           G-S-Y-RCi, s         4.5         5.0         32.5         10.5         30.0         32.5         32.5           fine (g, c-l'), s         2.5         0.0         0.0         1.4         0.3         A           mmmany         8.2         5.0         1.4	Unsig. Movement Delay, s/veh												
Weith         21         127         1125         A A C           9y, sveh         43         146         82         82           5         14,3         8         8         8           6 G+Y-RO, s         5.3         19.1         72         5.3         19.2         7.2           1 (Y-RO, s         5.3         19.1         72         5.3         19.2         7.2           1 (Y-RO, s         5.3         19.1         7.2         5.3         19.2         7.2           1 (Y-RO, s         5.5         19.1         7.2         5.3         19.2         7.2           1 (Y-RO, s         4.5         5.0         4.5         5.0         4.5         10.3           1 (Y-RO, s         4.5         5.0         4.5         5.0         4.5         10.3           1 (Y-RO, s         4.5         5.0         4.5         5.0         4.5         5.0           1 (Y-RO, s         4.5         5.0         3.0         3.2         5.0         3.4           1 (P-O, s         0.0         3.0         0.0         1.4         0.3           1 (P-O, s         0.0         3.0         0.0         1.4         <	LnGrp Delay(d),s/veh	14.3	0.0	0.0	13.8	0.0	15.4	21.1	7.9	7.9	20.8	5.9	5.9
weighth         21         127         1125           sy, siveh         14.3         14.6         8.2           see Priss         1         2         4         5         6         8           G+V+RO, s         5.3         19.1         7.2         5.3         19.2         7.2           G+V-RO, s         4.5         5.0         4.5         5.0         4.5           G+V-RO, s         4.5         5.0         4.5         5.0         4.5           Ime (Q_C+I), s         2.5         10.9         3.8         2.5         5.6         3.4           re (p_c), s         0.0         3.0         1.4         0.3         3.4           rummary         8.2         8.2         1.4         0.3	LnGrp LOS	В	A	A	В	A	В	ပ	V	A	ပ	V	A
9y, sveh 14.3 14.6 8.2 8.2 8.4 8.6 8.2 8.4 8.6 8.2 8.4 8.6 8.2 8.6 8.4 8.6 8.2 8.6 8.4 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6	Approach Vol, veh/h		21			127			1125			280	Ī
bed Piss 1 2 4 5 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 7.2 5 192 7.2 7.2 117 7.2 5.3 19.2 7.2 7.2 117 6 10.9 3.2 5 10.9 3.2 5 10.9 3.8 2.5 5.6 3.4 117 6 10.9 3.8 2.5 5.6 3.4 117 6 10.9 3.8 2.5 5.6 3.4 117 6 10.9 3.8 2.5 5.6 3.4 117 6 10.9 3.8 2.5 5.6 3.4 117 6 10.9 3.8 2.5 5.6 3.4 117 6 10.9 3.8 2.5 5.6 3.4 117 6 10.9 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Approach Delay, s/veh		14.3			14.6			8.2			9.9	
Ged Phs         1         2         4         5         6           G+Y-Ro), s         5.3         19.1         7.2         5.3         19.2           1 (Y-Ro), s         4.5         5.0         4.5         5.0           4 (Grax), s         1.5         2.0         3.5         10.5         3.0           4 (Grax), s         2.5         10.9         3.8         2.5         5.6         1.4           4 (P, c), s         0.0         3.0         0.0         1.4         1.4         1.4           1 (P, c), s         0.0         3.0         0.0         1.4         1.4         1.4           2 (P, c), s         0.0         3.0         0.0         1.4         1.4         1.4           3 (P, c), s         0.0         3.0         0.0         1.4         1.4         1.4           4 (P, c), s         0.0         3.0         0.0         1.4         1.4         1.4           5 (P, c), s         0.0         3.0         0.0         1.4         1.4         1.4           6 (P, c), s         0.0         3.0         0.0         0.0         1.4         1.4           6 (P, c), s         0.0         0	Approach LOS		Ф			Ф			∢			∢	Ī
G+Y+R0, s 5.3 19.1 72 5.3 19.2 (14-R0, s 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 5.0 3.0 0.0 0.0 1.4 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Timer - Assigned Phs	~	2		4	2	9		∞				Ī
tting (Gmax), s 4.5 5.0 4.5 5.0 4.5 5.0 tting (Gmax), s 12.5 28.0 32.5 10.5 30.0 3.0 ime (g_C+I1), s 2.5 10.9 3.8 2.5 5.6 ime (g_C-I1), s 0.0 3.0 0.0 0.0 1.4 immary	Phs Duration (G+Y+Rc). s	5.3	19.1	ı	7.2	5.3	19.2	ı	7.2	ı	ı	ı	
tting (Gmax), s 12.5 28.0 32.5 10.5 30.0 (ime (g_c+11), s 2.5 10.9 3.8 2.5 5.6 (e_c), s 0.0 3.0 0.0 0.0 1.4 mmary 82.	Change Period (Y+Rc), s	4.5	2.0		4.5	4.5	2.0		4.5				ľ
ime(q_c+I1), s 2.5 10.9 3.8 2.5 5.6 let(p_c), s 0.0 3.0 0.0 1.4 numary 82	Max Green Setting (Gmax), s	12.5	28.0		32.5	10.5	30.0		32.5				١
le (p_c), s 0.0 3.0 0.0 0.0 1.4 mmnary 8.2	Max Q Clear Time (g_c+l1), s	2.5	10.9		3.8	2.5	9.6		3.4				
ummary Jelay	Green Ext Time (p_c), s	0.0	3.0		0.0	0.0	1.4		0.3				
Delay	Intersection Summary	l	l	l	l	l	l	l	l	l	l		Ī
, and a	HCM 6th Ctd Delay	l	l	8.2	l	l	l	l	l	l	l	ı	
	HCM 6th I OS			Ş									ľ

Los Pinos Apartments TIS W-Trans
AM Future Page 1

HCM 6th Signalized Intersection Summary 2: S Moorland Ave & Todd Rd/US 101 South Ramps

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04/01/2020

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	k-	+	W.	K	2,		¥.		N.		4	
Traffic Volume (veh/h)	0	351	510	379	280	0	863	0	156	0	0	0
Future Volume (veh/h)	0	321	510	379	280	0	863	0	156	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	က	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		8			8			8			8	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	321	330	379	280	0	863	0	93	0	0	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	2	2
Cap, veh/h	099	693	574	099	693	0	0	0	0	0	∞	0
Arrive On Green	0.00	0.37	0.37	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1781	1870	1549	1781	1870	0		0		0	1870	0
Grp Volume(v), veh/h	0	351	330	379	280	0		0.0		0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1549	1781	1870	0				0	1870	0
Q Serve(g_s), s	0.0	3.5	4.1	4.1	2.7	0.0				0.0	0:0	0.0
Cycle Q Clear(g_c), s	0.0	3.5	4.1	4.1	2.7	0:0				0.0	0:0	0.0
Prop In Lane	1.00		1.00	1.00		0.00				0.00		0.00
Lane Grp Cap(c), veh/h	099	693	574	099	693	0				0	∞	0
V/C Ratio(X)	0.00	0.51	0.58	0.57	0.40	0.00				0.00	0.00	0.00
Avail Cap(c_a), veh/h	1548	1625	1346	2232	2344	0				0	1485	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.8	0.9	0.9	9.6	0:0				0.0	0:0	0.0
Incr Delay (d2), s/veh	0.0	9.0	6.0	0.8	0.4	0.0				0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0:0				0.0	0:0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.0	9.0	0.7	0.4	0.0				0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.4	6.9	8.9	0.9	0:0				0.0	0.0	0.0
LnGrp LOS	∢	A 50	∢	∢	A C	∢				∢	∢ (	<
Approach Vol, Ven/n		00			600						0	Ī
Approach Delay, s/ven		٥./			0.0						0:0	
Approach ECO		c			c							
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		0.0		12.1				11.9				Ī
Change Period (Y+Rc), s		3.0		3.2				3.0				
Max Green Setting (Gmax), s		19.0		20.8				30.0				
Max Q Clear Time (g_c+I1), s		0.0		6.1				6.1				
Green Ext Time (p_c), s		0.0		5.9				2.8				Ī
Intersection Summary												Ī
HCM 6th Ctrl Delay			9.9									
HCM 6th LOS			Þ									ľ
)))			:									

Los Pinos Apartments TIS W-Trans
AM Future Page 2

HCM 6th Signalized Intersection Summary 3: US 101 Overpass & Todd Rd

	Ť	1	1	ļ	1	4	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	\$	W.	K	4.0	¥	N. R.	
Traffic Volume (veh/h)	123	403	277	331	341	481	
Future Volume (veh/h)	123	403	277	331	341	481	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)		1.00	1.00		1:00	1.00	
Parking Bus, Adj	0.1	1.00	1.00	1:00	1.00	1:00	
Work Zone On Approach	2			2	2		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	123	253	277	331	341	470	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1:00	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	801	357	362	202	431	1428	
Arrive On Green	0.23	0.23	0.27	0.27	0.24	0.24	
Sat Flow, veh/h	3647	1585	3563	1870	1781	2790	
Grp Volume(v), veh/h	123	253	277	331	341	470	
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1870	1781	1395	
Q Serve(g_s), s	<del>[</del> .	5.9	9.9	6.3	7.2	4.0	
Cycle Q Clear(g_c), s	<del>[</del> :	5.9	9.9	6.3	7.2	4.0	
Prop In Lane		1.00	1.00		1:00	1.00	
Lane Grp Cap(c), veh/h	801	357	362	202	431	1428	
V/C Ratio(X)	0.15	0.71	09:0	99.0	0.79	0.33	
Avail Cap(c_a), veh/h	1821	812	1381	725	468	1485	
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	12.4	14.3	12.7	12.9	14.2	2.7	
Incr Delay (d2), s/veh	0.1	5.6	9.0	1.5	8.4	0.1	
Initial Q Delay(d3),s/veh	0.0	0:0	0:0	0.0	0:0	0.0	
%ile BackOfQ(50%),veh/ln	0.4	1.9	1.8	2.2	3.2	1.5	
Unsig. Movement Delay, s/veh		9	9		0	C	
LnGrp Delay(d),s/veh	12.5	16.9	73.3	14.4 D	9.77	ა. გ. <	
Angree Vel subth	370	٥	٥	000	2 5	c	
Approach Delay s/veh	15.4			37	129		
Approach LOS	В			В	В		
Timer - Assigned Phs		0				ç	α
Phe Duration (G+V+Rc) e		12.5	ı	ı	ı	14.3	13.5
Change Baried (V. Ba), a		2.7				5 4	2.5.
Change Period (Y+Rc), s		S. S.				3.5	3.5
Max Gleer Setting (Gridax), s		20.2				0.0 0.0	0.0
Green Ext Time (p. c) s		5 6				0.0	Z:0
		2				6.7	0.00
Intersection Summary							
HCM 6th Ctrl Delay			13.7				
HCM 6th LOS			В				
Notes							Ì

Nobes
User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS AM Future

W-Trans Page 3

HCM 6th Signalized Intersection Summary 4: Santa Rosa Ave & Todd Rd

04/01/2020

04/01/2020

Movement   EBL   EBT   EBR   WBL   WBT   WBR   NBL   MBT   NBR   SBL   SBT   SBR   MBT	Movement Lane Configurations Traffic Volume (veh/h) Tuture Volume (veh/h) Initial O (Qb) veh			F	>		,	_	_	,			
The color of the	Lane Configurations Traffic Volume (veh/h) Future Volume (veh/h) initial O (Oh) weh	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
263 62 276 27 32 15 596 505 28 21 429  263 62 276 27 32 15 596 505 28 21 429  100 100 100 100 100 100 100 100 100 10	Traffic Volume (veh/h) Future Volume (veh/h) Initial O (Ob) veh	K	4	W	k	45		K	7	W.	*	**	*
263         62         276         27         32         15         596         505         28         21         429           100         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Future Volume (veh/h)	263	62	276	27	32	15	296	505	28	21	429	227
100	Initial O (Ob), veh	263	62	276	27	32	15	596	505	28	21	429	227
100		0	0	0	0	0	0	က	0	0	0	0	0
1870 100 100 100 100 100 100 100 100 100 1	Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
No	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
1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1780   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781   1781	Work Zone On Approach		8			2			2			2	
162 203 136 27 32 6 596 505 18 21 429 100 1,00 1,00 1,00 1,00 1,00 1,00 1,00	Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
100 100 100 100 100 100 100 100 100 100	Adj Flow Rate, veh/h	162	203	136	27	32	9	296	202	18	21	429	123
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
277         291         242         81         69         13         535         1840         729         38         674           1781         1870         1566         1781         1870         186         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1781         1777         189         1777         189         1777         189         1777         189         1777         189         1777         189         1777         189         1777         189         1777         189         189         189         1777         189         1777         189         1777         189         1777         189         189         189         189         189         189         189         189         189         189	Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
0.16 0.16 0.16 0.05 0.05 0.05 0.30 0.46 0.46 0.02 0.19 1781 1870 1556 1781 1530 287 1781 3554 1590 1781 3554 162 203 1781 1530 287 1781 3554 1590 1781 3554 148 5.8 4.6 0.8 0.0 1.2 17.0 5.0 0.4 0.7 6.3 140 277 291 242 81 0 82 535 1640 729 35 674 0.5 0.7 0.56 0.34 0.01 0.0 1.00 1.00 1.00 1.00 1.00 1.00	Cap, veh/h	277	291	242	81	69	13	535	1640	729	32	674	299
1781   1870   1556   1781   1530   287   1781   3554   1580   1781   3554   1777   1556   1781   3554   1580   1781   3554   1777   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1871   1		0.16	0.16	0.16	0.05	0.05	0.05	0.30	0.46	0.46	0.02	0.19	0.19
162   203   136   27   0   38   596   505   18   21   429   428   48   5.8   4.6   0.8   0.0   1.2   1777   1580   1777   1580   1777   488   5.8   4.6   0.8   0.0   1.2   170   5.0   0.4   0.7   6.3   4.8   5.8   4.6   0.8   0.0   1.2   170   5.0   0.4   0.7   6.3   4.8   5.8   4.6   0.8   0.0   1.2   170   5.0   0.4   0.7   6.3   4.8   5.8   4.6   0.8   0.0   1.2   170   5.0   0.4   0.7   6.3   4.8   5.8   4.6   0.8   0.0   1.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0		1781	1870	1556	1781	1530	287	1781	3554	1580	1781	3554	1578
1781   1870   1556   1781   0   1817   1781   1777   1580   1781   1777   1580   1781   1777   1580   1781   1777   1580   1781   1777   1580   1781   1777   1580   1781   1777   1580   1781   1777   1580   1781   1777   1580   1781   1777   1781   1772   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   1872   187		162	203	136	27	0	38	969	202	18	21	429	123
48 5.8 4.6 0.8 0.0 112 170 5.0 0.4 0.7 6.3 148 5.8 4.6 0.8 0.0 112 170 5.0 0.4 0.7 6.3 110 1.00 1.00 1.00 1.00 1.00 1.00 1.0		1781	1870	1556	1781	0	1817	1781	1777	1580	1781	1777	1578
4.8 5.8 4.6 0.8 0.0 112 170 5.0 0.4 0.7 6.3 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.		4.8	5.8	4.6	8.0	0.0	1.2	17.0	5.0	0.4	0.7	6.3	3.9
100 100 100 0.16 100 100 1.00 1.00 1.00		4.8	2.8	4.6	0.8	0.0	1.2	17.0	2.0	0.4	0.7	6.3	3.9
277 291 242 81 0 82 535 feld 729 35 674 (17) (17) (17) (17) (17) (17) (17) (17)	Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1:00		1.00
059 077 056 034 000 046 111 031 0.02 0.59 0.64 117 1173 976 331 0.00 046 111 031 0.02 0.59 0.64 110 0 100 1.00 1.00 1.00 1.00 1.00 1.0	Lane Grp Cap(c), veh/h	277	291	242	81	0	82	535	1640	729	35	674	299
1117 1713 976 331 0 337 535 5418 1075 331 2041 1100 1.00 1.00 1.00 1.00 1.00 1.00 1.0	V/C Ratio(X)	0.59	0.70	0.56	0.34	0.00	0.46	1.11	0.31	0.02	0.59	0.64	0.41
100 100 100 100 100 100 100 100 100 100	Avail Cap(c_a), veh/h	1117	1173	926	331	0	337	535	2418	1075	331	2041	906
100 100 100 100 000 100 100 100 100 100	HCM Platoon Ratio	1.00	00.1	1.00	1.00	1.00	1.00	1.00	1.00	1:00	1.00	1.00	1.00
222 22.6 22.1 26.2 0.0 26.3 19.8 9.6 83 27.5 27.1 0.0 7.1 0.8 0.9 0.0 15.7 40 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Jpstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Neh 1 1 08 09 00 15 740 00 00 58 04 10 00 00 00 00 00 00 00 00 00 00 00 00	Uniform Delay (d), s/veh	22.2	22.6	22.1	26.2	0.0	26.3	19.8	9.6	œ. 6	27.5	21.1	20.1
uch 1.9 2.4 1.5 0.3 0.0 0.0 202 0.0 0.0 0.0 0.0 0.0 0.0 0.0	ncr Delay (d2), s/veh	0.7	0	8.0	6.0	0.0	3.5	74.0	0.0	0.0	2.8	0.4	0.3
Neh 229 23.8 22.9 27.1 0.0 27.8 114.0 9.6 8.3 33.3 21.5 C C C C A C F A A C C C C C A C F A A C C C C	Initial Q Delay(d3),s/ven	0.0	0.0	0.0	0.0	0.0	0.0	70.7	0.0	0.0	0.0	0.0	0.0
22,9 23,8 22,9 27,1 0,0 27,8 114,0 96 83 33,3 21,5 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	%ile BackOrQ(50%),ven/in	<u>.</u>	7.4	 C:	0.3	0.0	0.5	6.6	C.	1.0	0.3	2.3	5.
23.3	original movernment Dollary, styen	000	33.0	0000	77.4	0	070	1110	90	0	22.2	215	306
23.3	Lingip Delay(u),s/vell	6.7	0.02	6.7	. 17	0.0	0.12	Н	0.0	0.0 V	0.00	5.7	20.07
23.3 27.5 65.2 C	Approach Vol. veh/h		501			65			1119			573	
C C C E E 13.3 21.0 15.2 7.1 5.6 30.6 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5	Approach Delay, s/veh		23.3			27.5			65.2			21.7	
2 3 4 6 7 13.3 21.0 15.2 7.1 5.6 4.5 4.0 4.5 4.5 4.5 35.5 17.0 32.5 10.5 10.5 7.8 19.0 8.3 3.2 2.7 0.8 0.0 1.4 0.0 0.0	Approach LOS		ပ			O			ш			O	
13.3 21.0 15.2 7.1 5.6 4.5 4.0 4.5 4.5 4.5 35.5 17.0 32.5 10.5 10.5 7.8 19.0 8.3 3.2 2.7 0.8 0.0 1.4 0.0 0.0	Timer - Assigned Phs		2	က	4		9	7	00				٦
4.5 4.0 4.5 4.5 4.5 3.5 3.5 17.0 32.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10	Phs Duration (G+Y+Rc), s		13.3	21.0	15.2		7.1	5.6	30.6				
35.5 17.0 32.5 10.5 10.5 10.5 10.5 7.8 19.0 8.3 3.2 2.7 0.8 0.0 1.4 0.0 0.0 0.0 43.8 D	Change Period (Y+Rc), s		4.5	4.0	4.5		4.5	4.5	4.5				
7.8 19.0 8.3 3.2 2.7 0.8 0.0 1.4 0.0 0.0 0.0 4.3.8 D	Max Green Setting (Gmax), s		35.5	17.0	32.5		10.5	10.5	38.5				
0.8 0.0 1.4 0.0 0.0 43.8 D	Max Q Clear Time (g_c+l1), s		7.8	19.0	8.3		3.2	2.7	7.0				
Ш	Green Ext Time (p_c), s		8.0	0.0	1.4		0.0	0.0	1.6				
	Intersection Summary												
	HCM 6th Ctrl Delay			43.8									
25.4	HCM 6th LOS			٥									

User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS AM Future

HCM Signalized Intersection Capacity Analysis 4: Santa Rosa Ave & Todd Rd

Lane Configurations		NRP SRI	ı	
263 62 276 27 32 15 263 62 276 27 32 15 263 62 276 27 32 15 263 62 276 27 32 15 260 1900 1900 1900 1900 1900 260 0.96 0.96 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	_		SBT	SBR
263 62 276 27 32 15 263 62 276 27 32 15 1900 1900 1900 1900 1900 1900 4.5 4.5 4.5 4.5 4.5 4.5 15 0.95 0.95 1.00 1.00 1.00 1.00 1.00 0.98 1.00 1.00 1.00 1.00 0.98 1.00 1.00 1.00 1.00 0.98 1.00 0.95 0.97 1.00 0.95 1.00 1.681 1716 1568 1770 1774 0.95 0.97 1.00 0.95 1.00 1.681 1716 1568 1770 1774 0.95 0.97 1.00 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	~		‡	*
265 62 276 27 32 15 1900 1900 1900 1900 1900 1900 4,5 4,5 4,5 4,5 4,5 4,5 10 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1	~	28 21		227
1900 1900 1900 1900 1900 1900 1900 1900	_			227
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		1900 1900	_	1900
1.00 1.00 0.98 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0		4.5		4.5
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	37 0.95	1.00	0.95	1.00
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		1.00		0.99
1.00 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0		1.00		1.00
0.95 0.97 1.00 0.95 1.00 1.681 1716 1558 1770 1774 0.95 0.97 1.00 0.95 1.00 1.681 1716 1558 1770 1774 0.95 0.97 1.00 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0		1.00		0.85
1681 1716 1588 1770 1774 1081 1716 1588 1770 1774 1081 1716 1588 1770 1774 1081 1716 1588 1770 1774 1081 1716 1588 1770 1774 1081 1716 1588 1770 1774 1081 1716 1588 1770 1774 1081 1881 1881 1891 1891 1891 1891 1891 1891		96.0		1.00
0.65 0.87 1.00 0.65 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	` ,	1770		1561
168		0.95		1.00
100 100 100 100 100 100 100 100 100 100	33 3511	1770	3539	1561
263 62 276 27 32 15 0 0 0 224 0 14 0 160 165 52 7 33 0 170 165 52 7 33 0 2 2 2 6 6 129 129 129 3.3 3.3 129 129 129 3.3 3.3 129 129 129 3.3 3.3 129 129 129 129 3.3 3.3 129 129 129 129 3.3 3.3 129 129 129 129 3.3 3.3 129 129 129 3.3 3.3 0.19 0.19 0.19 0.05 0.05 0.5 0.5 0.6 0.03 0.5 0.6 0.1 0.0 1.00 0.5 0.6 0.1 0.8 11 25.6 25.8 23.6 32.5 32.9 0.7 0.0 0.0 0.0 0.0 0.0 0.5 0.6 0.1 0.8 11 25.6 25.8 23.6 32.5 32.9 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.8 11 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	00.1	1.00 1.00	Ì	1.00
90 0 224 0 14 0 0 16 52 27 33 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	96 505		429	227
160   165   52   27   33   0   1   1   1   1   1   1   1   1   1	0 3	0	0	172
Split NA Perm Split NA 2 2 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	96 530	0 21	429	55
Split NA Perm Sp	3			co
2 2 2 6 6 6 6 12.9 12.9 12.9 3.3 3.3 12.9 12.9 12.9 3.3 3.3 3.3 12.9 12.9 12.9 3.3 3.3 12.9 12.9 12.9 3.3 3.3 12.9 12.9 12.9 3.3 3.3 12.9 12.9 12.9 12.9 12.9 12.9 12.9 12.9		Jord .		Dorm
2 2 6 6 6 6 1 1 2 1 2 1 2 1 2 1 2 1 2 1	מא יי	וווו	<u> </u>	
129 129 129 33 33 129 129 129 129 129 129 129 129 129 129				4
129 129 129 33 33 33 00 00 019 019 019 005 005 005 005 019 019 019 019 019 019 019 019 019 019	4 33.8	6.0	16.8	16.8
0.19 0.19 0.19 0.06 0.06 4.5 4.5 4.5 4.5 4.5 1.5 1.5 1.5 1.5 1.5 1.5 314 321 291 84 84 0.10 0.01 0.02 0.02 0.51 0.51 0.51 0.18 0.32 0.39 2.52 25.2 23.5 31.7 31.8 1.00 1.00 1.00 2.0.5 0.6 0.1 0.8 1.1 2.56 2.58 2.36 32.5 32.9 C. C		6.0		16.8
4,5 4,5 4,5 4,5 4,5 4,5 4,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1		0.01		0.24
(vph) 314 321 291 84 84 84 84 84 84 84 84 84 84 84 84 84		4.5	4.5	4.5
(vph) 314 321 291 84 84 84 84 84 84 84 84 84 84 84 84 84	.5 1.5	1.5		1.5
0.10 c0.10 0.02 c0.02 c0.02 c0.03 0.51 0.51 0.51 0.13 0.32 0.39 cdr 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	ì	23	Ĩ	380
0.03 0.03 0.34 0.39 0.39 0.31 0.39 0.31 0.39 0.39 0.39 0.39 0.39 0.39 0.39 0.39		0.01	0	ľ
0.51 0.51 0.18 0.32 0.39  no Fador 1.00 1.00 1.00 1.00  tata Delay, d. 25.2 25.2 25.5 31.7 31.8  tata Delay, d. 0.5 0.6 0.1 0.8 1.1.  Delay (s) C C C C C  LOS  LOS  no Summary  0.51 0.51 0.5 0.6  C C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C  C C C C C C  C C C C C C  C C C C C C  C C C C C C  C C C C C C  C C C C C C C  C C C C C C C  C C C C C C C  C C C C C C C C  C C C C C C C C  C C C C C C C C  C C C C C C C C C  C C C C C C C C C C C C C C C C C C C C				0.04
25.2 25.2 23.5 31.7 31.8 1.00 1.00 1.00 1.00 1.00 25.6 25.8 23.6 32.5 32.9 C C C C C C C C C C C C C C C C C C C	55 0.31	0.91	0.50	0.15
1.00 1.00 1.00 1.00 1.00 1.00 2.05 0.5 0.6 0.1 0.8 1.1 2.56 2.58 23.6 32.5 32.9 C C C C C C C C C C C C C C C C C C C	.4 10.5	34.0	22.4	20.4
d2 05 06 0.1 0.8 1.1 2.5 2.5 2.5 2.5 32.9 2.0 C C C C C C C C C C C C C C C C C C C		1.00	1.00	1.00
256 258 23.6 32.5 32.9 C C C C C 24.8 32.8 C C	.3 0.0	145.7	0.2	0.1
24.8 C C C C C C C C C C C C C C C C C C C	.7 10.6	179.7		20.5
24.8 C	C	ш	c)	O
Approach LOS C C C	17.5		26.8	
Intersection Summary	В		ပ	
				Ť
HCM 2000 Control Delay 22.2 HCM 2000 Level of Service	e,	O		
pacity ratio 0.55				
		18.0		Ħ
		В		

Los Pinos Aparments TIS W-Trans
AM Future Mitigated Page 1

HCM Signalized Intersection Capacity Analysis 5: S Moorland Ave & US 101 Overpass

04/01/2020

04/01/2020

Movement Lane Configurations Traffic Volume (vph)	WBL		1					
Lane Configurations Traffic Volume (vph)		WBR	NBT	NBR	SBL	SBT		
Traffic Volume (vph)	>		ź.		je.	44		
	20	922	159	62	692	62		
Future Volume (vph)	20	922	159	79	692	62		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width	7	11	12	12	12	12		
Total Lost time (s)	4.5		4.5		4.5	4.5		
Lane Util. Factor	1.00		1.00		0.95	0.95		
£	0.87		96.0		1.00	1.00		
Fit Protected	1.00		1.00		0.95	96.0		
Satd. Flow (prot)	1561		1779		1681	1697		
Flt Permitted	1.00		1.00		0.95	96:0		
Satd. Flow (perm)	1561		1779		1681	1697		
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00		
Adj. Flow (vph)	20	922	159	62	69/	62		
RTOR Reduction (vph)	629	0	18	0	0	0		
Lane Group Flow (vph)	363	0	220	0	415	416		
Turn Type	Prot		NA		Split	NA		
Protected Phases	∞		2		9	9		
Permitted Phases								
Actuated Green, G (s)	21.6		15.0		24.8	24.8		
Effective Green, g (s)	21.6		15.0		24.8	24.8		
Actuated g/C Ratio	0.29		0.20		0.33	0.33		
Clearance Time (s)	4.5		4.5		4.5	4.5		
Vehide Extension (s)	3.0		3.0		3.0	3.0		
Lane Grp Cap (vph)	450		356		929	561		
v/s Ratio Prot	c0.23		c0.12		c0.25	0.25		
v/s Ratio Perm								
v/c Ratio	0.81		0.62		0.75	0.74		
Uniform Delay, d1	24.7		27.3		22.3	22.2		
Progression Factor	1.00		1.00		1.00	1.00		
Incremental Delay, d2	10.2		3.2		5.4	5.2		
Delay (s)	34.9		30.5		27.7	27.5		
Level of Service	ပ		ပ		ပ	ပ		
Approach Delay (s)	34.9		30.5			27.6		
Approach LOS	ပ		O			ပ		
Intersection Summary								Ī
HCM 2000 Control Delay			31.4	H	M 2000 I	HCM 2000 Level of Service	O	
HCM 2000 Volume to Capacity ratio	ty ratio		0.74					
Actuated Cycle Length (s)			74.9	Su	Sum of lost time (s)	time (s)	13.5	
Intersection Capacity Utilization	on	_	105.5%	0	ICU Level of Service	Service	ဖ	
Analysis Period (min)			15					

Los Pinos Apartments TIS AM Future

HCM 6th Signalized Intersection Summary 1: Santa Rosa Ave & East Robles Ave

ations  telephone  telephone  Application  A		1	†	-	1	1	1	-	+		٠	-	*
27 2 12 32 2 54 16 1182 49 72 72 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Movement	EB	EBT	EBR	WBL	WBT	WBR	NBL	NBT	MBR	SBL	SBT	SBR
27         2         12         32         2         54         16         1182         49         72           7         2         12         32         2         54         16         1182         49         72           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Lane Configurations		4		K	£\$		K	44		K	44	
27         2         12         32         2         54         16         1182         49         72           1.00         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Traffic Volume (veh/h)	27	2	12	32	2	75	16	1182	49	72	829	13
1.00	Future Volume (veh/h)	27	7	12	32	2	72	9	1182	49	72	829	13
1.00	Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683   1683	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
1683 1683 1683 1683 1683 1683 1683 1883 18	Work Zone On Approach		%			2			%			%	
27         2         12         32         2         54         16         1182         49         72           1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00	Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Adj Flow Rate, veh/h	27	7	12	35	2	72	9	1182	49	72	829	13
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1:00	1.00	1.00	1.00	1.00	1.00
193	Percent Heavy Veh, %	2	2	2	2	2	5	2	2	2	5	2	2
0.07 0.07 0.07 0.07 0.07 0.07 0.02 0.48 0.06 0.49 0.07 0.07 0.07 0.07 0.07 0.07 0.02 0.48 0.06 0.347 26 154 1260 50 1359 1603 3126 129 1603 3 126 0.0 0 0 1260 0 1410 1603 1599 1656 1603 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cap, veh/h	193	2	9	311	က	8	56	1491	62	92	1670	25
347         26         154         1260         56         1359         1603         3126         1603         3           41         0         0         0         0         0         144         0         11.1         11.1         1.6           527         0         0         0         0         0         144         0         11.1         11.1         1.6           2.3         0         0         0         0         0         14         0         11.1         11.1         1.6           0.66         0         0         0         0         0         0         11.1         11.1         1.6         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.02	0.48	0.48	90.0	0.52	0.52
41 0 0 32 0 56 16 604 627 72 50 125 0 0 1260 0 1410 1603 1599 1656 1693 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sat Flow, veh/h	347	26	154	1260	20	1359	1603	3126	129	1603	3223	49
527 0 0 1260 0 1410 1603 1599 1656 1603 1 2.9 0.0 0.0 0.0 0.0 1.4 0.3 11.1 11.1 11.6 2.8 0.0 0.0 0.0 0.0 1.4 0.3 11.1 11.1 11.6 2.8 0.0 0.0 0.0 1.4 0.3 11.1 11.1 11.6 2.8 0.0 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Grp Volume(v), veh/h	41	0	0	32	0	99	16	604	627	72	426	446
0.9 0.0 0.0 0.0 1.4 0.3 11.1 11.1 16 0.66 0.29 0.0 0.0 0.1 1.4 0.3 11.1 11.1 11.6 0.67 0.0 0.7 0.0 1.4 0.3 11.1 11.1 11.6 0.20 0.0 0.0 0.10 0.0 0.60 0.61 0.7 0.7 0.9 1.0 0.20 0.00 0.00 0.10 0.00 0.60 0.61 0.7 0.7 0.7 0.7 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Grp Sat Flow(s),veh/h/ln	527	0	0	1260	0	1410	1603	1599	1656	1603	1599	1673
23 0.0 0.0 0.7 0.0 14 0.3 11.1 11.1 1.6 205 0.0 0.29 1.00 0.96 1.00 0.08 1.00 205 0.0 0.0 0.10 0.00 0.60 0.61 0.79 0.79 0.79 1310 0 0.0 0.10 0.10 0.00 1.00 1.00 1.00	Q Serve(g_s), s	6.0	0.0	0.0	0.0	0.0	1.4	0.3	11.1	11.1	1.6	6.1	6.1
0.66 0.29 1.00 0.96 1.00 0.08 1.00 0.00 0.00 0.00 0.00 0.00	Cycle Q Clear(g_c), s	2.3	0.0	0.0	0.7	0.0	1.4	0.3	11.1	11.1	1.6	6.1	6.1
205 0 0 311 0 93 26 763 790 92 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Prop In Lane	99.0		0.29	1.00		96:0	1.00		0.08	1.00		0.03
020 0.00 0.00 0.10 0.00 0.66 0.64 0.79 0.78 (71310 0 0 0 1397 0 1308 481 1279 1324 572 11.00 0.00 0.00 1.00 1.00 1.00 1.00 1.	Lane Grp Cap(c), veh/h	205	0	0	311	0	83	56	763	790	92	829	867
1310 0 0 1397 0 1308 481 1279 1324 572 1 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	V/C Ratio(X)	0.20	0.00	0.00	0.10	0.00	09:0	0.61	0.79	0.79	0.78	0.51	0.51
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Avail Cap(c_a), veh/h	1310	0	0	1397	0	1308	481	1279	1324	572	1370	1433
100 0.00 0.00 1.00 0.00 1.00 1.00 1.00	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
17.1 0.0 0.0 15.6 0.0 15.9 17.1 7.7 16.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
02 00 00 01 00 23 80 0,7 5,3 00 00 00 01 00 02 00 00 00 03 0.0 0.0 02 00 00 00 00 00 03 0.0 0.0 02 00 04 02 18 1.9 0.6 04 17.3 0.0 00 15.7 0.0 18.3 25.1 8.4 8.4 21.6 05 4.1 88 C A A C A C 06 20 0.0 0.0 0.0 0.0 0.0 07.3 17.3 86 08 21.7 68 51 23.1 68 08 4.5 09 32.5 10.5 30.0 32.5 09 34 0.1 0.0 2.4 0.2	Uniform Delay (d), s/veh	17.1	0.0	0.0	15.6	0.0	15.9	17.1	7.7	7.7	16.3	5.5	5.5
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	2.3	8.0	0.7	0.7	5.3	0.2	0.2
0.3 0.0 0.0 0.2 0.0 0.4 0.2 1.8 1.9 0.6  17.3 0.0 0.0 15.7 0.0 18.3 25.1 84 84 21.6  4.4 8 A B C A A C A C A C A C A C A C B B B C A A C C A C C A C C A C C A C C A C C C C	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
Veh  17.3 0.0 0.0 15.7 0.0 18.3 25.1 8.4 8.4 21.6  B A B A B C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A C	%ile BackOfQ(50%),veh/ln		0.0	0.0	0.2	0.0	0.4	0.2	1.8	1.9	9.0	0.8	0.8
17.3 0.0 0.0 15.7 0.0 18.3 25.1 8.4 8.4 21.6  B A A B A B C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A C	Unsig. Movement Delay, s/veh												
41 8 A B C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A A C A C A A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A	LnGrp Delay(d),s/veh	17.3	0.0	0.0	15.7	0.0	18.3	25.1	8.4	8.4	21.6	2.7	5.7
17.3 17.3 18.8 12.47 17.3 17.3 18.6 8.6 8.6 8.6 8.6 8.6 8.6 8.7 12.5 1.7 6.8 5.1 23.1 6.8 8.6 12.5 21.7 6.8 5.1 23.1 6.8 4.5 5.0 4.5 5.0 4.5 5.0 3.4 0.1 0.0 2.4 0.2 8.4 1.3 4.8 1.3 8.4 8.4 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	LnGrp LOS	В	A	A	В	A	В	ပ	A	A	ပ	A	A
17.3 17.3 8.6 B A B A A B B A B B A B B B A B B B B B	Approach Vol, veh/h		41			88			1247			944	
1 2 4 5 6 8 65 21.7 68 5.1 23.1 6.8 4.5 5.0 4.5 5.0 4.5 7.5 3.6 13.1 4.3 2.3 8.1 3.4 0.0 3.4 0.1 0.0 2.4 0.2	Approach Delay, s/veh		17.3			17.3			9.8			6.9	
1 2 4 5 6 65 21.7 68 5.1 23.1 4.5 5.0 4.5 45 5.0 1,s 1.26 28.0 3.26 10.5 30.0 5,s 3.6 13.1 4.3 2.3 8.1 0.0 3.4 0.1 0.0 2.4	Approach LOS		ш			В			∢			∢	Ī
6.5 21.7 6.8 5.1 23.1 45.5 5.0 4.5 4.5 5.0 4.5 4.5 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5	Timer - Assigned Phs	_	2		4	2	9		∞				Ī
4.5 5.0 4.5 4.5 5.0 (8.4 1.5 12.5 28.0 32.5 10.5 30.0 (9.4 1.3 1.4 1.3 2.3 8.1 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	Phs Duration (G+Y+Rc), s	6.5	21.7		8.9	5.1	23.1		8.9				
nax), s 12.5 28.0 32.5 10.5 30.0 3.1), s 3.6 13.1 4.3 2.3 8.1 s 0.0 3.4 0.1 0.0 2.4 8.4	Change Period (Y+Rc), s	4.5	2.0		4.5	4.5	2.0		4.5				
s 00 34 0.1 0.0 2.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8	Max Green Setting (Gmax), s	12.5	28.0		32.5	10.5	30.0		32.5				
s 0.0 3.4 0.1 0.0 2.4	Max Q Clear Time (g_c+11), s		13.1		4.3	2.3	8.1		3.4				
ary 8	Green Ext Time (p_c), s		3.4		0.1	0.0	2.4		0.2				i
8	Intersection Summary												Ī
	HCM 6th Ctrl Delay	ı		8.4								ı	
	HCM 6th LOS			5									

Los Pinos Apartments TIS W-Trans PM Future Page 1

HCM 6th Signalized Intersection Summary 2: S Moorland Ave & Todd Rd/US 101 South Ramps

04/01/2020

04/01/2020

Movement EBI EBI WBI WBI WBI NBI NBI NBI NBI SBI SBI SBI Lane Colligations		1	1	-	1	ļ	1	-	<b>—</b>	•	*	-	*
1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
10	Lane Configurations	*	4	W	k	43		J.		N.		4	
10	Traffic Volume (veh/h)	0	414	866	450	179	0	9//	0	139	0	0	0
100   10   0   0   0   0   0   0   0	Future Volume (veh/h)	0	414	866	450	179	0	9//	0	139	0	0	0
1,00	Initial Q (Qb), veh	0	~	0	0	0	0	က	0	0	0	0	0
100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100	Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
No ageth No	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
1870 1870 1870 1870 1870 1870 1870 1870	Work Zone On Approach		2			2			8			2	
0 414 760 450 179 0 776 0 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
100 100 100 100 100 100 100 100 100 100	Adj Flow Rate, veh/h	0	414	200	420	179	0	9//	0	79	0	0	0
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
916 962 797 592 622 0 0 0 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0	Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	2	2
0.00 0.51 0.51 0.33 0.33 0.00 0.00 0.00 0.00 0.00 0.0	Cap, veh/h	916	362	797	265	622	0	0	0	0	0	ည	0
1781   1870   1550   1781   1870   0   0   0   1870     1781   1870   1550   1781   1870   0   0   0   0   0     1781   1870   1550   1781   1870   0   0   0   0   0     1781   1870   1870   1870   0   0   0   0   0     1781   1870   1780   1870   0   0   0   0   0     1781   1870   1870   1870   0   0   0   0   0     1781   1870   1870   1870   0   0   0   0   0     1781   1870   1870   1870   0   0   0   0     1781   1870   1781   1870   0   0   0   0     1781   1870   1870   1870   0   0   0     1781   1871   1871   1871   1871   0   0   0     1781   1871   1871   1871   1871   0   0   0     1781   1871   1871   1871   0   0   0     1881   1882   1881   0   0   0   0     1882   1881   0   0   0   0     1883   1881   0   0   0     1883   1881   0   0   0     1884   0   0   0   0   0     1885   1881   0   0   0     1885   1881   0   0   0     1885   1881   0   0   0     1885   1881   0   0   0     1885   1881   0   0   0     1885   1881   0   0   0     1885   1881   0   0   0     1885   1881   0   0   0     1885   1881   0   0   0     1885   1881   0   0   0     1885   1885   0   0   0     1885   0   0   0   0     1885   0   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0   0   0     1885   0	Arrive On Green	0.00	0.51	0.51	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1781 760 450 179 0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sat Flow, veh/h	1781	1870	1550	1781	1870	0		0		0	1870	0
1781   1870   1550   1781   1870   0   0   1870     0.0   5.6   18.9   9.1   2.9   0.0   0.0   0.0     0.0   5.6   18.9   9.1   2.9   0.0   0.0   0.0     1.00   1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   1.00   1.00   0.00     1.00   1.00   1.00   1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00   1.00   0.00     1.00   1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   1.00   0.00   0.00     1.00   0.1   1.00   1.00   0.00   0.00     1.00   0.2   2.4   2.4   2.4   2.4     1.00   0.0   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0   0.0     1.00   0.0   0.0	Grp Volume(v), veh/h	0	414	09/	450	179	0		0.0		0	0	0
0.0 5.6 18.9 9.1 2.9 0.0 0.0 0.0 0.0 0.0 1.0 0.0 1.00 1.00	Grp Sat Flow(s),veh/h/ln	1781	1870	1550	1781	1870	0				0	1870	0
1.00 5.6 18.9 9.1 2.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Q Serve(g_s), s	0.0	9.6	18.9	9.1	2.9	0.0				0.0	0.0	0.0
1.00 1.00 1.00 0.00 0.00 0.00 0.00 0.00	Cycle Q Clear(g_c), s	0.0	9.6	18.9	9.1	5.9	0.0				0.0	0.0	0.0
916 962 797 592 622 0 0 0 0 5 0100 013 0195 0176 029 0.00 0.00 0.00 916 962 797 1321 1387 0 0 0 0 0 0 0 0 0 0100 1.00 1.00 1.00 1	Prop In Lane	1.00		1.00	1.00		0.00				0.00		0.00
0.00 0.43 0.95 0.76 0.29 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Lane Grp Cap(c), veh/h	916	962	797	265	622	0				0	2	0
916 962 797 1321 1387 0 0 0 879 1,00 1,00 1,00 1,00 1,00 1,00 1,00 0,00 1,00 1	V/C Ratio(X)	0.00	0.43	0.95	92.0	0.29	0.00				0.00	0.00	0.00
100 100 100 100 100 100 100 100 100 100	Avail Cap(c_a), veh/h	916	962	797	1321	1387	0				0	879	0
0.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00	HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
0.0 6.2 9.4 12.1 10.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.00	0.00	0.00
0.0 0.3 21.3 2.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Uniform Delay (d), s/veh	0.0	6.2	9.4	15.1	10.0	0.0				0.0	0.0	0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Incr Delay (d2), s/veh	0.0	0.3	21.3	2.0	0.3	0.0				0.0	0.0	0.0
0.0 6.5 30.6 14.1 10.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	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 6.5 30.6 14.1 10.2 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	8.2	3.0	6.0	0.0				0.0	0.0	0.0
0.0 6.5 30.6 14.1 10.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Unsig. Movement Delay, s/ve												
A A C B B A A A A 1774 629 0 0 0 22.1 B 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	LnGrp Delay(d),s/veh	0.0	6.5	30.6	14.1	10.2	0.0				0.0	0.0	0.0
1174 629 22.1 13.0 C B B 8 3.0 24.0 16.4 3.0 20.8 30.0 0.0 20.9 11.1 0.0 0.0 0.0 2.3	LnGrp LOS	A	A	ပ	В	В	A				A	A	V
22.1 13.0 C B B 8 2 4 8 8 0.0 24.0 16.4 3.0 3.2 3.0 19.0 20.8 30.0 0.0 20.9 11.1 0.0 0.0 22.9	Approach Vol, veh/h		1174			629						0	
C B A B C C C B C C C C C C C C C C C C	Approach Delay, s/veh		22.1			13.0						0.0	
2 4 0.0 24.0 3.0 3.2 19.0 20.8 0.0 20.9 0.0 0.0	Approach LOS		ပ			Ф							ı
0.0 24.0 3.0 3.2 19.0 20.8 0.0 20.9 0.0 0.0	Timer - Assigned Phs		2		4				∞				Ī
3.0 3.2 19.0 20.8 0.0 20.9 0.0 0.0	Phs Duration (G+Y+Rc), s		0.0		24.0				16.4				
19.0 20.8 0.0 20.9 0.0 0.0 18.9	Change Period (Y+Rc), s		3.0		3.2				3.0				
0.0 20.9 0.0 0.0 18.9	Max Green Setting (Gmax), s		19.0		20.8				30.0				
18.9 18.9	Max Q Clear Time (g_c+I1), s		0.0		20.9				11.1				
			0.0		0.0				2.3				
	Intersection Summary												Ī
	HCM 6th Ctrl Delay			18.9	ı								
	TOM 6# 100			2 0									ĺ

Los Pinos Apartments TIS PM Euture

HCM 6th Signalized Intersection Summary 3: US 101 Overpass & Todd Rd

	1	1	4	ţ	1		
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	#	*	M	40	r	N.N.	
Traffic Volume (veh/h)	181	245	369	389	328	901	
Future Volume (veh/h)	181	245	369	389	328	901	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1:00	
Parking Bus, Adj	00:1	1.00	1.00	1.00	1:00	1.00	
Work Zone On Approach	S			2	2		
Adj Sat Flow, veh/h/In	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	181	8	253	225	328	855	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Percent Heavy Veh, %	5	2	2	5	2	2	
Cap, veh/h	499	223	483	1015	204	1546	
Arrive On Green	0.14	0.14	0.27	0.27	0.28	0.28	
Sat Flow, veh/h	3647	1585	1781	3741	1781	2790	
Grp Volume(v), veh/h	181	66	253	225	328	855	
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1870	1781	1395	
Q Serve(g_s), s	1.6	2.0	4.1	4.3	5.6	8.9	
Cycle Q Clear(g_c), s	1.6	2.0	4.1	4.3	5.6	8.9	
Prop In Lane		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	499	223	483	1015	504	1546	
V/C Ratio(X)	0.36	0.44	0.52	0.54	0.65	0.55	
Avail Cap(c_a), veh/h	2120	946	803	1687	544	1609	
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	13.4	13.5	10.6	10.7	10.8	4.9	
Incr Delay (d2), s/veh	0.4	1.4	6.0	0.5	2.5	0.4	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.5	9.0	1.3	<del>د</del> .	- 28	2.4	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	13.8	14.9	11.5	11.2	13.3	5.3	
LnGip LOS	n	n	n	m	n	A	
Approach Vol, veh/h	780			802	1183		
Approach Delay, s/veh	14.2			11.3	7.5		
Approach LOS	മ			m	⋖		
Timer - Assigned Phs		2				9	Φ
Phs Duration (G+Y+Rc), s		8.3				12.8	13.2
Change Period (Y+Rc), s		3.5				3.5	3.57
Max Green Setting (Gmax), s		20.5				15.5	10.5
Max Q Clear Time (g_ c+l1), s		4.0				6.3	8.8
Green Ext Time (p_c), s		1.2				3.0	0.0
Intersection Summary							
Hotelstand Calling y			1				
HCM 6th Ctrl Delay			 				
HCIM btn LOS			∢				
Notes							

Notes
User approved volume balancing among the lanes for furning movement.

Los Pinos Apartments TIS PM Future

W-Trans Page 3

HCM 6th Signalized Intersection Summary 4: Santa Rosa Ave & Todd Rd

04/01/2020

04/01/2020

Movement   EBL   EBT   EBT   WBL   WBT   WBR   WBL   WBT		1	1	-	1	ļ	1	1	<b>—</b>	•	*	-	*
yeshelm) 394 65 566 48 95 64 482 755 38 21 731 me (vehln) 394 65 566 48 95 64 482 755 38 21 731 me (vehln) 394 65 566 48 95 64 482 755 38 21 731 me (vehln) 394 65 566 48 95 64 482 755 38 21 731 me (vehln) 394 65 566 48 95 64 482 755 38 21 731 me (vehln) 394 65 566 48 95 64 482 755 38 21 731 me (vehln) 394 65 566 48 95 64 482 755 38 21 731 me (vehln) 100 100 100 100 100 100 100 100 100 10	Movement	盟	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
rine (velht) 394 65 556 48 95 64 482 755 38 21 731 mine (velht) 394 65 556 48 95 64 482 755 38 21 731 mine (velht) 394 65 556 48 95 64 482 755 38 21 731 mine (velht) 0 0 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0	Lane Configurations	K	4	W.	K	ŧ\$		K	‡	W.	*	‡	*
mine (welhilp) 394 65 566 48 95 64 462 755 38 21 731 mine (welhilp) 394 65 566 48 95 64 462 755 38 21 731 mine (welhilp) 394 65 566 48 95 64 462 755 38 21 731 mine (welhilp) 100 0.00 1.00 1.00 1.00 1.00 1.00 1.00	Traffic Volume (veh/h)	394	65	256	48	92	64	482	755	38	21	731	239
On-Approach 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Future Volume (veh/h)	394	65	929	48	92	64	482	755	38	21	731	239
oil Agricoach         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00	Initial Q (Qb), veh	0	0	0	0	0	0	5	0	0	0	0	0
s, Adjir, Horizon 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,0	Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		9.	1.00		1.00
Un Appolacin No	Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.5	1.00
ate, vehin 1870 1870 1870 1870 1870 1870 1870 1870	Work Zone On Approach	0.00	2	o ii o	0	2	0107	010	2	0.00	o i o	2	0
ata, vehin 424 0 401 48 95 43 482 755 20 21 731 Flector 100 100 100 100 100 100 100 100 100 10	Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Adj Flow Rate, veh/h	424	0	401	48	32	43	482	755	50	5 51	731	125
say Veh, % 1002	Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
price 1002 0 439 174 119 54 58 1818 1818 1819 1819 1819 1819 1819 1	Percent Heavy Veh, %	2	2	2	2 :	2	7	2	2	2 !	7	2	2
3563 0.00 0.28 0.010 0.10 0.18 0.41 0.41 0.02 0.25 3563 0.00 0.28 0.00 0.28 0.00 0.28 0.10 0.10 0.10 0.18 0.41 0.41 0.02 0.25 0.29 0.00 0.23 0.23 0.2 7.1 170 14.8 0.7 1.1 180 0.0 0.23 0.23 0.23 0.0 7.1 170 14.8 0.7 1.1 180 0.0 0.23 0.23 0.0 7.1 170 14.8 0.7 1.1 180 0.0 0.0 0.20 0.23 0.23 0.0 7.1 170 14.8 0.7 1.1 180 0.0 0.0 0.20 0.23 0.0 7.1 170 14.8 0.7 1.1 180 0.0 0.0 0.0 1.00 1.00 1.00 1.00	Cap, veh/h	1002	0	439	174	119	24	328	1451	645	32	881	391
3563 0 1961 1/81 1/218 3551 1/81 3554 15/9 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 3554 1/81 355 2 2 2 1 177 1/81 35 3 1 1/81 35 3 1 1/81 35 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81 3 1 1/81	Arrive On Green	0.28	0.00	0.28	0.10	0.10	0.10	0.18	0.41	0.41	0.02	0.25	0.25
424         0         401         48         0         138         482         755         20         21         731           1781         0         1561         1781         0         1769         1781         1777         1579         1781         1777         1779         1781         1777         1779         1781         1777         1779         1781         1777         1779         1781         1777         1779         1781         1777         1779         1781         1777         1780         1781         1777         1779         1781         1777         1780         1781         1777         1780         1781         1777         1780         1781         1777         1781         1777         1781         1781         1777         1781         1777         1781         1777         1781         1777         1781         1777         1781         1777         1781         1777         1781         1777         1781         1777         1781         1777         1781         1777         1781         1777         1781         1777         1781         1781         1781         1781         1781         1781         1781         1781         1781	Sat Flow, veh/h	3563	0	1561	1/81	1218	551	1/81	3554	15/9	1/81	3554	15/9
1781	Grp Volume(v), veh/h	424	0	401	48	0	138	482	755	20	21	731	125
9.0 0.0 23.0 2.3 0.0 7.1 17.0 14.8 0.7 1.1 18.0 1.00 1.00 1.00 1.00 1.00 1.00	Grp Sat Flow(s), veh/h/ln	1781	0	1561	1781	0	1769	1781	1777	1579	1781	17.77	1579
100 0.0 23.0 2.3 0.0 7.1 17.0 14.8 0.7 11.1 18.0 10.0 10.0 10.0 10.0 10.0 10.0	Q Serve(g_s), s	9.0	0.0	23.0	2.3	0:0	7.1	17.0	14.8	0.7	<del>[</del> -	18.0	0.9
1,00	Cycle Q Clear(g_c), s	9.0	0.0	23.0	2.3	0.0	7.1	17.0	14.8	0.7	<del>1.</del>	18.0	0.9
1002 0 439 174 0 173 328 1451 645 32 881 1451 645 32 881 1451 645 32 881 1451 645 32 881 1451 645 32 813 642 0.00 0.991 0.28 0.00 0.80 0.80 0.83 0.00 0.991 0.28 0.00 0.80 0.100 1.00 1.00 1.00 1.00 1.	Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1:00
1368 0.00 0.91 0.28 0.00 0.80 147 0.52 0.03 0.65 0.83 1368 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Lane Grp Cap(c), veh/h	1002	0	439	174	0	173	328	1451	645	32	881	391
1386 0 599 202 0 201 328 1480 658 202 1249 1300 1.00 1.00 1.00 1.00 1.00 1.00 1.00	V/C Ratio(X)	0.42	0.00	0.91	0.28	0.00	0.80	1.47	0.52	0.03	0.65	0.83	0.32
100 100 100 100 100 100 100 100 100 100	Avail Cap(c_a), veh/h	1368	0	299	202	0	201	328	1480	658	202	1249	222
1,000 0,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	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
27.1         0.0         32.1         38.7         0.0         40.8         37.7         20.5         16.4         45.1         32.9           0.1         0.0         12.8         0.0         15.0         228.1         0.1         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.1 0.0 128 0.3 0.0 15.0 228.1 0.1 0.0 80 2.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Uniform Delay (d), s/veh	27.1	0.0	32.1	38.7	0.0	40.8	37.7	20.5	16.4	45.1	32.9	28.4
0.0 0.0 0.0 0.0 0.0 0.0 22.0 0.0 0.0 0.0	Incr Delay (d2), s/veh	0.1	0.0	12.8	0.3	0.0	15.0	228.1	0.1	0.0	8.0	2.3	0.2
3.7 0.0 9.7 1.0 0.0 3.7 29.8 5.7 0.2 0.5 7.6  2.2 0.0 44.9 39.0 0.0 55.8 287.8 20.7 16.4 53.1 35.2  C A D D A E F C B D D  825 186 1257 87.7  2 3 4 6 7 8  30.5 21.0 27.4 13.5 6.2 42.2  2 3 4 6 7 8  30.5 21.0 27.4 13.5 6.2 42.2  2 5.0 49.0 20.0 9.1 3.1 16.8  771.3	Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0
172   0.0   44.9   39.0   0.0   55.8   287.8   20.7   16.4   53.1   35.2     C	%ile BackOfQ(50%),veh/ln		0.0	9.7	1.0	0.0	3.7	29.8	2.7	0.2	0.5	9.7	2.2
2 3 4 6 7 7 8 8 6 7 8 8 7 8 7 8 7 8 7 8 7 8 7	Unsig. Movement Delay, s/veh		d		6	d	L	000	1	7 07		c	0
825 186 157 877 877 877 877 877 877 877 877 877 8	LnGrp Delay(d),s/ven	7.17	0.0	¥.5	0.85 0.0	0.0	22.8	287.8	70.7	16.4	53.7	35.2	78.0
35.8 51.4 123.0 D	Annmach Vol. veh/h	)	825	۵	٥	186	١	-	1257	ב	2	877	
2 3 4 6 7 8 30.5 21.0 27.4 13.5 6.2 42.2 4.5 4.0 4.5 4.5 4.5 4.5 38.5 17.0 20.0 9.1 3.1 16.8 0.9 0.0 2.2 0.1 0.0 2.5 771.3	Approach Delay, s/veh		35.8			51.4			123.0			34.7	
2 3 4 6 7 30.5 21.0 27.4 13.5 6.2 4 4.5 4.0 4.5 4.5 4.5 36.5 17.0 20.0 9.1 3.1 0 0.9 0.0 2.2 0.1 0.0 71.3 E	Approach LOS		۵			۵			ட			ပ	F
30.5 21.0 27.4 13.5 6.2 4 4.5 4.0 4.5 4.5 4.5 35.5 17.0 32.5 10.5 10.5 20.0 0.9 0.0 2.2 0.1 0.0  771.3	Timer - Assigned Phs		2	က	4		9	7	∞				
4.5 4.0 4.5 4.5 4.5 3.5 3.5 17.0 32.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10	Phs Duration (G+Y+Rc), s		30.5	21.0	27.4		13.5	6.2	42.2				
35.5 17.0 32.5 10.5 10.5 25.0 19.0 20.0 9.1 3.1 0.9 0.0 2.2 0.1 0.0    71.3 E	Change Period (Y+Rc), s		4.5	4.0	4.5		4.5	4.5	4.5				
250 190 200 9.1 3.1 0.9 0.0 2.2 0.1 0.0 71.3	Max Green Setting (Gmax), s		35.5	17.0	32.5		10.5	10.5	38.5				
0.9 0.0 2.2 0.1 0.0 71.3 E	Max Q Clear Time (g_c+I1), s		25.0	19.0	20.0		9.1	3.1	16.8				
ary	Green Ext Time (p_c), s		6.0	0.0	2.2		0.1	0.0	2.5				
	Intersection Summary												Ī
	HCM 6th Ctrl Dolay	ı	ı	71.3	ı	ı	ı	ı	ı	ı	ı	ı	
	HCM 6th LOS			<u>.</u> Э ш									

Notes
User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS PM Future

HCM Signalized Intersection Capacity Analysis 4: Santa Rosa Ave & Todd Rd

Control Extension   Cont	Movement Lane Configurations Traffic Volume (vph) Future Volume (vph) Ideal Flow (vphp) Total Lost time (s) Total Lost time (s) Future Uil: Factor Future Volume (s) Future Uil: Factor Future Volume (s)	EBL	FBT	EBR	WBL	WBT	WRR	NBL	NRT	NRR	SBL	SBT	SBR
10	Lane Configurations Traffic Volume (vph) Future Volume (vph) Ideal Flow (vphp) Total Lost time (s) Total Lost time (s) Emb Ulf, Factor Emb ned Visitee								2	-		)	
1934   65 566 48 95 64 482 755 38 21 731     1900 1900 1900 1900 1900 1900 1900 190	Traffic Volume (vph) Future Volume (vph) Ideal Flow (vphpl) Total Lost time (s) Lane Util. Factor Emb. road hijkes	je-	4	*_	*	24		*	4		<u>r</u>	‡	*-
1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,00	Future Volume (vph) Ideal Flow (vphpl) Total Lost time (s) Lane Util. Factor	394	65	226	48	92	25	482	755	38	21	731	239
1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900	Ideal Flow (vphpl) Total Lost time (s) Lane Util. Factor Emb. pad/hites	394	92	226	84	92	22	482	755	38	51	731	239
4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5	Total Lost time (s) Lane Util. Factor Emb. pad/hites	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
1,00	Lane Util. Factor	4.5	4.5	4.5	4.5	4.5		4.0	4.5		4.5	4.5	4.5
1.00	Emh nad/hikae	0.95	0.95	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
1.00	i pp, ped/bines	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	0.99
1.00   1.00   0.85   1.00   0.99   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00	Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Color   Colo	Frt	1.00	1.00	0.85	1.00	0.94		1.00	0.99		1.00	1.00	0.85
1681   1708   1588   1770   1750   3433   3514   1770   3539   1700   1588   1770   1750   3433   3514   1770   3539   1700   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000	Fit Protected	0.95	0.97	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
0.95   0.97   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95   0.95	Satd. Flow (prot)	1681	1708	1558	1770	1750		3433	3514		1770	3539	1560
Hell   1708   1568   1770   1750   3433   3514   1770   3559   1	Flt Permitted	0.95	0.97	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Satd. Flow (perm)	1681	1708	1558	1770	1750		3433	3514		~	3539	1560
394 65 556 48 95 64 482 755 38 21 731   229 230 296 48 138 0 92 790 0 21 731   229 230 296 48 138 0 482 790 0 21 731   2	Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
0         0         290         0         21         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Adj. Flow (vph)	394	92	226	48	92	2	482	755	38		731	239
229 230 266 48 138 0 482 790 0 21 731    1	RTOR Reduction (vph)	0	0	290	0	21	0	0	က	0		0	169
NA Perm Split NA Prot NA Pro	Lane Group Flow (vph)	229	230	266	48	138	0	482	790	0		731	70
Split         NA         Perm         Split         NA         Prof         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A	Confl. Peds. (#/hr) Confl. Bikes (#/hr)			— ო	<del>-</del>			က					n
2         2         6         6         3         8         7         4           196         196         196         10.1         10.1         10.1         162         39.5         2.2         26.0           196         196         10.1         10.1         10.1         16.2         39.5         2.2         26.0           0.22         0.22         0.11         0.11         10.1         16.2         39.5         2.2         26.0           4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5	Turn Type	Split	NA	Perm	Split	AN		Prot	AN		Prot	¥	Perm
196   196   196   196   196   196   196   196   196   196   196   196   196   196   196   196   196   101   101   162   395   2.2   26.0     196   196   196   101   10.11   16.2   395   2.2   26.0     125   0.22   0.22   0.11   0.11   0.18   0.44   0.02   0.29     126   125   1.5   1.5   1.5   1.5   1.5   1.5     128   374   341   199   197   622   1562   43   1029     0.14   0.13   0.03   0.08   0.014   0.22   0.01   0.021     0.62   0.61   0.78   0.24   0.70   0.77   0.51   0.49   0.71     0.62   0.61   0.78   0.24   38.4   0.5   0.1   0.01     0.73   0.73   0.74   0.70   0.77   0.51   0.49   0.71     0.74   0.75   0.74   0.70   0.77   0.51   0.49   0.71     0.75   0.76   0.76   0.77   0.77   0.51   0.62     0.76   0.78   0.78   0.70   0.70   0.70   0.70     0.78   0.78   0.78   0.70   0.70   0.70     0.78   0.78   0.78   0.70   0.70   0.70     0.78   0.78   0.70   0.70   0.70   0.70     0.78   0.78   0.70   0.70   0.70   0.70     0.79   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70     0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.70   0.	Protected Phases	2	7		9	9		က	80		7	4	ľ
196   196   196   196   101   101   162   39.5   2.2   26.0     196   196   196   10.1   10.1   16.2   39.5   2.2   26.0     196   196   196   10.1   10.1   16.2   39.5   2.2   26.0     4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5     4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5     4.5   4.5   4.5   4.5   4.5   4.5   4.5   4.5     4.6   4.7   4.1   4.1   4.1   4.1   4.1   4.1     5   4.5   4.5   4.5   4.5   4.5   4.5     5   5   6   6   6   6   6   6   6     5   6   6   6   6   6   6   6     5   7   7   7   7     5   7   7   7   7     5   7   7   7   7     5   7   7   7   7     5   7   7   7     6   7   7   7     7   7   7   7     7   7	Permitted Phases			2									4
196   196   196   101   101   162   395   2.2   260     45   45   45   45   45   45   45	Actuated Green, G (s)	19.6	19.6	19.6	10.1	10.1		16.2	39.5		2.2	26.0	26.0
0.22         0.22         0.1         0.11         0.11         0.18         0.44         0.02         0.29           4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         6.0         1.02         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Effective Green, g (s)	19.6	19.6	19.6	10.1	10.1		16.2	39.5		2.2	26.0	26.0
45   45   45   45   45   45   45   45	Actuated g/C Ratio	0.22	0.22	0.22	0.11	0.11		0.18	0.44		0.02	0.29	0.29
1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.0	4.5		4.5	4.5	4.5
368 374 341 199 197 622 1552 43 1029  0.14 0.13 0.03 c0.08 c0.14 0.22 0.01 c0.21  0.62 0.61 0.78 0.24 0.70 0.77 0.51 0.49 0.71  3.16 31.5 32.9 36.2 38.2 34.9 18.0 43.0 28.3  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5
0.14 0.13 0.03 c.0.08 c.0.14 0.22 0.01 c.0.21 0.05 c.0.08 c.0.14 0.22 0.01 c.0.21 0.05 c.0.08 0.0.14 0.22 0.01 c.0.21 0.05 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02 0.02	Lane Grp Cap (vph)	368	374	341	199	197		622	1552		43	1029	453
0.62 0.61 0.78 0.24 0.70 0.77 0.51 0.49 0.71 0.61 0.78 0.51 0.49 0.71 0.61 0.78 0.78 0.79 0.77 0.51 0.49 0.71 0.61 0.78 0.79 0.70 0.77 0.51 0.49 0.71 0.70 0.70 0.70 0.70 0.70 0.70 0.70	v/s Ratio Prot	0.14	0.13		0.03	c0.08		c0.14	0.22		0.01	c0.21	
0.62 0.61 0.78 0.24 0.70 0.77 0.51 0.49 0.71 0.51 0.16 0.29 0.71 0.52 0.61 0.78 0.24 0.70 0.77 0.51 0.49 0.71 0.51 0.04 0.71 0.51 0.04 0.71 0.51 0.04 0.71 0.51 0.04 0.71 0.51 0.04 0.71 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.0	v/s Ratio Perm			c0.17									0.04
316   315   329   362   382   349   180   430   283   310   283   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310   310	v/c Ratio	0.62	0.61	0.78	0.24	0.70		0.77	0.51		0.49	0.71	0.15
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Uniform Delay, d1	31.6	31.5	32.9	36.2	38.2		34.9	18.0		43.0	28.3	23.5
2.4 2.1 9.8 0.2 8.4 5.5 0.1 3.2 1.9 3.3 3.6 42.7 36.4 46.6 40.3 18.1 46.2 30.3 C C D D D D B D C C D D C C D D D C C C D D D D B C C C D D D C C C C C C C C C C C C C C	Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
33.9 33.6 42.7 36.4 46.6 40.3 18.1 46.2 30.3 C C D D D D B D C C S S S S S S S S S S S S S S S S S	Incremental Delay, d2	2.4	2.1	8.6	0.2	8.4		5.5	0.1		3.2	1.9	0.1
C C D D D D B B D 38.6 44.2 26.5 D C D D D D B B D C D C C D D D D B B D C D C C C D D D D B B D D C D C C C D D D D B B D D C D C C D D C C C D C C D C C D C C D C C D C C D C D C D D C D D D D D D D D D D D D D D D D D D D D	Delay (s)	33.9	33.6	42.7	36.4	46.6		40.3	18.1		46.2	30.3	23.6
38.6 44.2 26.5  D D D C  Dacity ratio 0.75  Sation 75.5% (CU Level of Service D  15.5% (CU Level of Service D  15.5% (CU Level of Service D  15.5% (CU Level of Service D	Level of Service	ပ	ပ	Δ	Δ	۵		Ω	В		Ω	O	O
D D C 31.8 HCM 2000 Level of Service C pacity ratio 0.75  Sation 75.5% ICU Level of Service D 15	Approach Delay (s)		38.6			44.2			26.5			29.0	
31.8 HCM 2000 Level of Service 0.75 0m of lost time (s) zation 75.5% ICU Level of Service 15	Approach LOS		Ω						O			ပ	Ī
31.8 HCM 2000 Level of Service pacity ratio 0.75  994 Sum of lost time (s) zation 75.5% ICU Level of Service 15	Intersection Summary												
pacity ratio 0.75  (27)  Sum of lost time (s)  75,5% (CU Level of Service 15)	HCM 2000 Control Delay			31.8	¥	M 2000	level of S	Service		ပ			
h (s) 89.4 Sum of lost time (s) Utilization 75.5% ICU Level of Service	HCM 2000 Volume to Capacity	ratio		0.75									
Utilization 75.5% ICU Level of Service 15	Actuated Cycle Length (s)			89.4	S	m of lost	time (s)			18.0			ì
Analysis Period (min) 15	Intersection Capacity Utilization			75.5%	0	U Level o	f Service			۵			ľ
	Analysis Period (min)			15									Ī

Los Pinos Apartments TIS PM Future Mitigated

W-Trans Page 1

HCM Signalized Intersection Capacity Analysis 5: S Moorland Ave & US 101 Overpass

04/01/2020

04/01/2020

WEL WER NBT NBR SEL  3 760 204 105 1307  33 760 204 105 1307  1900 1900 1900 1900 1900  11 11 11 12 12 12  4.5 1.00 1900 1900 1900  1.00 100 100 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.95  1.00 1.00 0.97  2.88 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27.1 21.3  2.85 2 27	SBT \$9 59 59 59 100 100 0.96 100 0.96 100 0.96 100 0.96 100 0.96 100 0.96 100 0.96 100 100 100 100 100 100 100 10
Name	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
33 760 204 105 1307 1900 1900 1900 1900 1900 11 11 12 12 12 4.5 4.5 4.5 4.5 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 1.00 0.95 1.00 0.97 1.00	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
33 760 204 105 1307 1900 1900 1900 1900 1900 1,00 100 1900 1900 1900 1,00 1,00 1,00 0.95 1,00 1,00 0.95 1,00 1,00 0.95 1,00 1,00 0.95 1,00 1,00 0.95 1,00 1,00 1,00 0.95 1,00 204 105 1307 1,00 204 105 1307 1,00 1,00 1,00 0.95 1,15 0.95 1,14 16.8 31.5 1,14 16.8 31.5 1,15 0.42 0.42 1,10 0.61 0.74 0.97 2,10 0.61 0.74 0.85 2,10 0.61 0.74 0.87 2,10 0.74	5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5
1900 1900 1900 1900 1900 1900 1900 1900	0.0 5.5 5.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6
11   11   12   12   12   13   14   15   14   15   15   15   15   15	2.2 6.6 6.6 0.0 0.0 6.6 6.6 6.6 6.6 6.6 6.6
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1564   1777   1681   1700   1.00   0.95   1.00   1.00   0.95   1.00   1.00   1.00   0.95   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
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h) 168 0 291 0 680  Prot NA Split 8 131.5  134 16.8 31.5  0.18 0.22 0.42  4.5 4.5 4.5 4.5  3.0 3.0 3.0 3.0  278 396 704  c0.11 c0.16 0.40 c  1.00 1.00 1.00  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2.85 27.1 21.3  2	δΑ Α Α
Prot NA Split 8 2 6 6 6 13.4 16.8 31.5 13.4 16.8 31.5 13.5 13.0 3.0 3.0 2.7 13.0 3.0 2.0 2.0 10.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	۸ ئ ئ
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(s) 3.0 3.0 3.0 3.0 (h) 278 396 774 0.011 0.016 0.40 0.97 1.0 1.00 1.00 1.00 1.00 1.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	4.5
n) 278 396 704 0.40 0.40 0.61 0.61 0.74 0.97 28.5 27.1 21.3 1.00 1.00 1.00 1.00 0.55 0.55 0.55 0.55	3.0
0011 0016 040 0 061 074 097 285 27.1 21.3 100 1.00 1.00 1.00 42 3.7 6.9 25.5 C C D 32.2 34.1 46.8 C C D	708
0.61 0.74 0.97  28.5 27.1 21.3  1.00 1.00 1.00  22.2 34.1 46.8  C C C  9 32.2 34.1  1.00 22.0  1.00 25.5	<u> </u>
061 074 097 285 27.1 21.3 r 1.00 1.00 1.00 1.02 3.7 6.9 25.5 32.2 34.1 46.8 C C D 5) 32.2 34.1	
28.5 27.1 21.3 -1.00 1.00 1.00 1.00 -1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	76.0
lay, d2 3.7 6.9 25.5 [100]  lay, d2 3.7 6.9 25.5 [100]  c	21.4
lay, d2 3.7 6.9 25.5 32.2 34.1 46.8 5 C C D y(s) 32.2 34.1	1.00
32.2 34.1 46.8 C C D y(s) 32.2 34.1 C	26.0
y(s) 32.2 34.1 D	47.3
y(s) 32.2 34.1 C C	۵
O	47.1
	٥
Intersection Summary	
HCM 2000 Control Delay 40.7 HCM 2000 Level of Service	of Service D
pacity ratio 0.83	
Actuated Cycle Length (s) 75.2 Sum of lost time (s)	(s) 13.5
zation 115.0	vice
Analysis Period (min) 15	

Los Pinos Apartments TIS PM Future

HCM 6th Signalized Intersection Summary 1: Santa Rosa Ave & East Robles Ave

## Hear Hear Hear Well Well Nell Nell Nell Nell Nell Nell		1	1	-	1	1	1	1	+		۶	-	*
Figurations   Color	Movement	EB	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
14 0 7 46 0 55 25 999 17 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Lane Configurations		42		K	24		K.	44		K	44	
14 0 7 46 0 55 25 999 17 21 3  10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Traffic Volume (veh/h)	14	0	7	46	0	22	25	666	17	21	330	15
100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Future Volume (veh/h)	14	0	7	46	0	22	22	666	17	21	390	15
100   0.98   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1	Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
1.00 1,00 1,00 1,00 1,00 1,00 1,00 1,00	Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
No	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
Fig.	Work Zone On Approach		8			2			8			8	
15 0 8 49 0 59 27 1074 18 23 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93	Adj Flow Rate, veh/h	15	0	∞	49	0	29	27	1074	18	23	419	16
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	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
224 0 17 352 0 110 43 1434 24 37 7 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
0.08 0.00 0.08 0.08 0.00 0.08 0.03 0.45 0.45 0.02 23 0.00 0.00 0.00 0.00 0.00 0.00 0	Cap, veh/h	224	0	17	352	0	110	43	1434	24	37	1387	53
400	Arrive On Green	0.08	0.00	0.08	0.08	0.00	0.08	0.03	0.45	0.45	0.02	0.44	0.44
23 0 0 49 0 59 27 534 558 23 2	Sat Flow, veh/h	400	0	213	1267	0	1402	1603	3217	54	1603	3137	120
613 0 0 1267 0 1402 1603 1599 1672 1603 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Grp Volume(v), veh/h	23	0	0	49	0	29	27	534	228	23	213	222
0.5 0.0 0.0 0.0 1.3 0.5 8.6 8.6 0.4 0.65 0.3 100 0.0 13 0.5 8.6 8.6 0.4 0.65 0.3 100 0.0 13 0.5 8.6 8.6 0.4 0.10 0.00 0.00 0.14 0.00 0.54 0.63 0.75 0.75 0.62 0.7 0.10 0.00 0.00 1.00 1.00 1.00 1.00 1.00	Grp Sat Flow(s),veh/h/ln	613	0	0	1267	0	1402	1603	1599	1672	1603	1599	1657
s 18 0.0 0.0 0.9 1.3 0.5 8.6 8.6 0.4 1.0 0.65 0.3 1.0 0.0 0.0 0.0 1.3 0.5 8.6 8.6 0.4 1.0 0.65 0.35 1.0 0.0 0.0 0.1 1.0 1.00 0.0 0.3 1.0 0.0 0.0 0.1 1.0 1.0 0.0 0.0 0.0 0.1 1.0 1.0	Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	1.3	0.5	9.8	9.8	0.4	2.7	2.7
hill 1065 0.35 1.00 1.00 1.00 0.03 1.00 1.00 0.10 0.03 1.00 0.10 0.1	Cycle Q Clear(g_c), s	1.8	0.0	0.0	6.0	0.0	1.3	0.5	9.8	9.8	0.4	2.7	2.7
hith 240 0 352 0 110 43 713 745 37 713 745 37 713 745 37 713 710 0.00 0.014 0.00 0.54 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.65	Prop In Lane	0.65		0.35	1.00		1:00	1.00		0.03	1.00		0.07
100   0.00   0.14   0.00   0.54   0.63   0.75   0.62   0.62   0.63   0.75   0.62   0.63   0.75   0.62   0.63   0.75   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0.65   0	Lane Grp Cap(c), veh/h	240	0	0	352	0	110	43	713	745	37	707	733
National Property   Nati	V/C Ratio(X)	0.10	0.00	0.00	0.14	0.00	0.54	0.63	0.75	0.75	0.62	0.30	0.30
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Avail Cap(c_a), veh/h	1477	0	0	1584	0	1474	244	1448	1514	648	1552	1608
100 0.00 0.00 1.00 1.00 1.00 1.00 1.00	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
(d), s/veh 14.6 0.0 0.0 13.5 0.0 13.7 14.9 7.1 7.1 15.0 15.0 (d), s/veh 1.0 0.0 0.0 0.1 0.0 1.5 5.5 0.6 6.1 15.0 (d), s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
N, siveh 0.1 0.0 0.0 0.1 0.0 1.5 5.5 0.6 0.6 6.1 (20), siveh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Uniform Delay (d), s/veh	14.6	0.0	0.0	13.5	0.0	13.7	14.9	7.1	7.1	15.0	5.5	5.6
(30%),vehln 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	1.5	5.5	9.0	9.0	6.1	0.1	0.1
Figure   F	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
ent Delay, siveh 14.6 0.0 0.0 13.6 0.0 15.2 20.4 7.7 7.7 21.0 lysveh	%ile BackOfQ(50%),veh/ln		0.0	0.0	0.3	0.0	0.4	0.2	1.3	1.3	0.2	0.4	0.4
U, siveh 146 0.0 0.0 136 0.0 152 204 77 77 210  Welch 23 108 C	Unsig. Movement Delay, s/veh												
Weith         23         A         B         A         B         C         A         A         C           9y, sveh         14,6         14,5         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.0         8.5         18.7         6.9         8.5         18.7         6.9         8.5         18.7         6.9         8.5         18.7         6.9         8.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.5         18.7         18.5         18.5         18.7         18.5         18.7         18.5         18.7         18.5         18.7         18.5         18.7         18.5         18.7         18.5         18.5         18.7         18.7         18.7         18.7	LnGrp Delay(d),s/veh	14.6	0.0	0.0	13.6	0.0	15.2	20.4	7.7	7.7	21.0	9.6	5.6
weighth         23         108         1119           sy, sveh         14.6         14.5         8.0           see Pris         1         2         4         5         6           G-Y+RO, s         5.2         18.8         6.9         5.3         18.7         6.9           G+Y-RO, s         4.5         5.0         4.5         5.0         4.5           G+V-RO, s         4.5         5.0         4.5         5.0         4.5           Immedical (analy), s         2.4         10.6         3.0         32.5         1.1         0.2           re (p_c), s         0.0         3.0         0.0         1.1         0.2         1.1         0.2           mmmany         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1         8.1	LnGrp LOS	В	A	A	В	A	В	ပ	V	A	ပ	A	A
9y, sveh 14.6 14.5 8.0 8 B B A A B B A A B B B B B B B B B B B	Approach Vol, veh/h		23			108			1119			458	
B B B B Carbon B B B Carbon B B Carbon	Approach Delay, s/veh		14.6			14.5			8.0			6.4	
Ged Phs         1         2         4         5         6           G+Y-Rc), s         5.2         18.8         6.9         5.3         18.7           1 (Y-Rc), s         4.5         5.0         4.5         5.0           4 (Grax), s         1.5         2.0         3.5         10.5         30.0           4 (Grax), s         2.4         10.6         3.8         2.5         4.7           1 (P, c), s         0.0         3.0         0.0         1.1           2 (P, c), s         0.0         3.0         0.0         1.1           2 (P, c), s         0.0         3.0         1.1         3.0           3 (P, c), s         0.0         1.1         3.0         1.1	Approach LOS		Ф			Ф			∢			∢	ľ
G+Y+R0, s 5.2 18.8 6.9 5.3 18.7 (1/4R0, s 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.5 5.0 4.7 (1/4R0, s) 2.4 10.6 3.8 2.5 4.7 (1/4R0, s) 2.4 10.6 3.8 2.5 4.7 (1/4R0, s) 2.4 10.6 3.8 2.5 4.7 (1/4R0, s) 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8	Timer - Assigned Phs	_	2		4	2	9		∞				Ī
tting (Gmax), s 4.5 5.0 4.5 5.0 3.0 tting (Gmax), s 12.5 28.0 32.5 10.5 30.0 3.0 ime (g_C+I1), s 2.4 10.6 3.8 2.5 4.7 ime (g_C-I1), s 0.0 3.0 0.0 0.0 1.1 immary  Manuary  8.1	Phs Duration (G+Y+Rc). s	5.2	18.8		6.9	5.3	18.7		6.9		ı	ı	
tting (Gmax), s 12.5 28.0 32.5 10.5 30.0 (cmax), s 12.5 28.0 32.5 10.5 30.0 (cm (g_C+11), s 2.4 10.6 3.8 2.5 4.7 (cm (g_C+11), s 0.0 3.0 0.0 0.0 1.1 (cm ary)	Change Period (Y+Rc), s	4.5	2.0		4.5	4.5	2.0		4.5				ľ
ime(g_c+I1), s 2.4 10.6 3.8 2.5 4.7 le(p_c), s 0.0 3.0 0.0 0.0 1.1 mmany 8.1	Max Green Setting (Gmax), s	12.5	28.0		32.5	10.5	30.0		32.5				١
le (p_o), s 0.0 3.0 0.0 0.0 1.1 mmnany 8.1 8.1	Max Q Clear Time (g_c+I1), s	2.4	10.6		3.8	2.5	4.7		3.3				
ummary 8	Green Ext Time (p_c), s	0.0	3.0		0.0	0.0	1.1		0.2				
Delay 8	Intersection Summary	l	l	l	l	l	l	l	l	l	l		Ì
S S S S S S S S S S S S S S S S S S S	HCM 6th Ctd Delay	l	l	ά.	l	l	l	l	l	l	l	ı	
	HCM 6th I OS			5 <									ľ

Los Pinos Apartments TIS W-Trans AM Existing Plus Project Page 1

HCM 6th Signalized Intersection Summary 2: S Moorland Ave & Todd Rd/US 101 South Ramps

03/30/2020

03/30/2020

Movement EBI EBI WBI WBI WBI NBI NBI NBI NBI SBI SBI SBI SBI And Lane Configurations		1	1	-	1	ţ	1	1	<b>—</b>	•	×	<b>→</b>	*
1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
10   269   330   291   184   0   468   0   126   0   0	Lane Configurations	k	4	W.	K	2		K		N. W.		4	
100   269   330   291   184   0   468   0   126   0   0   0   0   0   0   0   0   0	Traffic Volume (veh/h)	0	269	330	291	184	0	468	0	126	0	0	0
100	Future Volume (veh/h)	0	269	330	291	184	0	468	0	126	0	0	0
100 100 100 100 100 100 100 100 100 100	Initial Q (Qb), veh	0	0	0	0	0	0	က	0	0	0	0	0
1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   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		0.98	1.00		1.00	1.00		1.00	1.00		1.00
ch 1870 1870 1870 1870 1870 1870 1870 1870	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
1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870	Work Zone On Approach		2			2			8			S	
0 283 158 306 194 0 493 0 67 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
0.05 0.95 0.95 0.95 0.95 0.95 0.95 0.95	Adj Flow Rate, veh/h	0	283	158	306	194	0	493	0	29	0	0	0
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 0 2 2 2 2	Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
1890   619   513   614   645   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	2	2
1781 1870 1549 1781 1870 0 000 000 000 000 000 000 000 000 00	Cap, veh/h	290	619	513	614	645	0	0	0	0	0	9	0
1781   1870   1549   1781   1870   0 0 0   1870     10	Arrive On Green	0.00	0.33	0.33	0.34	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
National Color   Nati	Sat Flow, veh/h	1781	1870	1549	1781	1870	0		0		0	1870	0
1781 1870 1549 1781 1870 0 0 1870	Grp Volume(v), veh/h	0	283	158	306	194	0		0.0		0	0	0
0.0 2.3 1.5 2.6 1.4 0.0 0.0 0.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 0	Grp Sat Flow(s),veh/h/ln	1781	1870	1549	1781	1870	0				0	1870	0
100 2.3 1.5 2.6 1.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Q Serve(g_s), s	0.0	2.3	1.5	5.6	1.4	0.0				0.0	0.0	0.0
House the control of	Cycle Q Clear(g_c), s	0.0	2.3	1.5	5.6	1.4	0.0				0.0	0.0	0.0
hh 550 619 513 614 645 0 0 0 0 10 0 10 0 10 0 10 0 10 0 10 0	Prop In Lane	1.00		1.00	1.00		0.00				0.00		0.00
1000 046 031 050 030 000 000 000 000 000 000 000 000	Lane Grp Cap(c), veh/h	290	619	513	614	645	0				0	9	0
1938 2035 1685 2795 2935 0 0 1859 1100 1100 1100 1100 1100 1100 1100 110	V/C Ratio(X)	0.00	0.46	0.31	0.50	0.30	0.00				0.00	0.00	0.00
100 100 100 100 100 100 100 100 100 100	Avail Cap(c_a), veh/h	1938	2035	1685	2795	2935	0				0	1859	0
average of the control of the contro	HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
when 0.0 5.0 4.8 5.0 4.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.00	0.00	0.00
sh 0.0 0.5 0.3 0.6 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Uniform Delay (d), s/veh	0.0	2.0	4.8	2.0	4.6	0.0				0.0	0.0	0.0
viveh         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 </td <td>Incr Delay (d2), s/veh</td> <td>0.0</td> <td>0.5</td> <td>0.3</td> <td>9.0</td> <td>0.3</td> <td>0.0</td> <td></td> <td></td> <td></td> <td>0.0</td> <td>0.0</td> <td>0.0</td>	Incr Delay (d2), s/veh	0.0	0.5	0.3	9.0	0.3	0.0				0.0	0.0	0.0
Jyehlin         0.0         0.2         0.1         0.2         0.1         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
Helay, siveh  A A A A A A A A A A A A A A A A A A A	%ile BackOfQ(50%),veh/In		0.2	0.1	0.2	0.1	0.0				0.0	0.0	0.0
ah 0,0 5,6 5,1 5,6 4,8 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0	Unsig. Movement Delay, s/vel												
A A A A A A A A A A A A A A A A A A A	LnGrp Delay(d),s/veh	0.0	9.6	5.1	9.9	4.8	0.0				0.0	0.0	0.0
n 441 500 weh 5.4 5.3 h A A A h A B hs 2 4 86 hc),s 0.0 9.5 9.6 hc),s 3.0 3.2 3.0 hc) 20.8 30.0 hc) 20.8 30.0 hc) 20.8 30.0 hc) 4.3 4.6 hc),s 0.0 4.3 4.6 hc) 5 3.0	LnGrp LOS	A	A	A	A	A	A				A	A	A
reh 5.4 5.3  Ins 2 4 A A A A A A A A A A A A A A A A A A	Approach Vol, veh/h		44			200						0	
hs 2 4 A RPO, 8 0.0 9.5 RPO, 8 3.0 3.2 Gmax), s 19.0 20.8 Gj. c+11), s 0.0 4.3 L), s 0.0 1.9 A A A A A	Approach Delay, s/veh		5.4			5.3						0.0	
hrs 2 4 RPC), s 0.0 9.5 RPC), s 3.0 3.2 (Gmax), s 19.0 20.8 9, c+11), s 0.0 4.3 1.9 1.9	Approach LOS		∢			∢							
eRo, s 0.0 9.5 (Conax), s 3.0 3.2 (Conax), s 19.0 20.8 (3.0 4.3 c.), s 0.0 1.9 (2.5 c.), s 0.0 5.3 exp	Timer - Assigned Phs		2		4				00				
Re), s 3.0 3.2 (Gmax), s 19.0 20.8 (Gmax), s 0.0 4.3 (c), s 0.0 1.9 (c), s 0.0 5.3	Phs Duration (G+Y+Rc), s		0.0		9.2				9.6				
(Gmax), s 19.0 20.8 3 (9_c+11), s 0.0 4.3 4.3 5.), s 0.0 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	Change Period (Y+Rc), s		3.0		3.2				3.0				
(g_c+H), s 0.0 4.3 c), s 0.0 1.9 any 5.3	Max Green Setting (Gmax), s		19.0		20.8				30.0				
c), s 0.0 1.9	Max Q Clear Time (g_c+I1), s		0.0		4.3				4.6				
ary	Green Ext Time (p_c), s		0.0		1.9				2.0				Ī
	Intersection Summary												Ī
	HCM 6th Ctrl Delay			5.3									
	HOM 6# 100			٥									ľ

Los Pinos Apartments TIS
AM Existing Plus Project Page 2

HCM 6th Signalized Intersection Summary 3: US 101 Overpass & Todd Rd

	1	-	1	ţ	1	*	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	‡	W.	K	4.0	r	N.W.	
Traffic Volume (veh/h)	126	238	371	232	181	464	
Future Volume (veh/h)	126	238	371	232	181	464	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)		1.00	1.00		1:00	1.00	
Parking Bus, Adj	00:	1.00	1.00	1:00	1:00	1.00	
Work Zone On Approach	2			2	2		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	<u>¥</u>	ස	395	247	193	482	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	
Percent Heavy Veh, %	7	2	2	2	2	2	
Cap, veh/h	469	500	933	490	405	1365	
Arrive On Green	0.13	0.13	0.26	0.26	0.23	0.23	
Sat Flow, veh/h	3647	1585	3563	1870	1781	2790	
Grp Volume(v), veh/h	134	93	395	247	193	482	
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1870	1781	1395	
a Serve(g_s), s	6.0	1.5	5.6	3.1	2.6	3.0	
Cycle Q Clear(g_c), s	6.0	1.5	5.6	3.1	5.6	3.0	
Prop In Lane		1.00	1.00		1:00	1.00	
Lane Grp Cap(c), veh/h	469	500	933	490	405	1365	
V/C Ratio(X)	0.29	0.44	0.42	0.50	0.48	0.35	
Avail Cap(c_a), veh/h	2629	1173	1993	1046	675	1788	
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	10.8	1.1	8.5	8.7	9.3	4.4	
Incr Delay (d2), s/veh	0.3	1.5	0.3	0.8	6:0	0.2	
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	0.4	9.0	0.8	0.7	6:0	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	11.2	12.6	8.8	9.5	10.2	4.5	
LnGrp LOS	В	В	A	A	В	A	
Approach Vol, veh/h	227			642	675		
Approach Delay, s/veh	11.8			9.1	6.1		
Approach LOS	മ			∢	<b>4</b>		
Timer - Assigned Phs		2				9	8
Phs Duration (G+Y+Rc), s		7.2				10.8	9.8
Change Period (Y+Rc), s		3.5				3.5	3.5
Max Green Setting (Gmax), s		20.5				15.5	10.5
Max Q Clear Time (g_c+11), s		3.5				5.1	5.0
Green Ext Time (p_c), s		6.0				2.1	1.4
Intersection Summary							
UCM 6th Ctd Dolow	l		Ca				
HCM 6th LOS			7 A				
Notes							

Notes
User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS AM Existing Plus Project

HCM 6th Signalized Intersection Summary 4: Santa Rosa Ave & Todd Rd

03/30/2020

03/30/2020

Movement Lane Configurations Traffic Volume (veh/h) Futura Volume (veh/h) mitial Q (2b), weh Ped-Bike Adj(A, pbf) Parking Bus, Adj	EBI											
Lane Configurations Traffic Volume (veh/h) Futura Volume (veh/h) mital Q (Qb), veh Ped-Bike Adj(A_pbT) Parking Bus, Adj Work, Zone On Approach	ב נ	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (veh/h) Future Volume (veh/h) Initial Q (Qb), veh Ped-Bike Adj(A_pbT) Parking Bus, Adj Work Zone On Approach	K	4	W.	k	2		K	‡	×	*	**	*
Future Volume (veh/h) Initial Q (Qb), veh Ped-Bike Adj(A_pbT) Parking Bus, Adj	266	62	218	25	32	15	308	450	26	21	278	236
Initial Q (Qb), veh Ped-Bike Adj(A_pbT) Parking Bus, Adj Work Zone On Approach	266	62	218	25	32	12	308	450	26	21	278	236
Ped-Bike Adj(A_pbT) Parking Bus, Adj Work Zone On Approach	0	0	0	0	0	0	က	0	0	0	0	0
Parking Bus, Adj Work Zone On Approach	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.99
Work Zone On Approach	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
E . (::		8			8			S			8	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	176	220	83	27	34	9	331	484	17	23	299	142
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	309	325	270	88	77	14	404	1288	572	93	299	266
Arrive On Green	0.17	0.17	0.17	0.05	0.05	0.05	0.22	0.36	0.36	0.02	0.17	0.17
Sat Flow, veh/h	1781	1870	1557	1781	1547	273	1781	3554	1578	1781	3554	1577
Grp Volume(v), veh/h	176	220	83	27	0	40	331	484	17	23	299	142
Grp Sat Flow(s), veh/h/ln	1781	1870	1557	1781	0	1820	1781	1777	1578	1781	1777	1577
Q Serve(g_s), s	4.1	2.0	2.1	0.7	0.0	1.0	8.1	4.6	0.3	9.0	3.5	3.7
Cycle Q Clear(g_c), s	4.1	2.0	2.1	0.7	0.0	1.0	8.1	4.6	0.3	9.0	3.5	3.7
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	309	325	270	88	0	91	404	1288	572	39	299	266
V/C Ratio(X)	0.57	0.68	0.31	0.30	0.00	0.44	0.82	0.38	0.03	0.58	0.50	0.53
Avail Cap(c_a), veh/h	1389	1458	1214	411	0	420	999	3005	1335	411	2537	1125
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
Jpstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	17.8	16.6	21.1	0.0	21.2	17.0	10.8	9.4	22.3	17.4	17.5
ncr Delay (d2), s/veh	9.0	6.0	0.2	0.7	0.0	1.2	1.6	0.1	0.0	2.0	0.2	9.0
nitial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.9	9.0	0.3	0.0	0.4	3.2	1.4	0.1	0.3	1.2	1.2
Unsig. Movement Delay, s/ven	7 07	70 1	0	5	6		0	0	3	04.0	1	40
LnGrp Delay(a),s/ven	<u>.</u> a	0.V	0.0 E	0.12	0.0	C.22	20.0 C	9.0 B. a	9. 4. ⊲	5.12	o. u	o a
Approach Vol. veh/h	1	479			29			832			464	
Approach Delay, s/veh		18.2			22.2			14.8			18.2	
Approach LOS		œ			O			В			В	
Timer - Assigned Phs		2	က	4		9	7	00				
Phs Duration (G+Y+Rc), s		12.4	14.1	12.2		8.9	5.5	20.8				
Change Period (Y+Rc), s		4.5	4.0	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		35.5	17.0	32.5		10.5	10.5	38.5				
Max Q Clear Time (g_c+l1), s		7.0	10.1	2.7		3.0	5.6	9.9				
Green Ext Time (p_c), s		0.8	0.2	1.0		0.0	0.0	1.5				
Intersection Summary												Ī
HCM 6th Ctrl Delay			16.8									
HCM 6th LOS			В									
Notes												

Notes: User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS AM Existing Plus Project

> W-Trans Page 3

HCM Signalized Intersection Capacity Analysis 4: Santa Rosa Ave & Todd Rd

Movement	EBL 2 266 2 266 1900 1 100 1 100 1 100 1 100 1 100 2 26 0 0.95 1 100 2 26 2 26 1 100 1 100	## Page 12	EBR 276 276 276 4.5 1.00 0.98 1.00 1.558 1.00 2.76 2.24 2.24 2.24 2.24 3.3 3.3 Perm	WBL 27 27 27 27 27 27 27 27 27 27 27 27 27	WBT 45 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5	1.00 1.00 1.00 0 0 0	NBL 596 596 596 1900 4.0 1.00 1.00 0.95 3433 3433 3433 3433 3433 3433 3433 34	NBT 505 505 505 1900 4.5 0.95 1.00 3511 1.00 3511 1.00 3513 3 3 530	28 28 28 1.00 28 0 0 0	SBL 21 21 21 21 21 21 20 60 60 60 60 60 60 60 60 60 60 60 60 60	\$\frac{\pmatrix}{431}\$ 431 431 431 431 430 1.00 1.00 1.00 3539 1.00 431 0 431	236 236 236 1900 1.00 0.99 1.00 0.85 1.00 1.00 236 178 58 8 3 3
266 62 276 27 32 15 596 505 28 21 216 226 276 27 32 15 596 505 28 21 226 226 276 27 32 15 596 505 28 21 226 226 276 27 32 15 596 505 28 21 226 226 276 27 32 15 596 505 28 21 20 21 20 100 100 100 100 100 100 100	2.66 2.66 2.66 2.66 0.95 1.00 1.00 1.00 1.00 1.00 1.00 2.66 0.95 1.00 1.00 2.66 2.66 2.66 2.66 2.66 2.66 2.66 2	4.5 62 62 62 62 62 62 62 62 62 62 62 62 62	276 276 1900 4.5 1.00 0.98 1.00 1.58 1.00 2.76 2.24 5.2 5.2 1.00 2.76 2.24 3.3	27 27 27 27 27 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	45 32 32 32 4.5 1.00 1.00 1.00 1.00 1.77 1.00 32 1.00 33 33	1.00 1.00 0 0 0 0	596 596 1900 1900 1.00 1.00 1.00 1.00 1.00 596 596 596	505 505 1900 4.5 0.95 1.00 3511 1.00 3511 1.00 3513 3513 3513 3513 3513 3513 3513 35	28 28 1900 1.00 28 0 0	21 21 1900 4.5 1.00 1.00 1.00 1.00 1.70 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 1770 0.95 0	↑↑ 431 431 431 1900 4.5 0.95 1.00 1.00 1.00 3539 1.00 431 0 0	236 236 236 1900 4.5 1.00 0.99 1.00 1.00 1.00 236 1.78 58 3 3
266 62 276 27 32 15 596 505 28 21 1900 1900 1900 1900 1900 1900 1900 1	266 1900 4,50 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1	62 62 62 62 63 62 63 63 63 63 63 63 63 63 63 63 63 63 63	276 276 1900 1900 1.00 1.00 1.00 1.00 1.00 1.00	27 27 27 1900 1900 1.00 1.00 1.00 1.00 1.00 1.00	32 32 32 1.00 1.00 1.00 1.00 1.00 1.74 1.00 32 32 33 33	21 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	596 596 1900 1.00 1.00 1.00 1.00 1.00 596 596 596	505 505 1900 4.5 0.95 1.00 1.00 3511 1.00 3511 1.00 505 3 3	28 28 1900 1.00 0 0	21 21 1900 4.5 1.00 1.00 1.00 1,00 1,70 1,70 1,70 2,1 2,1 2,1 2,1 2,1 2,1 2,1 2,1 2,1 2,1	431 431 450 45 0.95 1.00 1.00 1.00 1.00 3539 1.00 1.00 431	236 236 4.5 1.00 0.99 1.00 0.85 1.00 1.00 1.00 236 1.78 58 3
266 62 276 277 32 15 596 505 28 21 45 45 45 45 45 45 45 45 45 45 45 45 45	2 266 4 5 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	4.5 4.5 1.00 1.00 1.00 1.00 1.00 1.00 62 62 0 1.00 62 0 1.00 62 62 62 62 62 62 62 62 62 62 62 62 62	276 1900 1,500 1,00 1,00 1,00 1,00 1,00 1,00 1	27 4.5 1.00 1.00 1.00 1.00 0.95 1.770 1.00 27 27 27 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	32 4.5 1.00 1.00 0.095 1.00 1.774 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	596 4.0 4.0 1.00 1.00 1.00 0.95 3433 1.00 596 596 396 397	505 1900 4.5 0.95 1.00 1.00 3.511 1.00 3.511 1.00 5.55 3 5.30	1900 1.00 2.8 0 0 0	21 4.5 4.5 1.00 1.00 1.00 0.95 1770 0.95 1770 1.00 21	431 1900 4.5 0.95 1.00 1.00 1.00 3539 1.00 431 0 431	236 4.5 4.5 1.00 0.99 0.85 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900	1900 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1900 4.5 0.95 1.00 1.00 1.00 0.97 1716 1.00 62 62 62 7	1900 4.5 1.00 1.00 1.00 1.00 1.00 1.00 2.24 5.2 5.2 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	1900 4.5 1.00 1.00 1.00 0.95 1.770 1.00 27 27 27 1.00 1.00 1.00	1900 4.5 1.00 1.00 0.95 1.00 1.774 1.00 1.00 1.32 3.3	00.1 15 0 0 0	1900 4.0 1.00 1.00 1.00 0.95 3433 1.00 596 596 3	1900 4.5 0.95 1.00 0.99 1.00 3511 1.00 3511 1.00 505 530	1900 1.00 2.8 0 0 0	4.5 4.5 1.00 1.00 1.00 1.00 1.00 1.00 1.00 21 21 21	1900 4.5 1.00 1.00 1.00 3539 1.00 3539 1.00 431 0 431	4.5 4.5 1.00 0.99 1.00 0.85 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
1.50	4.5 0.95 1.00 1.00 1.00 0.95 0.95 0.96 0.96 0.96 0.96 1.00 2.66 0.96 1.00 2.66 2.66 0.96 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	4.5 0.95 1.00 1.00 1.00 1.00 1.00 62 62 62 0.97 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	4.5 1.00 0.38 1.00 1.00 1.58 1.00 1.58 2.76 2.24 5.27 3.3	4.5 1.00 1.00 1.00 1.00 1.00 27 27 27 1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.774 1.774 1.00 3.2 3.3 3.3	00.1	4.0 1.00 1.00 1.00 1.00 3.433 3.433 3.433 3.433 1.00 5.96 0	4.5 0.95 1.00 1.00 0.99 1.00 3.511 1.00 3.511 1.00 5.05 5.30	1.00 28 0 0	4.5 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	4.5 0.95 1.00 1.00 1.00 1.00 431 431	4.5 1.00 0.99 0.99 1.00 1.00 1.00 1.00 1.00
1.00   0.95   0.95   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00	0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	0.95 1.00 1.00 1.00 1.00 1.00 62 0 1.66 NA	1.00 0.98 1.00 1.00 1.00 1.00 1.00 2.24 5.24 5.24 3.3	1.00 1.00 1.00 1.00 1.00 1.00 27 27 1.00 1.00	1.00 1.00 0.95 1.00 1.774 1.774 1.00 3.2 3.3 3.3	0.0 0.0 0.0	0.97 1.00 1.00 1.00 1.00 3.433 3.433 3.433 1.00 5.96 5.96 3.3	0.95 1.00 1.00 0.39 1.00 3.511 1.00 505 3 530	1.00 28 0 0	1.00 1.00 1.00 1.00 1.70 1.70 21 0 0	0.95 1.00 1.00 1.00 1.00 1.00 431 431	1.00 0.99 1.00 1.00 1.00 1.00 1.00 236 1.00 236 1.00 236 33 3
1,00	1.00 1.00 1.00 1.00 0.36 1.681 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	1.00 1.00 1.00 1.00 1.00 62 0 1.66 NA	0.98 1.00 1.00 1.00 1.00 1.00 2.24 52 52 3	1.00 1.00 1.00 1.00 1.00 27 27 27 27 1.00	1.00 1.00 0.95 1.00 1.00 1.00 32 32 33	0 0 0	1.00 1.00 1.00 1.00 1.00 1.00 596 0 596 3	1.00 1.00 0.99 1.00 3.511 1.00 505 3 530	1.00 28 0	1.00 1.00 1.00 1.00 0.95 1770 1.00 21 21	1.00 1.00 1.00 1.00 1.00 431 0	0.99 1.00 0.85 1.00 1.00 1.00 236 178 58 58 3
100	1,00 0,95 0,95 1,00 2,66 0 1,00 1,00 2,66 2,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00	1.00 1.00 1.00 1.00 62 62 62 0 1.00 1.66	1.00 0.85 1.00 1.00 1.00 2.24 52 52 52 3	1.00 1.00 1.00 0.95 1770 27 27 27 1.00 1.00	1.00 0.95 1.00 1.00 1.00 32 32 33 NA	0 0 0	1.00 1.00 1.00 0.95 3433 1.00 596 0 596 3	1.00 0.99 1.00 3511 1.00 505 3 530	1.00 2.8 0 0	1.00 1.00 0.95 1770 1.00 21 21	1.00 1.00 1.00 1.00 1.00 431 0	1.00 0.85 1.00 1.00 1.00 236 1.78 58 58
100   100   0.85   1.00   0.95   1.00   0.99   1.00   0.95   0.95   0.97   1.00   0.95   1.00   0.95   1.00   0.95   0.97   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.	1.00 1.00 1.00 1.00 2.66 0 1.00 2.66 0 1.00 2.66 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	1.00 1.716 1.00 62 0 0 1.00 NA NA	0.85 1.00 1.00 1.00 2.76 2.24 5.2 1 3	1.00 0.95 1770 1.00 27 27 27 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.95 1.00 1.00 1.00 3.2 1.4 1.4 1.3 1.00 1.00 1.00 1.00	0.00	1.00 0.95 3433 3433 1.00 596 596 3	0.99 1.00 3511 1.00 530 530	1.00 28 0 0	1.00 0.95 1770 0.95 1770 1.00 21 21	1.00 1.00 3539 1.00 1.00 431 431	0.85 1.00 1.00 1.00 1.00 236 178 58 58
10.95   0.97   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00	0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	0.97 1716 1.00 62 0 0 166 NA	1.00 1.00 1.00 1.00 2.24 5.2 5.2 1 3	0.95 1770 0.95 1.00 27 27 1	1.00 1774 1.00 32 32 33 NA	0.7 0.0 0.0	0.95 3433 0.95 3433 1.00 596 3	1.00 3511 1.00 3511 1.00 505 3 3	1.00 28 0 0	0.95 1770 0.95 1770 1.00 21 21	1.00 3539 1.00 1.00 1.00 431 0 431	1.00 1561 1.00 1.00 236 178 58 58 58
1681   7716   1558   7770   7774   3433   3551   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770   7770	1681 1681 1681 1.00 260 200 179 2	1716 0.97 1716 62 0 166 NA	1558 1.00 1.558 1.00 276 224 52 1 3	1770 0.95 1770 1.00 27 27 1	1774 1.00 1.00 32 32 33 NA	0 0 0	3433 0.95 3433 1.00 596 0 596 3	3511 1.00 3511 1.00 505 3 530	1.00 28 0 0	1770 0.95 1770 1.00 21 21 21	3539 1.00 3539 1.00 431 0 431	1561 1.00 1.00 1.00 236 236 58 58 58
1.50	0.95 1681 266 0 266 162 Spiit 2 2	0.97 1716 1.00 62 0 166 NA	1.00 1.00 2.76 2.24 5.2 1 3	0.95 1.00 27 27 27 1 1 Split	1.00 1.00 32 32 33 33 NA	0 0 0	0.95 3433 1.00 596 0 596 3	1.00 3511 505 3 530	1.00 28 0 0	0.95 1770 1.00 21 21	1.00 1.00 1.00 431 431	1.00 1.561 1.00 236 178 58 58 3
1681   1716   1558   1770   1774   3433   3511   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770   1770	1681 1.00 266 0 162 Split 2 2	1716 1.00 62 0 166 NA NA	1558 1.00 276 224 52 1 3	1.00 27 27 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.00 32 32 14 33 NA	0 0 0	3433 1.00 596 596 3	3 505 530 530	1.00 28 0 0	1.00 2.1 2.1 2.1 2.1	3539 1.00 431 0 431	1561 1.00 236 178 58 58 3
F   100   100   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00	1.00 266 0 162 Split 2 2	1.00 62 0 166 NA	1.00 276 224 52 1 1 3	1.00 27 27 1 1 1 Split	1.00 32 14 33 NA	0 0 0	1.00 596 0 596 3	1.00 505 3 530	1.00 28 0 0	1.00 21 0 21	1.00 431 0 431	1.00 236 27 178 58 58 3
266         62         276         27         32         15         596         505         28         21           nh)         162         166         52         7         33         0         9         3         0         0         20         0         1           nh)         162         166         52         7         33         3         3         1         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         <	266 0 162 Split 2 2	62 0 166 NA	276 224 52 1 1 3	27 0 27 1	33 14 NA	<u>१</u> 0 0	596 0 596 3	505 3 530	0 0 0	21 0 21	431 431	236 178 58 3 3
hh) 0 0 0 224 0 14 0 0 3 0 0 21 1 1 1 3 3 0 0 0 21 1 1 1 1 3 3 0 0 0 21 2 2 2 2 6 6 6 7 3 8 8 7 7 2 2 2 2 6 6 6 7 3 8 8 8 7 2 129 129 129 129 33 33 184 33.8 0.9 3 1 12.9 12.9 12.9 33 33 184 33.8 0.9 3 1 12.9 12.9 12.9 12.9 12.9 12.9 12.9 12		166 NA	224 52 1 3	27 1 27 Spiit	33 44 NA	0 0	596 3	530	00	21	431	178 58 3
Split NA Perm Split NA Prot NA NA Prot NA NA Prot NA		166 NA	52 1 3	27 1 Split	33 A	0	596 3	230	0	51	431	58 3 Pem
1		NA 2	3 1	- Figs	AA		3 Prot					3 Perm
Split         NA         Perm         Split         NA         Prot         NA         Prot           2         2         6         6         3         8         7           2         2         3         3         3         3         3         3           1         129         129         129         33         3         3         184         33.8         0.9           1         129         129         129         33         3         184         33.8         0.9           0         19         0.19         0.19         0.19         0.19         0.05         0.05         0.27         0.49         0.09           0         19         0.19         0.19         0.19         0.19         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01		NA 2	3 Perm	Split	AN		Prot					Perm
Split NA Perm Split NA Prod NA NA Prod NA		N 2	Perm	tios.	A		Prot					Perm
2 2 6 6 6 7 3 8 7 7 1 1 1 1 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1 2 9 1		7		,			-	¥ Y		Prot	¥	
129   129   129   33   33   184   33.8   0.9     129   129   129   33   33   184   33.8   0.9     129   129   129   33   33   184   33.8   0.9     145   45   45   45   45   45   45   45				9	9		က	∞		7	4	1
12.9   12.9   12.9   33   33   184   33.8   0.9     12.9   12.9   12.9   33   33   344   33.8   0.9     12.9   12.9   12.9   33   33   344   33.8   0.9     12.9   12.9   12.9   33   33   34.4   34.6   4.5     4.5   4.5   4.5   4.5   4.5   4.0   4.5   4.5     4.5   4.5   4.5   4.5   4.5   4.0   4.5   4.5     4.5   4.5   4.5   4.5   4.0   4.5   4.5     4.5   4.5   4.5   4.5   4.0   4.5   4.5     4.5   4.5   4.5   4.5   4.0   4.5   4.5     4.5   4.5   4.5   4.5   4.0   4.5   4.5     4.5   4.5   4.5   4.5   4.0   4.5   4.5     4.5   4.5   4.5   4.5   4.0   4.5   4.5     4.5   4.5   4.5   4.5   4.0   4.5   4.5     4.5   4.5   4.5   4.5   4.0   4.5   4.5     4.5   4.5   4.5   4.5   4.5   4.0   4.5     4.5   4.5   4.5   4.5   4.5   4.0     4.5   4.5   4.5   4.5   4.5   4.5     4.5   4.5   4.5   4.5   4.5     4.5   4.5   4.5   4.5   4.5     4.5   4.5   4.5   4.5   4.5     4.5   4.5   4.5   4.5     4.5   4.5   4.5   4.5     4.5   4.5   4.5     4.5   4.5   4.5   4.5     4.5   4.5   4.5     4.5   4.5   4.5     4.5   4.5   4.5     4.5   4.5   4.5     4.5   4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5   4.5     4.5			2									4
129   129   129   33   33   184   338   0.9     0.19		12.9	12.9	3.3	3.3		18.4	33.8		0.9	16.8	16.8
0.19 0.19 0.19 0.05 0.05 0.27 0.49 0.01  4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 0.01  3.14 321 291 84 84 916 1722 23  0.10 c0.10 0.02 c0.02 c0.17 0.15 1.5 1.5  0.52 0.52 0.18 0.32 0.39 0.65 0.31 0.91  2.52 2.52 2.35 31.7 31.8 2.24 10.5 34.0  1.00 1.00 1.00 1.00 1.00 1.00 1.00  2.58 2.58 2.36 3.17 31.8 2.24 10.5 34.0  2.58 2.58 2.36 3.25 3.29 2.37 10.6 1.00  2.59 2.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50	12.9	12.9	12.9	3.3	3.3		18.4	33.8		6.0	16.8	16.8
4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.0         4.0         4.0         4.0         4.0         4.0 <td>0.19</td> <td>0.19</td> <td>0.19</td> <td>0.05</td> <td>0.05</td> <td></td> <td>0.27</td> <td>0.49</td> <td></td> <td>0.01</td> <td>0.24</td> <td>0.24</td>	0.19	0.19	0.19	0.05	0.05		0.27	0.49		0.01	0.24	0.24
1.5		4.5	4.5	4.5	4.5		4.0	4.5		4.5	4.5	4.5
314   321   291   84   84   916   1722   23     0.10   0.010   0.02   0.02   0.017   0.15   0.011     0.52   0.52   0.18   0.32   0.39   0.65   0.31   0.91     25.2   25.2   23.5   31.7   31.8   22.4   10.5   34.0     1.00   1.00   1.00   1.00   1.00   1.00   1.00     25.8   25.8   23.6   3.1   3.2   3.2   3.7   0.6   145.7     C	1.5	1.5	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5
0.10 c0.10 0.03 c0.02 c0.17 0.15 0.01 c0.10 c0.10 0.03 c0.03 c0.03 c0.03 c0.04 c0.17 0.15 0.01 c0.05 c0.22 c0.18 0.32 0.39 0.65 0.31 0.91 c0.05 c0.18 0.10 0.10 0.10 0.10 0.10 0.10 0.10	314	321	291	8	84		916	1722		23	862	380
0.52 0.52 0.18 0.32 0.39 0.65 0.31 0.91 2.52 2.52 2.35 3.47 31.8 2.24 10.5 34.0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	0.10	c0.10		0.02	c0.02		c0.17	0.15		0.01	c0.12	
0.52 0.52 0.18 0.32 0.39 0.65 0.31 0.91 2.52 2.52 2.35 31.7 31.8 2.24 10.5 34.0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1			0.03									0.04
252 252 235 317 318 224 10.5 34.0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 2 0.6 0.6 0.1 0.8 1.1 1.3 0.0 1.00 2 0.6 0.6 0.1 0.8 1.1 1.3 0.0 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.52	0.52	0.18	0.32	0.39		0.65	0.31		0.91	0.50	0.15
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	25.2	25.2	23.5	31.7	31.8		22.4	10.5		34.0	22.4	20.5
2 06 06 01 08 111 13 00 145.7 25.8 25.8 23.6 32.9 23.7 10.6 179.7 C C C C C C C B B  Y   Y   Y   Y   Y   Y  Y  Y  Y  Y  Y		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
25.8 25.8 23.6 32.5 32.9 23.7 10.6 179.7 22.2 C C C B F F C C C B F F C C C B F F C C C B F F C C C C		9.0	0.1	8.0	<del></del>		1.3	0.0		145.7	0.2	0.1
C C C C C B F F  24.8 32.8 17.5 C B F  Y  y  y  (s) 68.9 Sum of lost time (s) 18.0 Ullication 57.3% CU Level of Service B		25.8	23.6	32.5	32.9		23.7	10.6		179.7	22.6	20.5
y         C         C         B           y         C         C         B           r         22.2         HCM 2000 Level of Service         C           in (s)         68.9         Sum of lost time (s)         18.0           Utilization         57.3%         ICU Level of Service         B	Level of Service C	ပ	ပ	ပ	ပ		O	В		ட	ပ	O
y  y  22.2 HCM 2000 Level of Service  c and 22.2 HCM 2000 Level of Service  (b) 6.36 Sum of lost time (s)  (b) 6.3% CU Level of Service  (c) 7.3% CU Level of Service	Approach Delay (s)	24.8			32.8			17.5			26.7	
1	Approach LOS	O			O			В			O	
slay         22.2         HCM 2000 Level of Service           Capacity ratio         0.56         Sum of lost time (s)           h (s)         68.9         Sum of lost time (s)           Utilization         57.3%         ICU Level of Service	Intersection Summary											٦
Capacity ratio 0.56 Sum of lost time (s)  h (s) 68.9 Sum of lost time (s)  Utilization 57.3% CU Level of Service	HCM 2000 Control Delay	ı	22.2	E	M 2000 L	S Jo leve	arvira	ı	c	ı	ı	ı
h (s) 68.9 Sum of lost time (s) Utilization 57.3% ICU Level of Service	HCM 2000 Volume to Capacity ratio		0.56	2	2007	5			•			
Utilization 57.3% ICU Level of Service	Actuated Cycle Length (s)		68.9	Sun	n of lost ti	me (s)			18.0			١
4	Intersection Capacity Utilization	-	57.3%	DOI	Level of	Service			В			
Analysis Period (Till)	Analysis Period (min)		15									

Los Pinos Apartments TIS AM Future Plus Project Mitgated

HCM Signalized Intersection Capacity Analysis 5: S Moorland Ave & US 101 Overpass

04/01/2020

03/31/2020

Movement         WBI         WBR         NBT         NBR         SBI         SBI         SBI         Lane Configurations         Y         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A		•		3	8				
figurations (ph) 20 580 25 79 554 56 10 10 10 10 10 10 10 10 10 10 10 10 10	Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lyme (xph)         20         580         25         79         554         56           Jume (xph)         20         580         25         79         554         56           Jume (xph)         10         10         100         100         100         100           Hr         11         12         12         12         12         12           Factor         100         100         100         100         100         100           red         100         100         100         100         100         100         100           red         100         100         100         100         100         100         100         100           red         100         100         100         100         100         1	Lane Configurations	>		2,		K	4		
Ulme (yph)         20         580         25         79         554         56           Veyhal)         190         1900         1900         1900         1900         1900           I (while)         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5	Traffic Volume (vph)	20	280	25	79	554	26		
(Velph)         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900	Future Volume (vph)	20	280	25	79	554	56		
time (s) 45 45 45 45 45 45 45 45 45 45 45 45 45	Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Factor   4.5   4.5   4.5   4.5   4.5     Factor   0.00   0.00   0.00     Factor   0.87   0.00   0.00     Factor   0.87   0.00   0.00     Factor   0.087   0.00   0.00     Factor   0.00   0.00   0.00     Factor   0.00   0.00   0.00     Factor   0	Lane Width	=	7	12	12	12	12		
Factor 1.00 1.00 0.95 0.95  red 1.00 1.00 1.00 1.00  red 1.00 1.00 1.00 1.00  red 1.00 1.00 1.00 1.00  red	Total Lost time (s)	4.5		4.5		4.5	4.5		
ted 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Lane Util. Factor	1.00		1.00		0.95	0.95		
ted 100 100 0.95 0.96  w (pad) 1563 1672 1681 1700  w (pad) 1563 1672 1681 1700  w (pad) 1563 1672 1681 1700  w (pam) 1563 1672 1681 1700  r (pad) 1563 167 0.87 0.87 0.87 0.87  duction (vph) 517 0 8 0 0 0 0  up Flow (vph) 173 0 9 350 351  Prod NA Split NA	Ē	0.87		06.0		1.00	1.00		
v (prot)         1563         1672         1681         1700           (ed         1,00         0.35         0.96           (vpm)         1563         1672         0.87         0.87           (vpm)         1563         0.87         0.87         0.87         0.87           (vpm)         23         667         29         91         637         64           duction (vph)         517         0         80         0         0         0           author (vph)         177         0         40         0         0         0           b Hasses         8         2         6         6         6         6           B Hasses         8         2         6         6         6         6         6           Abrases         8         2         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         <	Fit Protected	1.00		1.00		0.95	96.0		
ted 1.00 1.00 0.95 0.96 (yeld) 1.683 1.672 1.681 1.700 (yell) 1.563 0.87 0.87 0.87 0.87 0.87 (yell) 2.8 667 2.9 91 637 0.87 0.87 (yell) 2.8 667 2.9 91 637 0.87 (yell) 2.8 667 2.9 91 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Satd. Flow (prot)	1563		1672		1681	1700		
Hebot, PHF 1863 1672 1681 1700  Hebot, PHF 087 087 087 087 087 087 087 087 087 087	Fit Permitted	1.00		1.00		0.95	96:0		
ractor, PHF 0.87 0.87 0.87 0.87 0.87 0.87 deddeddeddeddeddedddachol (yph) 173 0 40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Satd. Flow (perm)	1563		1672		1681	1700		
(vph)         23         667         29         91         637         64           duction (vph)         177         0         80         0         0         0           audicion (vph)         173         0         40         0         0         0           a Provi (vph)         173         0         40         0         0         0           Phases         8         2         6         6         6         6         6           Phases         8         2         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6         6 <t< td=""><td>Peak-hour factor, PHF</td><td>0.87</td><td>0.87</td><td>0.87</td><td>0.87</td><td>0.87</td><td>0.87</td><td></td><td></td></t<>	Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87		
duction (vph) 517 0 80 0 0 0 duction (vph) 173 0 40 0 350 351 Prot NA Split NA Prot NA Split NA Phases 8 2 6 6 Phases 8 2 6 6 Phases 9 10.7 5.6 17.7 17.7 Seen. (s) 10.7 6.0 0.3 0.3 0.3 Seen. (s) 10.7 6.0 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0	Adj. Flow (vph)	23	299	29	91	637	64		
up Flow (vph)         173         0         40         380         361           Phases         8         2         6         6           Phases         8         2         6         6           Phases         8         2         6         6           Phases         10.7         5.6         17.7         17.7           Green, g (s)         10.7         5.6         17.7         17.7           Green, g (s)         10.7         5.6         17.7         17.7           Green, g (s)         10.7         5.6         17.7         17.7           Attension (s)         3.0         3.0         3.0         3.0           Attension (s)         3.0         3.0         3.0         3.0           Apper (approximation)         3.0         3.0         3.0         3.0           Apper (approximation)         1.0         1.0         1.0         1.0           Apper (approximation)         17.1         19.4         12.9         B           B         B         B         B         B           B         B         B         B         B           Cortrol Delay         17.1	RTOR Reduction (vph)	217	0	80	0	0	0		
Protess Prot NA Split NA Phases 8 2 6 6 6 6 Phases 8 2 6 6 6 6 Phases 8 2 6 6 6 6 Phases 8 2 6 6 6 Phases 9 10.7 5.6 17.7 17.7 17.7 27.0 27.0 2.0 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3	Lane Group Flow (vph)	173	0	40	0	320	351		
Phases         2         6         6           Phases         2         6         6           Phases         10.7         5.6         17.7         17.7           Green, G(s)         10.7         5.6         17.7         17.7           Green, G(s)         10.7         5.6         17.7         17.7           gC Ratio         0.23         0.12         0.37         0.37           A Fine (s)         4.5         4.5         4.5         4.5           A Fine (s)         3.0         3.0         3.0         3.0         3.0           Cap (vph)         352         197         6.26         6.33         6.3         6.3         6.3         6.3         6.3         6.3         6.2         6.3         6.3         6.2         6.3         6.2         6.2         6.33         6.2         6.2         6.3         6.2         6.2         6.2         6.3         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2         6.2	Turn Type	Prot		¥		Split	W		
Phases Green, G(s) 10.7 5.6 17.7 17.7 Filme(s) 4.5 4.5 4.5 4.5 4.5 Avarsion (s) 3.0 3.0 3.0 3.0 Avarsion (s) 3.0 3.0 3.0 3.0 Avarsion (s) 3.0 3.0 3.0 3.0 Avarsion (s) 3.0 3.0 3.0 Frot collision (s) 3.0 3.0 3.0 Frot collision (s) 3.0 3.0 3.0 Frot collision (s) 4.5 6.0 5.6 0.56 Frot collision (s) 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Protected Phases	∞		2		9	9		
Green, G (s) 10.7 5.6 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17	Permitted Phases								
Green, g (s)         10.7         5.6         17.7         17.7           Green, g (s)         10.7         5.6         17.7         17.7           AgC Ratio         0.23         0.12         0.37         0.37           Asternical (s)         4.5         4.5         4.5         4.5           Asternical (s)         3.0         3.0         3.0         3.0           Cap (vph)         352         197         6.26         6.33           Prof.         6.01         1.07         6.02         6.21         0.21           Perm         0.49         0.20         0.56         0.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         6.55         7.28         8         8	Actuated Green, G (s)	10.7		5.6		17.7	17.7		
g/C Ratio (0.23 0.12 0.37 0.37 1	Effective Green, g (s)	10.7		9.9		17.7	17.7		
Aversion (s) 4.5 4.5 4.5 4.5 Aversion (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Actuated g/C Ratio	0.23		0.12		0.37	0.37		
Axension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Clearance Time (s)	4.5		4.5		4.5	4.5		
Cap (vph)         352         197         626         633           Prof.         c0.11         c0.02         c0.21         0.21           Perm         0.49         0.20         0.56         0.55           Nelay, d1         16.0         18.9         11.8         11.8           non Factor         1.00         1.00         1.00         1.00           and Packor         1.1         0.5         1.1         1.1           service         B         B         B         B           Delay (s)         17.1         19.4         12.9         12.8           no Delay (s)         17.1         19.4         12.9         12.8           Delay (s)         17.1         19.4         12.9         12.8           Delay (s)         17.1         19.4         12.9         12.9           Delay (s)         17.1         19.4         12.9         12.9           Delay (s)         B         B         B         B           Do Control Delay         15.3         HCM 2000 Level of Service           Oycle Levglh (s)         47.5         Sum of lost time (s)           Action (min)         15.3         Num of lost time (s) <td>Vehicle Extension (s)</td> <td>3.0</td> <td></td> <td>3.0</td> <td></td> <td>3.0</td> <td>3.0</td> <td></td> <td></td>	Vehicle Extension (s)	3.0		3.0		3.0	3.0		
Prof. c0.11 c0.02 c0.21 0.21 Perm 0.49 0.20 0.56 0.55 Pelay, d1 16.0 18.9 11.8 11.8 11.8  In 10 1.00 1.00 1.00  In 10 1.00	Lane Grp Cap (vph)	352		197		626	633		
Perm         0.49         0.20         0.56         0.55           Plety, d1         16.0         18.9         11.8         11.8           No Factor         1.00         1.00         1.00         1.00           Ial Delay, d2         1.1         1.1         1.1         1.1           Service         B         B         B         B           LOS         B         B         B         B           LOS         B         B         B         B           O Control Delay         15.3         HCM 2000 Level of Service           Ovel Length (s)         47.5         Sum of lost time (s)           Accord (min)         15.3         HCM conditione	v/s Ratio Prot	c0.11		c0.02		c0.21	0.21		
belay, d1 16.0 18.9 0.26 0.55 0.55 on Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	v/s Ratio Perm								
belay, d1 16.0 18.9 11.8 11.8 11.8 on Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	v/c Ratio	0.49		0.20		0.56	0.55		
on Factor 1.00 1.00 1.00  Izi Delay, d2 1.1 1.1  Izi Delay, d2 1.1 1.1  Izi 19.4 12.9 12.8  B B B B B B  Izi 10.9  Ixi 19.4 12.9  Ixi 19.4 12.9  Ixi 10.9  I	Uniform Delay, d1	16.0		18.9		11.8	11.8		
tel Delay, d2 1.1 0.5 1.1 1.1  evice B B B B B B B B B B B B B B B B B B B	Progression Factor	1.00		1.00		1.00	1.00		
17.1   19.4   12.9   12.8	Incremental Delay, d2	1.		0.5		1.1	1.1		
17.1   19.4   12.9   B B B B B B B B B B B B B B B B B B	Delay (s)	17.1		19.4		12.9	12.8		
17.1 19.4 12.9 B B B B A B B B B B B B B B B B B B B B	Level of Service	В		В		В	В		
15.3 HCM 2000 Level of Service 10.48 Sum of lost time (s) 47.5 Sum of lost time (s) 16.0% ICU Level of Service 16.0% 16.0% ICU Level of Service 16.0% 16.0% ICU Level of Service 16.0%	Approach Delay (s)	17.1		19.4			12.9		
15.3 HCM 2000 Level of Service 0.48 Sum of lost time (s) 2ation 68.0% ICU Level of Service 15	Approach LOS	В		ш			В		
15.3 HCM 2000 Level of Service 0.48 Sum of lost time (s) 2ation 68.0% ICU Level of Service 15	Intersection Summary								
nacity ratio         0.48         Sum of lost time (s)           47.5         Sum of lost time (s)           zation         68.0%         ICU Level of Service           15         15	HCM 2000 Control Delay			15.3	Ĭ	CM 2000	Level of Service	В	
47.5 Sum of lost time (s) zation 68.0% ICU Level of Service 15	HCM 2000 Volume to Capa	acity ratio		0.48					
Utilization 68.0% ICU Level of Service	Actuated Cycle Length (s)			47.5	S	ım of lost	time (s)	13.5	
	Intersection Capacity Utiliz	ation		%0.89	೨	U Level o	f Service	ပ	
	Analysis Period (min)			.,					

Los Pinos Apartments TIS AM Existing Plus Project

> W-Trans Page 1

HCM 6th Signalized Intersection Summary 1: Santa Rosa Ave & East Robles Ave

Feb.		1	†	~	1	+	1	1	4		٠	<b>→</b>	*
typely 27 2 12 28 2 44 16 1081 49 51 598 54 598 54 598 54 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Movement	田田	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
verbit)         27         2         12         28         2         44         16         1081         49         51         589           Anh         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Lane Configurations		4		r	ĄŽ.		<b>V</b>	44		V-	4	
Vehith   27	Traffic Volume (veh/h)	27	2	12	28	2	4	16	1081	49	21	298	13
Part	Future Volume (veh/h)	27	2	12	78	2	4	16	1081	49	21	298	13
pbf)         1,00         0.08         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00 <th< td=""><td>Initial Q (Qb), veh</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></th<>	Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   1,00   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		0.98	1:00		0.98	1.00		0.97	1.00		0.97
Approach Holist         No         No         No         No         No         No         Approach Holist         No         No         No         Approach Holist         No         A	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
highlin [683 1683 1683 1683 1683 1683 1683 1683 1	Work Zone On Approach		2			2			2			S	
or celulu 29 2 13 30 2 47 17 1150 52 54 636 or celulu 29 2 13 30 2 47 17 1150 52 54 636 or celulu 29 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.9	Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
or 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94	Adj Flow Rate, veh/h	83	2	5	8	7	47	17	1150	25	24	636	4
Veh, %         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2 <td>Peak Hour Factor</td> <td>0.94</td>	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
202 2 11 314 4 84 28 1473 67 76 1608 0.00 0.06 0.06 0.06 0.06 0.06 0.06 0	Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
0.06 0.06 0.06 0.06 0.06 0.02 0.47 0.47 0.05 0.50 0.40 0.06 0.06 0.06 0.06 0.02 0.47 0.47 0.05 0.50 0.40 0.40 0.40 0.40 0.40 0.40	Cap, veh/h	202	2	=	314	4	\$	78	1473	29	92	1608	35
387 27 174 1259 58 1353 1603 3112 141 1603 3197 verbirth 588 0 0 1 29 0 0 49 17 591 611 54 318   318 verbirth 588 0 0 1411 1603 1654 1693 189   318 verbirth 588 0 0 0 0 0 0 0 0 0 0 0 111 0.4 10.3 10.4 1.1 1.4 1.1 1.0   1.0 0.0 0.0 0.0 0.0 1.1 0.4 10.3 10.4 1.1 1.4 1.1 1.0   1.0 0.0 0.0 0.0 0.0 1.1 0.4 10.3 10.4 1.1 1.4 1.1 1.0   1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Arrive On Green	90.0	90:0	90.0	90:0	90.0	90:0	0.02	0.47	0.47	0.05	0.50	0.50
868 0 0 0 1299 0 1411 1603 1599 1664 1693 1899 1664 1603 1899 1664 1603 1899 1664 1603 1899 1664 1603 1899 1664 1603 1899 1664 1603 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1664 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1613 1899 1899 1899 1899 1899 1899 1899 18	Sat Flow, veh/h	387	27	174	1259	28	1353	1603	3112	141	1603	3197	70
588 0 0 1259 0 1411 1603 1599 1654 1603 1599 1610 1 1 0 1 0 1 0 1 0 1 0 1 0 1 1 0 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 0 0 0 0 0 0 0 1 1 1 0 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 0 0 0 0 0 0 0 1 1 1 0 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Grp Volume(v), veh/h	44	0	0	30	0	49	17	591	611	54	318	332
0, s	Grp Sat Flow(s),veh/h/ln	288	0	0	1259	0	1411	1603	1599	1654	1603	1599	1668
0, s   2,1   0,0   0,0   0,0   0,1   0,4   10,3   10,4   1,1   1,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0,1   0	Q Serve(g_s), s	1.0	0.0	0.0	0.0	0.0	1.	0.4	10.3	10.4	1.	4.1	4.1
100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100	Cycle Q Clear(g_c), s	2.1	0.0	0.0	9.0	0.0	<del>[</del>	0.4	10.3	10.4	<del>[</del>	4.1	4.1
p(c), veh/h         215         0         0         314         0         88         28         757         783         76         804           p(c), veh/h         1021         0.00         0.01         0.00         0.05         0.61         0.77         783         76         804           a), veh/h         1381         1         0         0.00         0.10         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00	Prop In Lane	99.0		0.30	1.00		96:0	1.00		0.09	1.00		0.04
a), vehlh 1381 0 0.00 0.10 0.56 0.61 0.78 0.71 0.40 0.40 0.45 0.01 0.00 0.56 0.61 0.78 0.71 0.40 0.40 0.45 0.01 0.00 0.50 0.45 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Lane Grp Cap(c), veh/h	215	0	0	314	0	88	28	757	783	9/	804	839
1381         0         0         1456         0         1367         502         1335         1380         597         1430         1           1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00	V/C Ratio(X)	0.21	0.00	0.00	0.10	0.00	0.56	0.61	0.78	0.78	0.71	0.40	0.40
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Avail Cap(c_a), veh/h	1381	0	0	1456	0	1367	205	1335	1380	269	1430	1492
1,00 0,00 0,00 1,00 0,00 1,00 1,00 1,00	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
164 0.0 0.0 150 0.0 153 164 7.4 7.4 158 5.2 0.0 0.0 0.0 0.0 2.1 7.6 0.7 0.7 4.6 0.1 0.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1:00	1.00	1.00	1.00	1.00	1.00	1.00
0.2 0.0 0.0 0.0 0.0 2.1 76 0.7 46 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Uniform Delay (d), s/veh	16.4	0.0	0.0	15.0	0.0	15.3	16.4	7.4	7.4	15.8	5.2	5.2
165 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.0	2.1	9.7	0.7	0.7	4.6	0.1	0.1
165 0.0 0.0 0.2 0.0 0.3 0.2 1.6 1.7 0.4 0.5  165 0.0 0.0 15.1 0.0 17.3 240 80 80 204 5.3  44 A B A B C A A C A  165 165 8.3 64  16 B B B A A B A  1 2 4 5 6 8 8  61 20.9 6.6 5.1 21.9 6.6  45 5.0 4.5 5.0 4.5  12.5 28.0 32.5 10.5 30.0 32.5  0.0 3.4 0.1 0.0 1.7 0.2	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
16.5   0.0   0.0   15.1   0.0   17.3   24.0   8.0   8.0   20.4   5.3	%ile BackOfQ(50%),veh/ln		0.0	0:0	0.2	0.0	0.3	0.2	1.6	1.7	0.4	0.5	9.0
165   0.0   0.0   15.1   0.0   17.3   24.0   8.0   8.0   20.4   5.3	Unsig. Movement Delay, s/veh												
H A B A B C A A C C A A C C A A C C A A C C A A C C A A C C A A C C A A C C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A C A	LnGrp Delay(d),s/veh	16.5	0.0	0.0	12.1	0.0	17.3	24.0	8.0	8.0	20.4	5.3	5.3
44 79 1219 16.5 16.5 8.3 16.5 16.5 8.3 16.1 20.9 6.6 5.1 21.9 6.6 17.5 28.0 3.25 10.5 30.0 32.5 17.5 28.0 32.5 10.5 30.0 32.5 17.5 28.0 32.5 10.5 30.0 32.5 17.5 28.0 32.5 10.5 30.0 32.5 17.5 28.0 32.5 10.5 30.0 32.5 17.5 28.0 32.5 10.5 30.0 32.5 18.1	LnGrp LOS	В	A	A	В	A	В	ပ	A	A	O	A	A
16.5 16.5 8.3 8.3 8.3 8.3 8.4 8 8 8 8.3 8.4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Approach Vol, veh/h		44			6/			1219			704	
B B B B C C C C C C C C C C C C C C C C	Approach Delay, s/veh		16.5			16.5			8.3			6.4	
6.1 20.9 6.6 5.1 21.9 6.5 4.5 5.0 21.9 6.5 1.2 21.9 6.5 1.2 21.9 6.5 1.2 21.9 6.5 1.2 21.9 6.5 1.2 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2	Approach LOS		В			Ω			∢			∢	T
6.1 20.9 6.6 5.1 21.9 4.5 5.0 4.5 4.5 5.0 8. 12.5 28.0 32.5 10.3 30.0 8. 3.1 12.4 6.1 0.0 3.4 0.1 0.0 1.7	Timer - Assigned Phs	_	2		4	2	9		<b>∞</b>				Ī
4.5 5.0 4.5 4.5 5.0 5.12.5 28.0 32.5 10.5 30.0 5.3 3.1 12.4 4.1 2.4 6.1 0.0 3.4 0.1 0.0 1.7	Phs Duration (G+Y+Rc), s	6.1	20.9		9.9	5.1	21.9		9.9				
s 125 280 325 105 300 3 s 3.1 124 4.1 2.4 6.1 0.0 3.4 0.1 0.0 1.7	Change Period (Y+Rc), s	4.5	2.0		4.5	4.5	2.0		4.5				ľ
s 3.1 12.4 4.1 2.4 6.1 0.0 3.4 0.1 0.0 1.7 8.1		12.5	28.0		32.5	10.5	30.0		32.5				Ì
0.0 3.4 0.1 0.0 1.7 8.1	Max Q Clear Time (g_c+11), s	3.1	12.4		4.1	2.4	6.1		3.1				ı
ıry 8	Green Ext Time (p_c), s	0.0	3.4		0.1	0.0	1.7		0.2				Ī
8	Intersection Summary												Ī
	HCM 6th Ctrl Delay			× 4									
	HCM 6th I OS			- -									

Los Pinos Apartments TIS W-Trans PM Existing Plus Project Page 1

HCM 6th Signalized Intersection Summary 2: S Moorland Ave & Todd Rd/US 101 South Ramps

03/30/2020

03/30/2020

	1	1	~	1	1	1	-	<b>←</b>	•	×	<b>→</b>	*
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	K	+	W_	r	<b>£</b> ,		r		N.		4	
Traffic Volume (veh/h)	0	307	501	292	134	0	470	0	115	0	0	0
Future Volume (veh/h)	0	307	201	292	134	0	470	0	115	0	0	0
Initial Q (Qb), veh	0	<del>-</del>	0	0	0	0	က	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		2			2			2			8	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	330	283	314	144	0	202	0	29	0	0	0
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	0	2	2	2	2
Cap, veh/h	648	089	263	585	614	0	0	0	0	0	တ	0
Arrive On Green	0.00	0.36	0.36	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1781	1870	1548	1781	1870	0		0		0	1870	0
Grp Volume(v), veh/h	0	330	283	314	144	0		0.0		0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1548	1781	1870	0				0	1870	0
Q Serve(g_s), s	0.0	2.7	5.9	2.9	1.	0.0				0.0	0:0	0.0
Cycle Q Clear(g_c), s	0.0	2.7	5.9	2.9	<del>[</del> :	0.0				0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00				0.00		0.00
Lane Grp Cap(c), veh/h	648	089	263	585	614	0				0	တ	0
V/C Ratio(X)	0.00	0.49	0.50	0.54	0.23	0.00				0.00	0.00	0.00
Avail Cap(c_a), veh/h	1846	1938	1605	2662	2795	0				0	1770	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	2.0	2.0	5.5	4.9	0.0				0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.7	0.8	0.2	0.0				0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/In	0.0	0.3	0.3	0.4	0.1	0.0				0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.5	2.7	6.3	2.1	0.0				0.0	0:0	0.0
LnGrp LOS	A	A	A	A	A	A				A	A	V
Approach Vol, veh/h		613			458						0	
Approach Delay, s/veh		9.6			5.9						0.0	
Approach LOS		⋖			∢							
Timer - Assigned Phs		2		4				∞				Ī
Phs Duration (G+Y+Rc), s		0.0		10.5				9.6				
Change Period (Y+Rc), s		3.0		3.2				3.0				
Max Green Setting (Gmax), s		19.0		20.8				30.0				
Max Q Clear Time (g_c+11), s		0.0		4.9				4.9				
Green Ext Time (p_c), s		0.0		2.7				1.7				
Intersection Summary												Ī
HCM 6th Ctrl Delay			5.7									
HCM 6th LOS			⋖									

Los Pinos Apartments TIS W.Trans PM Existing Plus Project Page 2

HCM 6th Signalized Intersection Summary 3: US 101 Overpass & Todd Rd

Lane Confortance									
173   234   349   308   205   617     173   234   349   308   205   617     100   1.00   1.00   1.00   1.00     100   1.00   1.00   1.00   1.00     100   1.00   1.00   1.00   1.00     178   90   378   293   211   589     178   90   378   293   211   589     178   90   378   293   211   589     178   90   378   293   211   589     177   1565   1781   1870   1781   1395     178   90   378   293   211   589     178   90   378   293   211   589     178   90   378   293   211   589     178   90   378   293   214   389     178   90   378   293   214   389     178   90   378   293   214   389     178   90   378   293   214   389     179   910   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170   1.00   1.00   1.00     170	Movement	EBT	EBR	WBL	WBT	NBL	NBR		ì
173 234 349 308 205 617  173 234 349 308 205 617  100 1.00 1.00 0 0 0  1.00 1.00 1.00 1.	Lane Configurations	*	W.	M	440	k	N.N.		
173 234 349 308 205 617     100	Traffic Volume (veh/h)	173	234	349	308	205	617		
ach No 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Future Volume (veh/h)	173	234	349	308	205	617		
ach No 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Initial Q (Qb), veh	0	0	0	0	0	0		
ach 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Ped-Bike Adj(A_pbT)		1.00	1:00		1.00	1.00		
ach No 1870 1870 1870 1870 1870 1870 1870 1870	Parking Bus, Adj	00:1	1.00	1.00	1:00	1:00	1.00		Ī
1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870   1870	Work Zone On Approach	2			2	2			
6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870		Ī
6	Adj Flow Rate, veh/h	178	30	378	293	211	283		
0.14 0.14 0.27 0.27 0.24 0.24 0.24 0.14 0.14 0.27 0.27 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.24	Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
144 0.27 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.24	Percent Heavy Ven, %	7 [	7 000	7 7 7	7 7	7 9	7 70		
364 0.14 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.2	Cap, veryn	48/	777	97	200	432	1430		
3647 1369 3653 1870 1781 2790  177 1568 1781 1870 1781 1395  174 16 26 41 31 4.0  177 1568 1781 1870 1781 1395  178 1 22 971 510 432 1438  0.36 0.41 0.39 0.57 0.49 0.41  239 0.57 0.49 0.41  230 0.41 0.39 0.57 0.49 0.41  230 1.00 1.00 1.00 1.00 1.00 1.00  eh 11.9 11.9 9.3 0.5 614 1722  eh 0.0 0.0 0.0 0.0 0.0 0.0  eh 0.0 0.0 0.0 0.0 0.0 0.0  eh 0.0 0.0 0.0 0.0 0.0 0.0  eh 0.1 0.0 1.00 1.00 1.00  eh 1.9 1.2 0.9 1.3  ek 9.8 6.3  ek 0.3 1.3 1.1 9.3 10.6 10.8 4.7  ek 0.5 0.7 1.2 0.9 1.3  ek 0.7 0.8 0.0 0.0  ek 0.7 0.0 0.0 0.0  ek 0.7 0.0 0.0  ek 0.7 0.0 0.0  ek 0.7 0.0 0.0  ek 0.7	Arrive On Green	D. 14	0.14	0.27	0.27	0.24	0.24		
178   90   378   293   211   589   144   16   2.6   4.1   3.1   4.0   1.4   1.6   2.6   4.1   3.1   4.0   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00	Sat Flow, veh/h	364/	1585	3563	18/0	1/81	7/30		
vehirlin 1777 1585 1781 1870 1781 1335  -c) s 1.4 1.6 2.6 4.1 3.1 4.0  -c) s 1.4 1.6 2.6 4.1 3.1 4.0  -d) 1.00 1.00 1.00 1.00 1.00  -d) 1.00 1.00 1.00 1.00  -d) 222 971 510 432 1438  -dehir 2392 1067 1813 952 614 1722  -dehir 2392 1067 100 1.00  -dehir 2392 1067 100 1.00  -dehir 2392 1067 100 1.00  -dehir 2392 106 109 0.2  -dehir 2393 131 9.3 10.6 10.8 4.7  -dehir 23 13.1 9.3 10.6 10.8 4.7  -dehir 248  -dehir 258 6.1  -dehir 258 6.1  -dehir 268 6.1  -dehir 268 6.1  -dehir 268 6.1  -dehir 35  -dehir 35  -dehir 35  -dehir 36  -dehir 3	Grp Volume(v), veh/h	178	6	378	293	211	589		
0,s 1,4 1,6 2,6 4,1 3,1 4,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1	Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1870	1781	1395		
1, s	Q Serve(g_s), s	1.4	1.6	5.6	4.1	3.1	4.0		
Trane         100         100           Procedic), vehin         497         222         971         510         100           stic/N         0.36         0.41         0.39         0.57         0.48         1488           stic/N         0.36         0.41         0.39         0.57         0.49         0.41           spic/N         0.36         0.41         0.39         0.57         0.49         0.41           spic/N         0.00         1.00         1.00         1.00         1.00         1.00           m Pailly (L3), siveh         0.4         1.2         0.3         1.0         0.9         4.5           alsy (L3), siveh         0.4         0.5         0.7         1.2         0.9         4.5           Delay(L3), siveh         0.0         0.0         0.0         0.0         0.0         0.0           Delay(L3), siveh         1.2         3.1         9.3         1.3         4.7         1.3           LOS         B         A         B         B         A         A         A           LOS         B         B         A         A         A         A         A           LOS	Cycle Q Clear(g_c), s	1.4	1.6	5.6	4.1	3.1	4.0		
sip Cap(c), veh/h         497         222         971         510         432         1438           sip (Cap(c), veh/h         0.36         0.41         0.39         0.57         0.49         0.41           sap(c), veh/h         0.39         0.57         100         1.00         1.00         1.00           am Filler(I)         1.00         1.00         1.00         1.00         1.00         1.00           am Filler(I)         0.4         1.2         0.3         1.0         0.0         0.0           amy Collegy(S), siveh         0.0         0.0         0.0         0.0         0.0         0.0           Movement Delay (Siveh         B         B         A         B         A         A           LOS         B         A         B         B         A         A         A           LOS         B         B	Prop In Lane		1.00	1.00		1.00	1.00		
stro(X)  stro(X)  0.36  0.41  0.39  0.41  0.39  0.41  0.39  0.41  0.41  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40  0.40	Lane Grp Cap(c), veh/h	497	222	971	510	432	1438		Ì
tap(c_a), veh/h         2392         1067         1813         952         614         1722           Platoon Ratio         1.00         1.00         1.00         1.00         1.00           Platoon Ratio         1.00         1.00         1.00         1.00         1.00           In Delay(d), siveh         1.19         1.19         9.0         9.6         9.9         4.5           Bisy (d), siveh         0.4         1.2         0.3         1.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	V/C Ratio(X)	0.36	0.41	0.39	0.57	0.49	0.41		
Platoon Ratio         1.00         1.00         1.00           Platoon Ratio         1.00         1.00         1.00         1.00           In Dealy (3), siveh         1.19         9.0         9.6         9.6         4.5           Blay (43), siveh         0.4         1.2         0.3         1.0         0.9         0.2           C Delay (43), siveh         0.0         0.0         0.0         0.0         0.0         0.0           Delay (43), siveh         1.2         0.7         1.2         0.9         4.7           LOS         B         A         B         A         A           Delay (3), siveh         1.2         3.1         9.3         1.0         4.7           LOS         B         A         B         A         A           Ach Vol. verlvh         26e         6.7         80         6.3           Ach LOS         B         A         A         A           Ach LOS         B         A         A         A           Ach LOS         B         A         A         A           Ach Signed Phis         2.0         6.1         5.2           Exi Time (p.c.), s         1.2	Avail Cap(c_a), veh/h	2392	1067	1813	952	614	1722		Ī
an Filer(I) 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	HCM Platoon Ratio	1.00	1.00	1:00	1.00	1.00	1.00		
m Delay (d), s/veh 119 119 90 96 9.9 4.5  m Delay (d), s/veh 0.4 11.2 0.3 1.0 0.9 0.2  Delay (d), s/veh 0.4 0.5 0.7 1.2 0.9 1.3  Movement Delay, s/veh 1.2 13.1 9.3 10.6 10.8 4.7  LOS B B A B B A  CLOS B B A B B A  CLOS B B B A  A  Assigned Phs C  CLOS B B B A  A  CLOS B B B A  A  CLOS B B B A  A  A  Assigned Phs C  CLOS B B B A  A  A  Assigned Phs C  CLOS B B B A  A  A  A  A  A  A  A  A  A  A  A  A	Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		Ì
lay (d2), siveh 0.4 1.2 0.3 1.0 0.9 0.2  Delay(d3), siveh 0.0 0.0 0.0 0.0 0.0  Movement Delay, siveh 1.2 13.1 9.3 10.6 10.8 4.7  Delay(d), siveh 1.2 8 B A B B A  Assigned Phs 2 B B A A  Assigned Phs 2 B B A A  Assigned Phs 2 B B A B B  Assigned Phs 2 B B B B A  Assigned Phs 3 0.5 0.7 1.2 0.9 1.3  The signed Phs 3 0.5 0.5 0.5 0.5 0.5  Clear Time (p_c), s 1.2 3.5  Clear Time (p_c), s 1.2 2.2  Clear Time (p_c), s 1.2 3.5	Uniform Delay (d), s/veh	11.9	11.9	9.0	9.6	6.6	4.5		
Delay(d3)s/vehn 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Incr Delay (d2), s/veh	0.4	1.2	0.3	1.0	6.0	0.2		
ackO(d(50%),veh/n 0.4 0.5 0.7 1.2 0.9 1.3 Movement Delay, s/eh B B A B B A B B A A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B B A B B B A B B B A B B B A B B B A B B A B B B A B B B A B B B A B B B A B B B A B B B A B B B A B B B A B B B A B B B B A B B B B A B B B B A B B B B B A B B B B A B B B B A B B B B B B A B B B B B B B B B B B B B B B B B B B B	Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
Movement Delay, siveh 123 13.1 9.3 10.6 10.8 4.7 LOS BBABBA  ach UoS ach Delay, siveh 12.6 9.8 6.3 ach LOS ach LOS ach CoS ac	%ile BackOfQ(50%),veh/ln	0.4	0.5	0.7	1.2	6.0	1.3		
Delay(d), s/veh         12.3         13.1         9.3         10.6         10.8         4.7           LOS         B         A         B         A         A           sch Vol, veh/h         268         671         80         A           ach LOS         9.8         6.3         A         A           ach LOS         B         A         A         A         A           Assigned Phis         2         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A	Unsig. Movement Delay, s/veh								
LUSS B B A B B A A B B A A B B A A B B A A B B B A A B B A A B B A A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B A B B B A B B B A B B B A B B B A B B B A B B B A B B B B A B B B B A B B B B B B A B B B B B B B B B B B B B B B B B B B B	LnGrp Delay(d),s/veh	12.3	13.1	9.3	10.6	10.8	4.7		
act Delay, siveh 268 671 800  act Delay, siveh 126 9.8 6.3  act Delay, siveh 126 9.8 6.3  A Assigned Phs 2 6.3  Assigned Phs 2 6.3  Takion (G+Y+RD), s 3.5  Ten Setting (Gmax), s 20.5  Ten Setting (Gmax), s 3.6  Ext Time (g_c+I), s 3.6  Ext Time (	LnGrp LOS	В	В	A	В	В	A		
ach LOS	Approach Vol, veh/h	268			671	800			
Assigned Phs 2 6 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Approach Delay, s/veh	12.6			8. 8.	6.3			
Assigned Phs         2         6           ration (S+V+Rc), s         7.8         118           ee Period (Y+Rc), s         3.5         3.5           reen Selfrig (Gmax), s         2.0.5         15.5           Clear Time (p_c), s         1.2         2.2           cdron Summary         8.6         2.2           bit Cut Delay         8.6         A           Ah LOS         A         A	Approach LOS	മ			∢	∢			Ī
uration (G+'+Re), s 7.8 11.8  11.8 15.5 15.8  12.5 15.5 15.5  12.5 15.5 15.5  12.5 17.5 17.5  Ext Time (gc+f], s 3.6 17.2  Ext Time (gc+f], s 1.2 2.2  cdion Summary  Sth Cot Delay 8.6  A A	Timer - Assigned Phs		2				9	8	Ī
e Period (Y+Rc); s 3.5 3.5 reen Setting (Gmax), s 20.5 15.5 15.5 clear Time (g_c+l1), s 3.6 6.1 Ext Time (g_c, s) 1.2 2.2 action Summary 8.6 A A A A A A A A A A A A A A A A A A A	Phs Duration (G+Y+Rc), s		7.8				11.8	10.9	
reen Setting (Gmax), s 20.5 15.5 Clear Time (g_c+11), s 3.6 6.1 Ext Time (p_c), s 1.2 2.2 cidion Summary 8.6 A A	Change Period (Y+Rc), s		3.5				3.5	3.5	
Clear Time (g_c+I1), s 3.6 6.1  Ext Time (p_c), s 1.2 2.2  ction Summary 8.6  A A  A	Max Green Setting (Gmax), s		20.5				15.5	10.5	
Ext Time (p_6), s	Max Q Clear Time (q c+11), s		3.6				6.1	6.0	
cdion Summary Xh Ctri Delay Xh LOS	Green Ext Time (p_c), s		1.2				2.2	1.4	
th Cut Delay	Intersection Summary								
on Crit Delay Sth LOS	Illessector Samiliary	ı	ı	0	ı	ı	ı		
ith LOS	HCM 6th Ctrl Delay			9.8					
Natao	HCM 6th LOS			×					
	Notes								Ì

Los Pinos Apartments TIS PM Existing Plus Project

HCM 6th Signalized Intersection Summary 4: Santa Rosa Ave & Todd Rd

03/30/2020

03/30/2020

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Movement	EB	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	4	W_	K	42		*	‡	*	*	‡	*
Traffic Volume (veh/h)	404	65	264	36	92	64	304	629	34	21	418	246
Future Volume (veh/h)	404	65	264	36	92	64	304	639	34	21	418	246
Initial Q (Qb), veh	0	0	0	0	0	0	2	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		2			8			2			8	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	453	0	114	38	66	45	317	999	16	22	435	137
Peak Hour Factor	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96:0	96.0
Percent Heavy Veh, %	5	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	613	0	268	196	134	61	377	1331	291	37	684	304
Arrive On Green	0.17	0.00	0.17	0.11	0.11	0.11	0.21	0.37	0.37	0.02	0.19	0.19
Sat Flow, veh/h	3563	0	1557	1781	1216	553	1781	3554	1579	1781	3554	1578
Grp Volume(v), veh/h	453	0	114	38	0	144	317	999	16	22	435	137
Grp Sat Flow(s), veh/h/ln	1781	0	1557	1781	0	1769	1781	1777	1579	1781	1777	1578
Q Serve(g_s), s	6.7	0.0	3.6	<del>[</del>	0.0	4.4	9.2	8.0	0.4	0.7	6.2	4.3
Cycle Q Clear(g_c), s	6.7	0.0	3.6	<del>[</del>	0.0	4.4	9.5	8.0	0.4	0.7	6.2	4.3
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	613	0	268	196	0	195	377	1331	291	37	684	304
V/C Ratio(X)	0.74	0.00	0.43	0.19	0.00	0.74	0.84	0.50	0.03	0.60	0.64	0.45
Avail Cap(c_a), veh/h	2282	0	266	337	0	335	246	2468	1097	337	2084	925
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	20.7	22.6	0.0	24.1	21.2	13.4	11.0	27.1	20.7	19.9
Incr Delay (d2), s/veh	0.7	0.0	0.4	0.2	0.0	2.0	5.4	0.1	0.0	5.6	0.4	0.4
Initial Q Delay(d3),s/veh	0:0	0.0	0.0	0.0	0.0	0.0	<u></u>	0.0	0.0	0.0	0.0	0.0
%ile BackOrQ(50%),ven/in	7.6	0.0	7.7	0.4	0.0		4.2	7.6	0.1	0.3	2.3	1.4
Unsig. Movement Delay, s/ven	900	c	5	0 00	c	7 90	0.40	10 5	4	700	7 70	000
InGrn I OS	0. C.	9. A	- C	0.7	9. A	- C	6. 7.		2 00	32.1 C	- C	0.07
Approach Vol. veh/h	,	292	•	•	182	•	,	666	ı	•	594	
Approach Delay, s/veh		22.3			25.4			18.1			21.4	
Approach LOS		O			O			В			O	
Timer - Assigned Phs		2	က	4		9	7	∞				
Phs Duration (G+Y+Rc), s	ı	14.1	15.6	15.2		10.6	5.6	25.1				
Change Period (Y+Rc), s		4.5	4.0	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		35.5	17.0	32.5		10.5	10.5	38.5				ì
Max Q Clear Time (g_c+l1), s		8.7	11.5	8.2		6.4	2.7	10.0				
Green Ext Time (p_c), s		0.7	0.2	1.4		0.1	0.0	2.2				
Intersection Summary												Ī
HCM 6th Ctrl Delay			20.5									Ī
HCM 6th LOS			O									
Notes												

Notes
User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS PM Existing Plus Project

> W-Trans Page 3

HCM Signalized Intersection Capacity Analysis 5: S Moorland Ave & US 101 Overpass

Movement Lane Configurations Traffic Volume (voh)	WRI		NET	NBD	<u>a</u>			
Lane Configurations	7	WBR	- CA	NON	טנר	SBT		
Traffic Volume (vnh)	>		24		¥	4		
(101)	33	529	72	93	728	52		
Future Volume (vph)	33	529	25	93	728	52		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width	=	=	12	12	12	12		
Total Lost time (s)	4.5		4.5		4.5	4.5		
Lane Util. Factor	1.00		1.00		0.95	0.95		
Ĕ	0.87		0.91		1.00	1.00		
Fit Protected	1.00		1.00		0.95	96:0		
Satd. Flow (prot)	1567		1703		1681	1696		
Fit Permitted	1.00		1.00		0.95	96:0		
Satd. Flow (perm)	1567		1703		1681	1696		1
Peak-hour factor, PHF	96.0	96:0	96.0	96.0	96.0	96.0		
Adj. Flow (vph)	쫑	551	26	26	758	25		
RTOR Reduction (vph)	443	0	89	0	0	0		
Lane Group Flow (vph)	142	0	82	0	402	410		
Turn Type	Prot		N		Split	NA		
Protected Phases	∞		2		9	9		
Permitted Phases								
Actuated Green, G (s)	10.2		8.9		21.3	21.3		
Effective Green, g (s)	10.2		8.9		21.3	21.3		
Actuated g/C Ratio	0.20		0.13		0.41	0.41		
Clearance Time (s)	4.5		4.5		4.5	4.5		
Vehicle Extension (s)	3.0		3.0		3.0	3.0		
Lane Grp Cap (vph)	308		223		691	269		
v/s Ratio Prot	60.00		c0.05		0.24	c0.24		
v/s Ratio Perm								
v/c Ratio	0.46		0.38		0.58	0.59		
Uniform Delay, d1	18.4		20.6		11.8	11.8		
Progression Factor	1.00		1.00		1.00	1.00		
Incremental Delay, d2	1.1		1.		 5.	1.3		
Delay (s)	19.5		21.7		13.1	13.1		
Level of Service	ш		ပ		Ф	В		
Approach Delay (s)	19.5		21.7			13.1		
Approach LOS	В		ပ			В		
Intersection Summary								
HCM 2000 Control Delay			16.3	ľ	M 2000 I	HCM 2000 Level of Service	В	
HCM 2000 Volume to Capacity ratio	ty ratio		0.52					
Actuated Cycle Length (s)			51.8	S	Sum of lost time (s)	time (s)	13.5	
Intersection Capacity Utilization	on		75.9%	⊴	ICU Level of Service	Service	۵	
Analysis Period (min)			15					

Los Pinos Apartments TIS W-Trans PM Existing Plus Project Page 1

HCM 6th Signalized Intersection Summary 1: Santa Rosa Ave & East Robles Ave

03/31/2020

04/01/2020

	1	1	~	1	ţ	1	-	+	•	٠	<b>→</b>	*
Movement	B	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		je.	42		je.	44		k.	44	
Traffic Volume (veh/h)	14	0	7	61	0	99	25	1089	18	27	240	15
Future Volume (veh/h)	14	0	7	61	0	99	22	1089	18	27	240	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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		2			2			S			S	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	4	0	7	61	0	99	52	1089	9	27	240	15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	2	19	353	0	119	40	1440	24	43	1426	40
Arrive On Green	0.08	0.00	0.08	0.08	0.00	0.08	0.02	0.45	0.45	0.03	0.45	0.45
Sat Flow, veh/h	393	22	224	1268	0	1402	1603	3218	53	1603	3175	88
Grp Volume(v), veh/h	21	0	0	61	0	99	25	541	266	27	272	283
Grp Sat Flow(s), veh/h/ln	672	0	0	1268	0	1402	1603	1599	1672	1603	1599	1664
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	1.4	0.5	9.0	9.0	0.5	3.6	3.6
Cycle Q Clear(g c), s	1.8	0.0	0.0	1.1	0.0	1.4	0.5	9.0	9.0	0.5	3.6	3.6
Prop In Lane	29.0		0.33	1.00		1.00	1.00		0.03	1.00		0.05
Lane Grp Cap(c), veh/h	246	0	0	353	0	119	40	716	748	43	718	748
V/C Ratio(X)	0.09	0.00	0.00	0.17	0.00	0.55	0.63	92.0	92.0	0.63	0.38	0.38
Avail Cap(c_a), veh/h	1431	0	0	1543	0	1435	230	1410	1475	631	1511	1573
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	0.0	13.8	0.0	13.9	15.3	7.3	7.3	15.3	5.8	5.8
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	1.5	2.8	9.0	9.0	9.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.3	0.0	0.4	0.2	1.4	1.4	0.2	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	0.0	13.9	0.0	15.4	21.1	7.9	7.9	50.9	5.9	5.9
LnGrp LOS	В	A	A	В	A	В	O	A	A	ပ	A	A
Approach Vol, veh/h		21			127			1132			285	
Approach Delay, s/veh		14.3			14.7			8.2			9.9	
Approach LOS		В			Ω			∢			∢	
Timer - Assigned Phs	~	2		4	2	9		∞				
Phs Duration (G+Y+Rc), s	5.3	19.2		7.2	5.3	19.3		7.2				
Change Period (Y+Rc), s	4.5	2.0		4.5	4.5	2.0		4.5				
Max Green Setting (Gmax), s	12.5	28.0		32.5	10.5	30.0		32.5				
Max Q Clear Time (g_c+I1), s	2.5	11.0		3.8	2.5	9.9		3.4				
Green Ext Time (p_c), s	0.0	3.1		0.0	0.0	1.4		0.3				
Intersection Summary												Ī
HCM 6th Ctrl Delay			8.2									
HCM 6th LOS			⋖									1

Los Pinos Apartments TIS AM Future Plus Project

	*	-	*	1	+	*	1	1	1	1	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lane Configurations	- 1	<b>+</b>	7	-	1.		*		111		4	
Traffic Volume (veh/h)	0	351	510	379	280	0	863	0	165	0	0	(
Future Volume (veh/h)	0	351	510	379	280	0	863	0	165	0	0	(
Initial Q (Qb), veh	0	2	0	15	2	0	11	0	0	0	0	(
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	351	330	379	280	0	863	0	102	0	0	C
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	2	2
Cap, veh/h	660	693	573	690	696	0	0	0	0	0	8	0
Arrive On Green	0.00	0.37	0.37	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1781	1870	1549	1781	1870	0		0		0	1870	0
Grp Volume(v), veh/h	0	351	330	379	280	0		0.0		0	0	C
Grp Sat Flow(s), veh/h/ln	1781	1870	1549	1781	1870	0				0	1870	0
Q Serve(g_s), s	0.0	3.5	4.1	4.1	2.7	0.0				0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.5	4.1	4.1	2.7	0.0				0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00				0.00		0.00
Lane Grp Cap(c), veh/h	660	693	573	690	696	0				0	8	0
V/C Ratio(X)	0.00	0.51	0.58	0.55	0.40	0.00				0.00	0.00	0.00
Avail Cap(c a), veh/h	1548	1625	1346	2232	2344	0				0	1485	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.1	6.4	6.8	5.7	0.0				0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.9	0.7	0.4	0.0				0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.1	0.0	7.6	0.1	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.7	3.0	0.5	0.0				0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.8	7.3	15.1	6.1	0.0				0.0	0.0	0.0
LnGrp LOS	А	Α	A	В	Α	A				Α	Α	A
Approach Vol, veh/h		681			659						0	
Approach Delay, s/veh		7.1			11.3						0.0	-
Approach LOS		A			В						0.0	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		0.0		12.1				11.9				
Change Period (Y+Rc), s		3.0		3.2				3.0				
Max Green Setting (Gmax), s		19.0		20.8				30.0				
Max Q Clear Time (g_c+l1), s		0.0		6.1				6.1				
Green Ext Time (p_c), s		0.0		2.9				2.8				
Intersection Summary												
HCM 6th Ctrl Delay			9.1									
HCM 6th LOS			Α									

Los Pinos Apartments TIS	W-Trans
AM Future Plus Project	Page 2

Movement		<b>→</b>	*	1	+	1	-		
Traffic Volume (velvh)	Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Traffic Volume (velvh)	Lane Configurations	44	- 1	7	44	*	11		
Initial Q (Qb), veh	Traffic Volume (veh/h)		403	586	331	341	481		
Ped-Bike Adj(A_pbT)	Future Volume (veh/h)	126	403	586	331	341	481		
Ped-Bike Adj(A_pbT)	Initial Q (Qb), veh	0	0	0	0	0	0		
Parking Bus, Adj 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Ped-Bike Adj(A pbT)		1.00	1.00		1.00	1.00		
Work Zone On Ápproach		1.00	1.00	1.00	1.00	1.00	1.00		
Adj Flow Rate, veh/h Peak Hour Factor Peak Hour Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0		No			No	No			
Adj Flow Rate, veh/h Peak Hour Factor Peak Hour Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Adi Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870		
Peak Hour Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0		126	253	586	331	341	470		
Percent Heavy Veh, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2									
Cap, veh/h									
Arrive On Green 0.23 0.23 0.27 0.27 0.24 0.24 Sat Flow, veh/h 3647 1585 3563 1870 1781 2790 Sat Flow, veh/h 126 253 586 331 341 470 Sat Flow(s), veh/h/ln 1767 1585 1781 1870 1781 1395 Q Serve(g_s), s 1.1 5.9 5.8 6.3 7.2 4.0 Prop In Lane 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0									
Sat Flow, veh/h 3647 1585 3563 1870 1781 2790  3rp Volume(v), veh/h 126 253 586 331 341 470  3rp Sat Flow(s), veh/h/ln 1777 1585 1781 1870 1781 1395  2 Serve(g.s), s 1.1 5.9 5.8 6.3 7.2 4.0  Cycle Q Clear(g.c), s 1.1 5.9 5.8 6.3 7.2 4.0  Cycle Q Clear(g.c), veh/h 803 358 963 505 431 1429  V/C Ratio(X) 0.16 0.71 0.61 0.65 0.79 0.33  Avail Cap(c.a), veh/h 1818 811 1378 724 467 1485  HCM Platon Ratio 1.00 1.00 1.00 1.00 1.00  Uniform Delay (d), s/veh 12.4 14.3 12.8 13.0 14.2 5.7  nor Delay (d2), s/veh 0.1 2.6 0.6 1.4 8.4 0.1  Initial O Delay(d3), s/veh 0.1 2.6 0.6 1.4 8.4 0.1  Initial O Delay(d3), s/veh 0.4 1.9 1.8 2.2 3.3 1.5  Unsign Movement Delay, s/veh 1.0 1.0 1.0 1.0 0.0 0.0  Approach Delay, s/veh 15.4 13.8 12.9  Approach LOS B B B B C C A Approach Delay, s/veh 15.4 13.8 12.9  Approach LOS B B B B C C A Approach Delay, s/veh 15.4 13.8 12.9  Approach LOS B B B B C C A Approach Clos Whih 379 917 811  Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A Approach LOS B B B B C C A A Approach LOS B B B B C C A A Approach LOS B B B B C C A A Approach LOS B B B B C C A A Approach LOS B B B B C C A A Approach LOS B B B B C C A A Approach LOS B B B B C C A A Approach LOS B B B B C C A A Approach LOS B B B B C C A A Approach LOS B B B B C C A A Approach LOS B B B B C C A A Approach LOS B B B B C C A A A									
Sign   Volume(v), veh/h									
Grp Sat Flow(s), veh/h/ln 1777 1585 1781 1870 1781 1395 Q Serve(g.s), s 1.1 5.9 5.8 6.3 7.2 4.0 Cycle Q Clear(g.c), s 1.1 5.9 5.8 6.3 7.2 4.0 Prop In Lane 1.00 1.00 1.00 1.00 1.00 1.00 Lane Grp Cap(c), veh/h 803 358 963 505 431 1429 V/C Ratio(X) 0.16 0.71 0.61 0.65 0.79 0.33 Avail Cap(c_a), veh/h 1818 811 1378 724 467 1485 HCM Platon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0									
2 Serve(g_s), s 1.1 5.9 5.8 6.3 7.2 4.0  Cycle C (Clear(g_c), s 1.1 5.9 5.8 6.3 7.2 4.0  Cycle C (Clear(g_c), s 1.1 5.9 5.8 6.3 7.2 4.0  Prop In Lane 1.00 1.00 1.00 1.00  Lane Grp Cap(c), veh/h 803 358 963 505 431 1429  V/C Ratio(X) 0.16 0.71 0.61 0.65 0.79 0.33  Availa (Lap(c_a), veh/h 1818 811 1378 724 467 1485  H-CM Platon 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  Upstream Filter(I) 1.00 1.00 1.00 1.00 1.00 1.00  Uniform Delay (d), s/veh 12.4 14.3 12.8 13.0 14.2 5.7  Incr Delay (3), s/veh 0.1 2.6 0.6 1.4 8.4 0.1  Initial Q Delay(d3), s/veh 0.0 0.0 0.0 0.0 0.0 0.0  Wile BackOfQ(50%), veh/ln 0.4 1.9 1.8 2.2 3.3 1.5  Unsig. Movement Delay, s/veh  LnGrp Delay (d), s/veh 12.5 16.9 13.4 14.4 22.7 5.9  LnGrp Delay (d), s/veh 15.4 13.8 12.9  Approach Vol, veh/h 379 917 811  Approach LOS B B B B C A  Phs Duration (G+Y+Rc), s 12.5 13.8 12.9  Change Period (Y+Rc), s 3.5 3.5 3.5  Max Green Setting (Gmax), s 20.5 15.5 10.5  Intersection Summary  HCM 6th Ctrl Delay									
Cycle Q Clear(g_c), s									
1.00									
Lane Grp Cap(c), veh/h 803 358 963 505 431 1429  //C Ratio(X) 0.16 0.71 0.61 0.65 0.79 0.33  Avail Cap(c_a), veh/h 1818 811 1378 724 467 1485		1.1			0.3				
//C Ratio(X)		002			EOE				
Avail Cap(c_a), veh/h 1818 811 1378 724 467 1485  I-CM Platoon Ratio 1.00 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 12.4 14.3 12.8 13.0 14.2 5.7  ncr Delay (d2), s/veh 0.1 2.6 0.6 1.4 8.4 0.1  Initial Q Delay(d3), s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0  Wile BackOfQ(50%), veh/ln 0.4 1.9 1.8 2.2 3.3 1.5  Unsig. Movement Delay, s/veh  LnGrp Delay(d), s/veh 12.5 16.9 13.4 14.4 22.7 5.9  LnGrp LOS B B B B C A  Approach Vol, veh/h 379 917 811  Approach Delay, s/veh 15.4 13.8 12.9  Approach Delay, s/veh 15.4 13.8 12.9  Approach Delay, s/veh 15.4 13.8 12.9  Phs Duration (G+Y+Rc), s 3.5 3.5 3.5  Wax Green Setting (Gmax), s  Max Q Clear Time (g_c+I1), s 7.9 8.3 9.2  Green Ext Time (p_c), s 1.3 13.7  HCM 6th Ctrl Delay  HCM 6th LOS  HE 1.00 1.00 1.00 1.00 1.00  HCM 1									
HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Upstream Filter(1) 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.									
Upstream Filter(I)									
Jniform Delay (d), s/veh     12.4     14.3     12.8     13.0     14.2     5.7       ncr Delay (d2), s/veh     0.1     2.6     0.6     1.4     8.4     0.1       ncil Delay (d3), s/veh     0.0     0.0     0.0     0.0     0.0       mitial Q Delay(d3), s/veh     0.4     1.9     1.8     2.2     3.3     1.5       Junsig, Movement Delay, s/veh     12.5     16.9     13.4     14.4     22.7     5.9       n.nGrp LOS     B     B     B     B     C     A       Approach Vol, veh/h     379     917     811       Approach LOS     B     B     B     B       Phs Duration (G+Y+Rc), s     12.5     14.3     13.2       Change Period (Y+Rc), s     3.5     3.5     3.5     3.5       Max Green Setting (Gmax), s     20.5     15.5     10.5									
Incr Delay (d2), s/veh									
Initial Q Delay(d3),s/veh									
Maile BackOfQ(50%), veh/ln									
Unsig. Movement Delay, s/vehnGrp Delay(d),s/vehnGrp LOSBBBBBC _A Approach Vol, veh/h Approach Vol, veh/h Approach Delay, s/veh									
LnGrp Delay(d),s/veh LnGrp LOS B B B B B C A Approach Vol, veh/h Approach Delay, s/veh Approach LOS B B B B B B C A Approach Delay, s/veh 15.4 13.8 12.9 Approach LOS B B B B C A Approach Delay, s/veh 15.4 13.8 12.9 Approach LOS B B B C A A A Approach LOS B B B C A A A Approach LOS B B B C A A A A A A A A A A A A A A A A			1.9	1.8	2.2	3.3	1.5		
LnGrp LOS B B B B C A Approach Vol, veh/h 379 917 811 Approach Delay, s/veh 15.4 13.8 12.9 Approach LOS B B B B B Approach COS B B B B B Approach COS B B B B B Approach COS B B B B B B B B B B Approach COS B B B B B B B B B B B B B B B B B B B	0 7.								
Approach Vol, veh/h 379 917 811 Approach Delay, s/veh 15.4 13.8 12.9 Approach LOS B B B B  Timer - Assigned Phs 2 6 8 Phs Duration (G+Y+Rc), s 12.5 14.3 13.2 Change Period (Y+Rc), s 3.5 3.5 3.5 Max Green Setting (Gmax), s 20.5 15.5 10.5 Max Q Clear Time (g_c+I1), s 7.9 8.3 9.2 Green Ext Time (p_c), s 1.3 2.5 0.5  Intersection Summary HCM 6th Ctrl Delay 13.7 HCM 6th LOS B									
Approach Delay, s/veh 15.4 13.8 12.9 Approach LOS B B B  Timer - Assigned Phs 2 6 8 Phs Duration (G+Y+Rc), s 12.5 14.3 13.2 Change Period (Y+Rc), s 3.5 3.5 3.5 Wax Green Setting (Gmax), s 20.5 15.5 10.5 Wax Q Clear Time (g_c+If), s 7.9 8.3 9.2 Green Ext Time (g_c-If), s 7.9 8.3 9.2 Green Ext Time (p_c), s 1.3 2.5 0.5  Intersection Summary  I-CM 6th Ctrl Delay 13.7 I-CM 6th LOS B			В	В			A		
Supproach LOS									
Timer - Assigned Phs         2         6         8           Phs Duration (G+Y+Rc), s         12.5         14.3         13.2           Change Period (Y+Rc), s         3.5         3.5         3.5           Max Green Setting (Gmax), s         20.5         15.5         10.5           Max Q Clear Time (g_c+I1), s         7.9         8.3         9.2           Green Ext Time (p_c), s         1.3         2.5         0.5           Intersection Summary           HCM 6th Ctrl Delay         13.7           HCM 6th LOS         B									
Phs Duration (G+Y+Rc), s 12.5 14.3 13.2 Change Period (Y+Rc), s 3.5 3.5 3.5 Max Green Setting (Gmax), s 20.5 15.5 10.5 Max Q Clear Time (g_c+I1), s 7.9 8.3 9.2 Green Ext Time (p_c), s 1.3 2.5 0.5 Intersection Summary  HCM 6th Ctrl Delay 13.7 HCM 6th LOS B	Approach LOS	В			В	В			
Phs Duration (G+Y+Rc), s 12.5 14.3 13.2  Change Period (Y+Rc), s 3.5 3.5 3.5  Max Green Setting (Gmax), s 20.5 15.5 10.5  Max Q Clear Time (g_c+I1), s 7.9 8.3 9.2  Green Ext Time (p_c), s 1.3 2.5 0.5   Intersection Summary  HCM 6th Ctrl Delay 13.7  HCM 6th LOS B	Timer - Assigned Phs		2				6	8	
Change Period (Y+Rc), s     3.5     3.5     3.5       Max Green Setting (Gmax), s     20.5     15.5     10.5       Max Q Clear Time (g_c+I1), s     7.9     8.3     9.2       Green Ext Time (p_c), s     1.3     2.5     0.5       ntersection Summary       HCM 6th Ctrl Delay     13.7       HCM 6th LOS     B			12.5				14.3	13.2	
Max Öreen Setting (Gmax), s     20.5     15.5     10.5       Max Q Clear Time (g_c+l1), s     7.9     8.3     9.2       Green Ext Time (p_c), s     1.3     2.5     0.5       ntersection Summary       HCM 6th Ctrl Delay     13.7       HCM 6th LOS     B									
Max Q Clear Time (g_c+l1), s       7.9       8.3       9.2         Green Ext Time (p_c), s       1.3       2.5       0.5         Intersection Summary         HCM 6th Ctrl Delay       13.7         HCM 6th LOS       B									
Green Ext Time (p, c), s     1.3     2.5     0.5       Intersection Summary       HCM 6th Ctrl Delay     13.7       HCM 6th LOS     B									
HCM 6th Ctrl Delay 13.7 HCM 6th LOS B									
HCM 6th Ctrl Delay 13.7 HCM 6th LOS B	Intersection Summary								
HCM 6th LOS B				13.7					
				ט					

Notes
User approved volume balancing among the lanes for turning movement.

Los Pinos Apartments TIS AM Future Plus Project W-Trans Page 3

HCM 6th Signalized Intersection Summary 4: Santa Rosa Ave & Todd Rd

	1	†	~	1	<b>↓</b>	4	6	•		۶	<b>→</b>	*
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	k.	4	W_	×	24		K	‡	*	K	‡	*
Traffic Volume (veh/h)	266	62	276	27	35	15	296	202	28	21	431	236
Future Volume (veh/h)	266	62	276	27	35	15	296	202	28	21	431	236
Initial Q (Qb), veh	0	0	0	0	0	0	က	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1:00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		8			2			%			8	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	202	136	27	35	9	296	202	18	21	431	132
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	292	243	8	69	13	534	1639	729	35	929	300
Arrive On Green	0.16	0.16	0.16	0.05	0.05	0.05	0:30	0.46	0.46	0.02	0.19	0.19
Sat Flow, veh/h	1781	1870	1556	1781	1530	287	1781	3554	1580	1781	3554	1578
Grp Volume(v), veh/h	164	205	136	27	0	38	969	202	18	21	431	132
Grp Sat Flow(s),veh/h/ln	1781	1870	1556	1781	0	1817	1781	1777	1580	1781	1777	1578
Q Serve(g_s), s	4.9	5.9	4.6	0.8	0.0	1.2	17.0	5.1	0.4	0.7	6.3	4.2
Cycle Q Clear(g_c), s	4.9	5.9	4.6	8.0	0.0	1.2	17.0	5.1	0.4	0.7	6.3	4.2
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	278	292	243	8	0	85	534	1639	729	35	929	300
V/C Ratio(X)	0.59	0.70	0.56	0.34	0.00	0.46	1.12	0.31	0.02	0.59	0.64	0.44
Avail Cap(c_a), veh/h	1115	1170	974	330	0	336	534	2412	1072	330	2036	904
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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	22.7	22.1	26.3	0.0	26.4	19.9	9.6	8.3	27.6	21.2	20.3
Incr Delay (d2), s/veh	0.7	1.1	0.7	6.0	0.0	1.5	75.0	0.0	0.0	2.8	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	20.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.4	1.5	0.3	0.0	0.5	20.0	1.5	0.1	0.3	2.3	1.4
Unsig. Movement Delay, s/veh				į		į					į	
LnGrp Delay(d),s/ven	23.0	23.8	677	7.17	0.0	27.9	115.1	9.6	χ. Σ. 4	33.3	21.5	7.07
Lugip LUS	C	اد	c	د	∢ ;	c	-	∢ :	∢	د	اد	اد
Approach Vol, ven/h		505			9 2			1119			284	Ī
Approach Delay, siven		23.3			27.5			85.00 E			8.12	
Approact FOS		د			د			ш			2	ľ
Timer - Assigned Phs		2	3	4		9	7	8				Ī
Phs Duration (G+Y+Rc), s		13.4	21.0	15.3		7.1	9.9	30.7				
Change Period (Y+Rc), s		4.5	4.0	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		35.5	17.0	32.5		10.5	10.5	38.5				Ī
Max Q Clear Time (g_c+I1), s		7.9	19.0	8.3		3.2	2.7	7.1				
Green Ext Time (p_c), s		0.8	0.0	1.4		0.0	0.0	1.6				i
Intersection Summary												Ī
HCM 6th Ctrl Delay			43.9									
HCM 6th LOS												
Notor												

Notes User approved volume balancing among the lanes for turning movement. Los Pinos Apartments TIS AM Future Plus Project

W-Trans Page 4

HCM Signalized Intersection Capacity Analysis 5: S Moorland Ave & US 101 Overpass

04/01/2020

04/01/2020

Movement Lane Configurations Traffic Volume (vph) Future Volume (vph) Ideal Flow (vphol)	WBL	WRR	NBT	OON	2		
Lane Configurations Traffic Volume (vph) Future Volume (vph) Ideal Flow (vphpl)				NDN	SBL	SBT	
Traffic Volume (vph) Future Volume (vph) Ideal Flow (vphpl)	>		24		K	4	
Future Volume (vph) Ideal Flow (vphpl)	20	931	159	6/	69/	62	
Ideal Flow (vphpl)	20	931	159	79	69/	62	
	1900	1900	1900	1900	1900	1900	
Lane Width	=	7	12	12	12	12	
Total Lost time (s)	4.5		4.5		4.5	4.5	
Lane Util. Factor	1.00		1.00		0.95	0.95	
Ŧ	0.87		96.0		1.00	1.00	
Flt Protected	1.00		1.00		0.95	96.0	
Satd. Flow (prot)	1561		1779		1681	1697	
Flt Permitted	1.00		1.00		0.95	96:0	
Satd. Flow (perm)	1561		1779		1681	1697	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	
Adj. Flow (vph)	20	931	159	79	69/	62	
RTOR Reduction (vph)	574	0	18	0	0	0	
Lane Group Flow (vph)	377	0	220	0	415	416	
Turn Type	Prot		NA		Split	NA	
Protected Phases	80		2		9	9	
Permitted Phases							
Actuated Green, G (s)	22.3		15.0		25.0	25.0	
Effective Green, g (s)	22.3		15.0		25.0	25.0	
Actuated g/C Ratio	0.29		0.20		0.33	0.33	
Clearance Time (s)	4.5		4.5		4.5	4.5	
Vehicle Extension (s)	3.0		3.0		3.0	3.0	
-ane Grp Cap (vph)	459		352		554	559	
//s Ratio Prot	c0.24		c0.12		c0.25	0.25	
v/s Ratio Perm							
v/c Ratio	0.82		0.63		0.75	0.74	
Uniform Delay, d1	24.9		27.8		22.6	22.6	
Progression Factor	1.00		1.00		1.00	1.00	
ncremental Delay, d2	11.3		3.5		5.5	5.3	
Delay (s)	36.2		31.3		28.1	27.9	
Level of Service	۵		ပ		ပ	ပ	
Approach Delay (s)	36.2		31.3			28.0	
Approach LOS	۵		ပ			ပ	
Intersection Summary							
HCM 2000 Control Delay			32.2	H	:M 2000 I	HCM 2000 Level of Service	O
HCM 2000 Volume to Capacity ratio	ty ratio		0.75				
Actuated Cycle Length (s)			75.8	Su	Sum of lost time (s)	time (s)	13.5
Intersection Capacity Utilization	ou		106.1%	O	ICU Level of Service	f Service	ŋ
Analysis Period (min)			12				

Los Pinos Apartments TIS AM Future Plus Project

HCM 6th Signalized Intersection Summary 1: Santa Rosa Ave & East Robles Ave

Traffic Volume (verlyh)   27   2   2   2   2   2   2   2   2	12 12 12 12 12 12 12 12 12 12 12 12 12 1	MBL WBT	0.00 141 100 141 100 00	NBL 1683 1683 1683 1683 1683 1683 1683 1683	NBT 1188 1.00 0 0 N N N N N N N N N N N N N N N N	1683 620 630 630 630 630 630 630 630 630 630 63	SBL 72 72 72 72 72 72 72 1.00 1.00 1.00 1.00 92 92 92 92 72 72 72 1.00 1.00 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.603 1.	SBT 867 867 867 867 867 867 867 1.00 1.00 2 2 1.00 2.24 430 430 6.2 6.2 6.2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
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s 23 0.0 9h/h 204 0 0.26 0.00 h 1306 0 1.00 1.00 veh 17.2 0.0 hh 0.2 0.0 wehh 0.0 0.0	0.00				11.2	0.08	1.00	6.2	0.03
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0.2 0.0 0.0 0.0 0.3 0.0	0.0		_		7.7	7.7	16.3	5.5	5.5
0.0 0.0	0.0	0.1 0.0	0 2.4	8.0	0.7	0.7	5.3	0.2	0.2
0.3	0.0	0.0 0.0			0.0	0.0	0.0	0.0	0.0
9	0.0	0.2 0	0 0.4	0.2	1.9	1.9	9.0	0.8	0.9
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y(d),s/veh 17.3 0.0	0.0		9	22	8.4	8.4	21.6	2.7	5.7
LnGrp LOS B A	A	В	A B	ပ	A	V	ပ	Þ	A
Approach Vol, veh/h 41		ω	88		1253			952	
/, s/veh 17		17.4	4		9.8			6.9	
Approach LOS B			В		⋖			∢	П
Timer - Assigned Phs 1 2		4	5 6		∞				ī
c).s 6.5 21.		6.8 5.1	1 23.3		6.8				
4.5		4.5 4			4.5				
12.5		32.5 10.5			32.5				
11), s 3.6 1			3 8.2		3.4				
Green Ext Time (p_c), s 0.0 3.4		0.1 0			0.2				Ī
Intersection Summary									Ī
	ν α		l	l	l	l	l	l	ı
	t:								

Los Pinos Apartments TIS W-Trans
PM Future Plus Project Page 1

HCM 6th Signalized Intersection Summary 2: S Moorland Ave & Todd Rd/US 101 South Ramps

04/01/2020

04/01/2020

Movement EBL EBT EBR WEI WEI WEI NBT NBR NBI NBT NBR SBL SBT SBR Tarter Colorations		1	Ť	-	1	ţ	1	•	<b>—</b>	•	٠	<b>→</b>	*
Name	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
hth) 0 414 998 450 179 0 776 0 146 0 0 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lane Configurations	K	4	W	k	2		K		R.		4	
bill) 0 414 988 450 179 0 776 0 146 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0	Traffic Volume (veh/h)	0	414	866	450	179	0	9//	0	146	0	0	0
10	Future Volume (veh/h)	0	414	866	450	179	0	9//	0	146	0	0	0
bf.) 1,00	Initial Q (Qb), veh	0	~	0	0	0	0	က	0	0	0	0	0
100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100	Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
proach hin         No         Photo that         No         No         No         Photo that         No         Photo that         No         Photo that         No         Photo that         No         No         No         Photo that         No         No         No         No         No         Photo that         No         No <th< td=""><td>Parking Bus, Adj</td><td>1.00</td><td>1.00</td><td>1.00</td><td>1.00</td><td>1.00</td><td>1.00</td><td>1.00</td><td>1.00</td><td>1.00</td><td>1.00</td><td>1.00</td><td>1.00</td></th<>	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
hun 1870 1870 1870 1870 1870 1870 1870 1870	Work Zone On Approach		8			8			8			8	
hy 0 414 760 450 179 0 776 0 86 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
h, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Adj Flow Rate, veh/h	0	414	260	450	179	0	9//	0	98	0	0	0
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
916 962 797 592 622 0 0 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	2	2
1781   1870   1850   1781   1870   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cap, veh/h	916	362	797	265	622	0	0	0	0	0	2	0
1781   1870   1550   1781   1870   0 0 0 0   1870     1781   1870   1550   1781   1870   0 0 0 0 0   0     1781   1870   1850   1781   1870   0 0 0 0 0     1781   1870   1870   0 0 0 0 0 0 0     1781   1870   1870   0 0 0 0 0 0 0     1781   1870   1870   0 0 0 0 0 0     1870   100   100   100   100   0 0 0     1870   100   100   100   0 0 0     1870   100   100   100   100   0 0 0     1870   100   100   100   100   0 0 0     1870   100   100   100   100   0 0     1870   100   100   100   100   0 0     1870   100   100   100   100   0 0     1870   100   100   100   100   0 0     1870   100   100   100   100   0 0     1870   100   100   100   0 0     1870   100   100   100   0 0     1870   100   100   100   0 0     1870   100   100   100   0 0     1870   100   100   100   0     1870   100   100   100   0     1870   100   100   100   0     1870   100   100   100   0     1870   100   100   100   0     1870   100   100   100   0     1870   100   100   100   0     1870   100   100   100   0     1870   100   100   100   0     1870   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   0     1870   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100	Arrive On Green	0.00	0.51	0.51	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1781 1890 1870 0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sat Flow, veh/h	1781	1870	1550	1781	1870	0		0		0	1870	0
1781   1870   1550   1781   1870   0   0   1870     0.0   5.6   18.9   9.1   2.9   0.0   0.0   0.0     0.0   5.6   18.9   9.1   2.9   0.0   0.0   0.0     1.00   1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   1.00   1.00   0.00     1.00   1.00   1.00   1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   0.00   0.00     1.00   1.00   1.00   0.00     1.00   1.00   1.00   1.00   0.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00   1.00     1.00   1.00   1.00	Grp Volume(v), veh/h	0	414	09/	450	179	0		0.0		0	0	0
0.0 5.6 18.9 9.1 2.9 0.0 0.0 0.0 0.0 0.0 1.00 1.00 1.00 1.	Grp Sat Flow(s),veh/h/ln	1781	1870	1550	1781	1870	0				0	1870	0
100 5.6 18.9 9.1 2.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Q Serve(g_s), s	0.0	9.9	18.9	9.1	5.9	0.0				0.0	0.0	0.0
1,00	Cycle Q Clear(g_c), s	0.0	9.6	18.9	9.1	5.9	0.0				0.0	0.0	0.0
hh 916 962 797 552 622 0 0 0 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0	Prop In Lane	1.00		1.00	1.00		0.00				0.00		0.00
0.00 0.43 0.95 0.76 0.29 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Lane Grp Cap(c), veh/h	916	362	797	265	622	0				0	2	0
916 962 797 1321 1387 0 0 0 879 100 100 100 100 100 100 100 100 100 100	V/C Ratio(X)	0.00	0.43	0.95	92.0	0.29	0.00				0.00	0.00	0.00
100 100 100 100 100 100 100 100 100 100	Avail Cap(c_a), veh/h	916	362	797	1321	1387	0				0	879	0
ayeth 0.00 1,00 1,00 0,00 0,00 0,00 0,00 0,00	HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Syeth         0.0         6.2         9.4         12.1         10.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.00	0.00	0.00
ah 0.0 0.3 21.3 2.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Uniform Delay (d), s/veh	0.0	6.2	9.4	12.1	10.0	0.0				0.0	0.0	0.0
viveh         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 </td <td>Incr Delay (d2), s/veh</td> <td>0.0</td> <td>0.3</td> <td>21.3</td> <td>2.0</td> <td>0.3</td> <td>0.0</td> <td></td> <td></td> <td></td> <td>0.0</td> <td>0.0</td> <td>0.0</td>	Incr Delay (d2), s/veh	0.0	0.3	21.3	2.0	0.3	0.0				0.0	0.0	0.0
Nyehlin 0.0 1.4 8.2 3.0 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 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
leiay, siveh  A A C B B A A A A A A A A A A A A A A A	%ile BackOfQ(50%),veh/In		1.4	8.2	3.0	6.0	0.0				0:0	0.0	0.0
h 0.0 6.5 30.6 14.1 10.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Unsig. Movement Delay, s/vel												
A A C B B A A A A A A A A A A A A A A A	LnGrp Delay(d),s/veh	0.0	6.5	30.6	14.1	10.2	0.0				0:0	0.0	0.0
n 1174 629  veh 22.1 13.0  ls 2 4 8  Re), S 0.0 24.0 16.4  RO), S 3.0 3.0  G(max), S 19.0 20.8 30.0  G, C+H), S 0.0 0.0 20.9 11.1  c), S 18.9  Ry  H8.9	LnGrp LOS	A	A	ပ	В	В	A				A	A	٧
reh 22.1 13.0  Its C 4 B 8  Its 2 4 B 8  Ro, S 0.0 24.0 16.4  Ro, S 3.0 3.2 3.0  (Gmax), S 19.0 20.8 30.0  (g_C+11), S 0.0 20.9 11.1  ol, S 0.0 0.0 2.3  IR.9  B	Approach Vol, veh/h		1174			629						0	
hs 2 4 B  RPO, 8 0.0 24.0  RPO, 8 3.0 24.0  RPO, 8 3.0 24.0  RPO, 8 3.0 20.8  Gmax), s 19.0 20.8  Gy 2-11), s 0.0 20.9  Gy 8 0.0 0.0  By RPO 18.9  By RPO 18.9	Approach Delay, s/veh		22.1			13.0						0.0	
hs 2 4 Re, s 0.0 24.0 Re, s 3.0 3.2 Gmax, s 19.0 20.8 G, c+11), s 0.0 20.9 E), s 19.0 20.9 E), s 19.0 Re, s 19.0 E), s 19.0 Re, s 19	Approach LOS		ပ			Ф							
-Ro), s 0.0 24.0 Ro), s 3.0 3.2 Ro), s 3.0 3.2 Ro), s 19.0 20.8 Grazdy, s 0.0 20.9 Co), s 0.0 0.0 Ro) ary 18.9 Ro	Timer - Assigned Phs		2		4				∞				T
Re), s 3.0 3.2 (Gmax), s 19.0 20.8 (g_c+ff), s 0.0 20.9 c), s 0.0 0.0	Phs Duration (G+Y+Rc), s		0.0		24.0				16.4				
(Gmax), s 19.0 20.8 (Gmax), s 0.0 20.9 (G.+1f), s 0.0 20.9 (c), s 0.0 0.0 (d. f.	Change Period (Y+Rc), s		3.0		3.2				3.0				
(g_c+11), s 0.0 20.9 c), s 0.0 0.0 any 18.9	Max Green Setting (Gmax), s		19.0		20.8				30.0				
c), s 0.0 0.0 ary 18.9 R	Max Q Clear Time (g_c+I1), s		0.0		20.9				11.1				
ary	Green Ext Time (p_c), s		0.0		0.0				2.3				Ī
	Intersection Summary												Ī
	HCM 6th Ctrl Delay			18.9									
	HCM 6th 1 OS			α									ľ

Los Pinos Apartments TIS W-Trans
PM Future Plus Project Page 2

HCM 6th Signalized Intersection Summary 3: US 101 Overpass & Todd Rd

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Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	‡	W.	K	4.0	r	N. R.	
Traffic Volume (veh/h)	191	245	376	389	328	901	
Future Volume (veh/h)	191	245	376	389	328	901	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)		1.00	1.00		1:00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1:00	1.00	
Work Zone On Approach	8			2	2		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	191	66	255	228	328	855	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1:00	
Percent Heavy Veh, %	7	5	2	7	2	2	
Cap, veh/h	909	226	485	1018	205	1545	
Arrive On Green	0.14	0.14	0.27	0.27	0.28	0.28	
Sat Flow, veh/h	3647	1585	1781	3741	1781	2790	
Grp Volume(v), veh/h	191	66	255	228	328	855	
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1870	1781	1395	
Q Serve(g_s), s	1.7	2.0	4.2	4.4	5.6	8.9	
Cycle Q Clear(g_c), s	1.7	2.0	4.2	4.4	9.6	8.9	
Prop In Lane		1.00	1.00		1:00	1.00	
Lane Grp Cap(c), veh/h	206	526	485	1018	205	1545	
V/C Ratio(X)	0.38	0.44	0.53	0.55	0.65	0.55	
Avail Cap(c_a), veh/h	2107	940	798	1677	541	1607	
HCM Platoon Ratio	9.	1:00	1.00	1.00	1.00	1.00	
Jpstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	13.4	13.6	10.7	10.8	10.9	5.0	
ncr Delay (d2), s/veh	0.5	 	6.0	0.5	5.6	0.4	
nitial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.5	9.0	 	<del>د</del> .	0:	2.4	
Unsig. Movement Delay, s/veh							
nGrp Delay(d),s/veh	13.9	14.9	11.6	11.2	13.5	5.3	
LuGrp LOS	В	ш	В	В	В	A	
Approach Vol, veh/h	290			813	1183		
Approach Delay, s/veh	14.2			1.3	9.7		
Approach LOS	ш			ш	∢		
imer - Assigned Phs		2				9	ω
Phs Duration (G+Y+Rc), s		8.4				12.9	13.2
Change Period (Y+Rc), s		3.5				3.5	3.5
Max Green Setting (Gmax), s		20.5				15.5	10.5
Max Q Clear Time (g_c+11), s		4.0				6.4	8.8
Green Ext Time (p_c), s		1.3				3.0	6:0
ntersection Summary							
HCM 6th Ctrl Delay			80				
HCM 6th LOS			5. A				
Notes							

Notes User approved volume balancing among the lanes for turning movement. Los Pinos Apartments TIS PM Future Plus Project

W-Trans Page 4

Los Pinos Apartments TIS PM Future Plus Project

> W-Trans Page 3

HCM 6th Signalized Intersection Summary 4: Santa Rosa Ave & Todd Rd

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04/01/2020

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1870 1870 1870 1870 1870 1870 1870 1870		0.00 0.00 0.00 0.00 0.00 0.00 0.00	1870 43 1.00 2 54 0.10 551 178 7.1 7.1 7.1 0.31 0.80	1870 482 1.00 2 327 0.18 1781 482 1781 17.0 17.0 17.0 17.0	No 1870 757 1.00 2 2 1452 0.41 3554 757 14.8 14.8	1870 20 1.00 2 2 645 0.41 1579 0.7 0.7 1.00 645	1870 21 22 32 0.02 1781 1781 1.10 32 32 1.00 32 32 1.10 1.00 32	No 1870 732 1.00 2 882 0.25 3554 777	132 1.00 2 392 0.25 1.579 6.3 6.3 1.00 392
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ay, s/veh									
y(d),s/veh 27.3 0.0 45	33	0.0	55.9	288.4	20.7	16.4	53.2	35.2	28.7
Α	D D	A		L	ပ	В	O	О	0
Approach Vol, veh/h 835		186			1259			882	
y, s/veh		51.5			123.1			34.7	ı
Approach LOS D		۵			ட			ပ	Ī
2	3 4		9	7	80				Ī
30.5	0 27.5		13.5	6.2	42.3				T
4.5			4.5	4.5	4.5				
35.5	0 32.5		10.5	10.5	38.5				
.I1), s 25.0 1			9.1	3.1	16.8				
Green Ext Time (p_c), s 0.9 0.0	0 2.2		0.1	0.0	2.5				
Intersection Summary									Ī
Delay 71	.2								
HCM 6th LOS	ш								
School									

HCM Signalized Intersection Capacity Analysis 4: Santa Rosa Ave & Todd Rd

FBL   FBT   FBR   WBL   WBT   WBR   NBL   NBT   NBR   SBL   SBT   MBL   MBT   MBR   NBL   NBT   NBT   NBT   NBT   NBT   MBT   MBT   MBT   NBT   NBT   NBT   MBT	Movement Lane Configurations Traffic Volume (vph)	표	LDT			-							
10	Lane Configurations Traffic Volume (vph)			EBK	WBL	WBI	WBR	NBL	NBT	NBR	SBL	SBT	SBR
404 66 556 48 96 64 482 757 38 21 732 404 65 556 48 95 64 482 757 38 21 732 404 65 556 48 95 64 482 757 38 21 732 40 65 656 48 95 64 482 757 38 21 732 40 60 90 1900 1900 1900 1900 1900 1900 19	Traffic Volume (vph)	M.	44	W.	K	2		N. N.	41		K	**	*
1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,00		404	92	256	8	95	25	482	757	38	21	732	246
1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1900   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000	Future Volume (vph)	404	92	226	48	92	25	482	757	38	21	732	246
45   45   45   45   45   45   45   45	Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
0.95   0.95   1.00   1.00   0.97   0.95   1.00   0.95   1.00   0.95   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00	Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.0	4.5		4.5	4.5	4.5
100   100   0.98   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.	Lane Util. Factor	0.95	0.95	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
100	Frpb, ped/bikes	1:00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	0.99
100   100   0.85   1.00   0.94   1.00   0.99   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.	Flpb, ped/bikes	1:00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
10.85   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00   0.95   1.00	F	1:00	1.00	0.85	1.00	0.94		1.00	0.99		1.00	1.00	0.85
1681   1708   1558   1770   1750   3433   3514   1770   3539   1681   1708   1558   1770   1750   3433   3514   1770   3539   1681   1708   1558   1770   1750   3433   3514   1770   3539   1708   1558   1770   1750   3433   3514   1770   1500   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100	Fit Protected	0.95	0.97	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
1681   1708   1508   1700   1009   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000   1000	Satd. Flow (prot)	1681	1708	1558	1770	1750		3433	3514		1770	3539	1560
Tell   1708   1558   1770   1750   3433   3514   1770   3539     Tell   1708   1558   1770   1750   130   100   100   100     Tell   1.00   1.00   1.00   1.00   1.00   1.00   1.00     Tell   1.00   1.00   1.00   1.00   1.00   1.00     Tell   1.00   1.00   1.00   1.00   1.00   1.00     Tell	Flt Permitted	0.95	0.97	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
HF 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Satd. Flow (perm)	1681	1708	1558	1770	1750		3433	3514		1770	3539	1560
404         65         566         48         95         64         482         757         38         21         732           30h)         234         236         26         21         0         0         21         732           30h)         234         236         26         29         6         3         0         0         0           30h)         234         236         25         20         21         732         0         21         732           2         2         2         2         2         6         6         6         8         7         4           5         200         200         10.1         10.1         16.1         39.6         2.2         26.2           5         200         200         10.1         10.1         16.1         39.6         2.2         26.2           6         6         6         6         6         6         6         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5	Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Split NA Perm Split NA Prot	Adj. Flow (vph)	404	92	226	48	92	28	482	757	38	21	732	246
bh) 234 235 267 48 138 0 462 792 0 21 732 3 3 3 3 3 4 235 267 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	RTOR Reduction (vph)	0	0	289	0	51	0	0	က	0	0	0	174
1	Lane Group Flow (vph)	234	235	267	48	138	0	482	792	0	21	732	72
Split         NA         Perm         Split         NA         Prot         NA         Prot         NA           2         2         2         6         6         3         8         7         4           5         2         2         6         6         6         3         8         7         4           5         2         2         6         6         6         3         8         7         4           9         2         2         6         6         6         3         8         7         4         4           0         2         2         0         10.1         10.1         16.1         39.6         2.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2         26.2 <td< td=""><td>Confl. Peds. (#/hr)</td><td></td><td></td><td>_</td><td>_</td><td></td><td></td><td>က</td><td></td><td></td><td></td><td></td><td>c</td></td<>	Confl. Peds. (#/hr)			_	_			က					c
Split NA Perm Split NA Pro NA Prot NA	Confl. Bikes (#/hr)			က									
2 2 6 6 6 3 8 8 7 20 200 200 200 10.1 10.1 16.1 396 2.2 20 200 200 200 10.1 10.1 16.1 396 2.2 20 200 200 200 10.1 10.1 16.1 396 2.2 20 202 0.22 0.11 0.11 0.18 0.44 0.02 21.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	Turn Type	Split	AN	Perm	Split	NA		Prot	Y Y		Prot	¥	Perm
s) 200 200 20 10.1 10.1 16.1 39.6 2.2  0.20 200 200 10.1 10.1 16.1 39.6 2.2  0.22 0.22 0.22 0.11 0.11 0.18 0.44 0.02  4.5 4.5 4.5 4.5 4.5 4.5 4.0 4.0 4.5 4.5 4.5 4.0 4.5 4.0 4.5 4.5 4.0 4.0 4.0 4.5 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	Protected Phases	2	2		9	9		က	∞		7	4	
s) 200 200 200 10.1 10.1 16.1 39.6 2.2 2.0 200 200 20.0 10.1 10.1 10.1 16.1 39.6 2.2 2.2 2.2 0.22 0.11 0.11 0.18 0.44 0.02 2.2 0.22 0.22 0.11 0.11 0.18 0.45 0.22 0.22 0.11 0.11 0.18 0.45 0.02 0.22 0.22 0.11 0.11 0.18 0.45 0.12 0.12 0.13 0.14 0.14 0.14 0.03 c.08 196 6.14 1547 4.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1	Permitted Phases			2									4
200 200 200 10.1 10.1 16.1 396 2.2   2.2 0.22 0.22 0.22 0.1 0.1 0.1 0.1 0.02   4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5	Actuated Green, G (s)	20.0	20.0	20.0	10.1	10.1		16.1	39.6		2.2	26.2	26.2
0.22 0.22 0.21 0.11 0.11 0.18 0.44 0.02 0.2 0.2 0.22 0.11 0.11 0.18 0.44 0.02 0.2 0.13 0.15 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	Effective Green, g (s)	20.0	20.0	20.0	10.1	10.1		16.1	39.6		2.2	26.2	26.2
4.5	Actuated g/C Ratio	0.22	0.22	0.22	0.11	0.11		0.18	0.44		0.02	0.29	0.29
1.5	Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.0	4.5		4.5	4.5	4.5
373 379 346 198 196 614 1547 43 7 0.14 0.14 0.14 0.03 c.0.08 c.0.14 0.23 0.01 c.0 0.63 0.62 0.77 0.24 0.70 0.79 0.51 0.49 316 31.5 32.8 36.4 38.5 35.2 18.2 43.3 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5
0.14 0.14 0.14 0.03 c0.08 c0.14 0.23 0.01 c 0.63 0.62 0.77 0.24 0.70 0.79 0.51 0.49 3.16 31.5 32.8 36.4 38.5 35.2 18.2 43.3 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Lane Grp Cap (vph)	373	379	346	198	196		614	1547		43	1031	454
0.63 0.62 0.7 0.24 0.70 0.79 0.51 0.49 316 31.5 32.8 36.4 38.5 35.2 18.2 43.3 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	v/s Ratio Prot	0.14	0.14		0.03	c0.08		c0.14	0.23		0.01	c0.21	
0 63 0 62 0.77 0.24 0.70 0.79 0.51 0.49 31.6 31.5 32.8 36.4 38.5 35.2 18.2 43.3 2.4 2.3 9.3 0.2 8.9 6.0 0.1 3.2 2.4 2.3 9.3 0.2 8.9 6.0 0.1 3.2 2.4 2.3 9.3 0.2 8.9 6.0 0.1 3.2 2.4 2.3 9.3 0.2 8.9 6.0 0.1 3.2 2.4 2.3 9.3 0.2 8.9 6.0 0.1 3.2 2.4 2.3 9.3 0.2 8.9 6.0 0.1 3.2 2.4 2.3 9.3 0.2 8.9 6.0 0.1 3.2 2.4 2.3 9.3 0.2 8.9 6.0 0.1 3.2 2.4 2.3 9.3 0.2 8.9 6.0 0.1 3.2 2.5 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.5 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.5 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.5 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.5 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.5 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.5 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.5 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.5 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	v/s Ratio Perm			c0.17									0.05
316 315 328 364 385 352 182 433 432 1100 1.00 1.00 1.00 1.00 1.00 1.00 1.0	v/c Ratio	0.63	0.62	0.77	0.24	0.70		0.79	0.51		0.49	0.71	0.16
100 100 100 100 100 100 100 100 100 100	Uniform Delay, d1	31.6	31.5	32.8	36.4	38.5		35.2	18.2		43.3	28.5	23.7
2 24 23 93 02 89 60 0.1 3.2 34.0 33.8 42.1 36.6 47.4 41.3 18.3 46.4 C D D D D D D D D C 38.3 44.9 D C C D D D D D C C D D D D D C C D D D D	Progression Factor	1:00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
34.0 33.8 42.1 36.6 47.4 41.3 18.3 46.4  C C D D D D B B D  38.3 44.9 C7.0  D D C C  y  y  y  y  y  y  y  y  y  y  y  y  y	Incremental Delay, d2	2.4	2.3	9.3	0.2	8.9		0.9	0.1		3.2	1.9	0.1
C C D D D D D B D D B D D B D D B D D B D D B D D D D D B D D D D D D D D D D D D D D D D D D D D	Delay (s)	34.0	33.8	42.1	36.6	47.4		41.3	18.3		46.4	30.3	23.7
38.3 44.9 27.0  V  Y  A belay 31.9 HCM 2000 Level of Service C  C capacity ratio 0.75 Sum of lost time (s) 18.0  Int (s) 89.9 Sum of lost time (s) 18.0  1 18.0  1 18.0  1 18.0  1 18.0	Level of Service	O	ပ	۵	۵	□		٥	В		۵	ပ	O
7	Approach Delay (s)		38.3			44.9			27.0			29.0	
Alay 31.9 HCM 2000 Level of Service Capacity ratio 0.75 N (s) 89.9 Sum of lost time (s) Utilization 75.5% ICU Level of Service	Approach LOS		Ω			Ω			O			O	
slay         31.9         HCM 2000 Level of Service           Capacity ratio         0.75         Sum of lost time (s)           h (s)         89.9         Sum of lost time (s)           Utilization         75.5%         ICU Level of Service           15         15	Intersection Summary												Ī
(c) (2) (2) (2) (2) (2) (3) (4) (4) (5) (5) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	HCM 2000 Control Delay	l	l	340	Ĭ	M 2000	o fo lova	acivio		C			
h (s) 89.9 Sum of lost time (s) Ulitzation 75.5% ICU Level of Service	HCM 2000 Volume to Capac	sity ratio		0.75	Í	202	5	2					
Utilization 75.5% ICU Level of Service	Actuated Cycle Length (s)			6.68	ร	im of lost	time (s)			18.0			
Analysis Pariod (min)	Intersection Capacity Utilizat	ion		75.5%	೦	U Level o	of Service			۵			
	Analysis Period (min)			15									

Los Pinos Apariments TIS PM Future Pius Project Mitgated

W-Trans Page 1

HCM Signalized Intersection Capacity Analysis 5: S Moorland Ave & US 101 Overpass

04/01/2020

04/01/2020

Movement   WBI   WBR   NBT   NBR   SBI   SBT	WEL WBR NBT r  33 767 204 33 767 204 33 767 204 33 767 204 45 1.00 1900 1900 0.87 0.95 1.00 0.87 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			
Y	150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150   150		SBT	
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1564   1777   1681   1692   1693   1693   1700   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00	1564 1777  100 1.00 1.00  100 204  100 204  100 204  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 201  100 100  100 201  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100 100  100	96.0		
1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00	100 100 1.00 1.00 1.00 1.00 1.00 1.00 1	1681	Ì	
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8 2 6 6 6 1 134 16.8 31.5 31.5 31.5 31.5 31.5 31.5 31.5 31.5	8 13.4 13.4 13.4 13.4 13.4 0.18 4.5 3.0 278 20.11 0.61 28.5 1.00 3.9 32.4 C Capacity ratio Circle Chils Collication Collicatio	Spli		
13.4         16.8         31.5         31.5           13.4         16.8         31.5         31.5           0.18         0.22         0.42         0.42           0.18         0.22         0.42         0.42           3.0         3.0         3.0         3.0           278         3.6         4.5         4.5           278         3.96         7.04         708           20.11         c0.16         0.40         c0.41           28.5         27.1         21.3         21.4           100         1.00         1.00         1.00           3.9         6.9         25.5         26.0           C         C         D         D           A.1         47.1         47.1           c         C         D         D           c         C         C         D           c         C         C         D           c         C         C         D           c         C         C         D           c         C         C         D           c         C         C         D           d	13.4 13.4 13.4 0.18 4.5 3.0 278 c0.11 0.61 28.5 1.00 3.9 3.9 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.	9		
13.4   16.8   31.5   31.5     13.4   16.8   31.5   31.5     0.18   0.15   31.5     13.4   16.8   31.5   31.5     0.18   0.42   4.5   4.5     4.5   4.5   4.5   4.5     4.5   4.5   4.5     3.0   3.0   3.0     3.0   3.0   3.0     3.0   3.0   3.0     3.0   3.0   3.0     3.0   4.7   25.5   26.0     3.2   3.4   3.4   46.8   47.3     C	13.4 13.4 0.18 4.5 3.0 278 co.11 o 0.61 28.5 1.00 3.9 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.2.4 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C 3.0 C C C C C C C C C C C C C			
13.4 16.8 31.5 31.5 0.18 0.22 0.42 0.42 4.5 4.5 4.5 3.0 3.0 3.0 2.78 3.96 7.04 708 2.0.11 0.0.16 0.40 0.97 2.85 27.1 2.1.3 2.1.4 1.00 1.00 1.00 1.00 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 4.7 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.3 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4 2.85 27.1 2.1.4	13.4 0.18 4.5 4.5 3.0 2.78 2.78 2.0.11 0.61 2.8.5 1.00 2.3.4 2.3.4 C. 3.4 C. 3.4 C. 3.4 C. 11(n) (n) (n) (n)	31.5		
0.18 0.22 0.42 0.42 0.42 0.42 0.43 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.18  4.5  3.0  2.78  0.011  0.01  2.8.5  1.00  d2  3.9  2.4  C  Delay  to Capacity ratio to Capacity ratio To Well (20) T	31.5		
4.5 4.5 4.5 4.5 278 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	s) 4.5 3.0 778 0.011 c 0.01 28.5 1.00 42 3.9 22.4 C C 3.9 32.4 C C 22.4 C C 22.4 C C Delay C C Delay C C Delay C C Delay C C Delay C C Delay C C Delay C C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay C Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D Delay D D Delay D Delay D Delay D D Delay D Delay D Delay D Delay D Delay D Delay D D Delay D Delay D D D Delay D D D Delay D D D D D D D D D D D D D D D D D D D	0.42	٥	
3.0 3.0 3.0 3.0 3.0 2.78 3.96 7.04 7.08 7.04 7.08 7.04 7.08 7.04 7.08 7.04 7.08 7.04 7.08 7.04 7.08 7.04 7.08 7.04 7.09 7.04 7.09 7.09 7.09 7.09 7.09 7.09 7.09 7.09	s) 3.0 ) 278 0.011 0 28.5 1.00 42 3.9 32.4 C 32.4 C 32.4 C 32.4 C 32.4 C 32.4 C 34.4 C To Capacity ratio to Capacity ratio to Capacity ratio	4.5		
278 396 704 708  0.011 0.0.16 0.40 0.41  0.051 0.74 0.97 0.97  28.5 27.1 21.3 21.4  1.00 1.00 1.00  1.00 1.00 1.00  22.4 34.1 46.8 47.3  C C D D D  A7.1 47.1  A7.1 47.1  Capacity ratio 0.83  A4.7 HCM 2000 Level of Service  Capacity ratio 0.83  Unitization 115.4% ICUI Level of Service  115.4% ICUI Level of Service  115.4% ICUI Level of Service	278 00.11 0.61 28.5 1.00 d2 3.9 3.9 C C 32.4 C 32.4 C Delay to Capacity ratio to Capacity ratio to Capacity ratio The University of the Capacity ratio The Capacity r	3.0		
0.611 c0.16 0.40 c0.41  0.61 0.74 0.97 0.97  28.5 27.1 21.3 21.4  1.00 1.00 1.00 1.00  22.4 34.1 46.8 47.3  C C D D D  22.4 34.1 47.3  C C D D D  22.4 34.1 47.3  C C D D D  22.4 34.1 47.3  C C D D D  23.4 34.1 47.3  C C D D D  A7.1 A7.1  A7.1 A7.2  C C D D  A7.1 A7.1  A7.1 A7.1  A7.1 A7.2  C C D D  A7.1 A7.1  A7.1 A7.1  A7.1 A7.2  C C D  D D  A7.1 A7.1  A7.1 A7.1  A7.1 A7.2  C C D  D D  A7.1 A7.1  A7.1 A7.1  A7.1 A7.1  A7.1 A7.1  A7.1 A7.1  A7.1 A7.2  C C D  D D  A7.1 A7.1  A7.1	0011 0 061 28.5 1.00 3.9 3.9 32.4 C 22.4 C 22.4 C 22.4 C Delay to Capacity ratio	704		
0.61 0.74 0.97 0.97 2.85 27.1 21.3 21.4 1.00 1.00 1.00 1.00 2.39 6.9 2.5 26.0 2.4 34.1 46.8 47.3 C C D D D 32.4 34.1 47.1 C C C D D A1.0 C C D D A1.0 C C D D A1.0 C C C C C C C C C C C C C C C C C C C	0.61 28.5 1.00 d2 3.9 32.4 C 32.4 C 32.4 C Delay to Capacity ratio to Capacity ratio To Hullication To Hullication	0.40		
28.5 27.1 21.3 21.4 1.00 1.00 1.00 1.00 28.5 27.1 21.4 27.3 21.4 27.3 21.4 27.3 21.4 27.3 21.4 27.4 3.4 1 27.5 26.0 25.5 26.0 25.4 34.1 46.8 47.3 22.4 34.1 46.8 47.3 22.4 34.1 47.1 2 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 34.1 47.1 32.4 40.7 HCM 2000 Level of Service Capacity ratio (s) Unitization 115.4% (CULlevel of Service	0.61 28.5 1.00 42 3.9 3.2.4 C 32.4 C C 24 Delay tot Capacity ratio tot (20,000)			
28.5 27.1 21.3 21.4 1.00 1.00 1.00 1.00 2.4 3.4 34.1 46.8 47.3 2.4 34.1 46.8 47.3 C C D D D 32.4 34.1 47.1 C D D D A7.1 47.1 C D C D D D D D D D D D D D D D D D D D	28.5 1.00 d2 3.9 3.9 2.4 C 2.4 C 32.4 C Delay to Capacity ratio to Capacity ratio The University of Un	76.0		
100 100 100 100 100 100 100 100 100 100	1,00 d2 3.9 3.4 32.4 C C 32.4 C Delay C Delay gdth (s)	21.3		
2.4 34.1 46.8 47.3  2.4 34.1 46.8 47.3  C C D D  32.4 34.1 47.1  C C C C C C C C C C C C C C C C C C C	d2 3.9 d2 22.4	1.00		
32.4 34.1 46.8 47.3 C C D D C C C C C D A7.1 A7.1 A7.1 C C C C C C C C C C C C C C C C C C C	32.4 C 32.4 C C C Delay tot Capacity ratio tot (11)	25.5		
C D D D  24 34.1 47.1  C C D D D  47.1 47.1  slay  Capacity ratio 0.83  Ultization 115.4% ICU Level of Service 15.2	C 22.4 32.4 C C Delay to Capacity ratio to Capacity ratio Tiv Utilization	46.8		
32.4 34.1 47.1 C C D D A alay 40.7 HCM 2000 Level of Service Capacity ratio 0.83 Sum of lost time (s) Ut (s) 75.2 Sum of lost time (s) 115.4% ICU Level of Service 15	32.4 C C C Delay Delay (the Capacity ratio the V Utilization 11!	Δ		
C C D  Agy  40.7 HCM 2000 Level of Service Capacity ratio 0.83  h (s) 75.2 Sum of lost time (s)  Utilization 115.4% ICU Level of Service  15.4	e e e e e e e e e e e e e e e e e e e		47.1	
Any 40.7 HCM 2000 Level of Service Capacity ratio 0.83 (s) 75.2 Sum of lost time (s) 115.4% ICU Level of Service 15.4% ICU Level	=		۵	
Alay         HCM 2000 Level of Service           Capacity ratio         0.83           N (s)         75.2           Utilization         115.4%           I (S)         115.4%	<u></u>			
Capacity ratio         0.83           h (s)         75.2         Sum of lost time (s)           Utilization         115.4%         ICU Level of Service           15         15	<u>+</u>	HCM 200	10 Level of Service	Q
h (s) 75.2 Sum of lost time (s) Utilization 115.4% ICU Level of Service 15	zation 11			
Utilization 115.4% ICU Level of Service 15	7	Sum of lo	st time (s)	13.5
15		ICU Leve	of Service	Ŧ

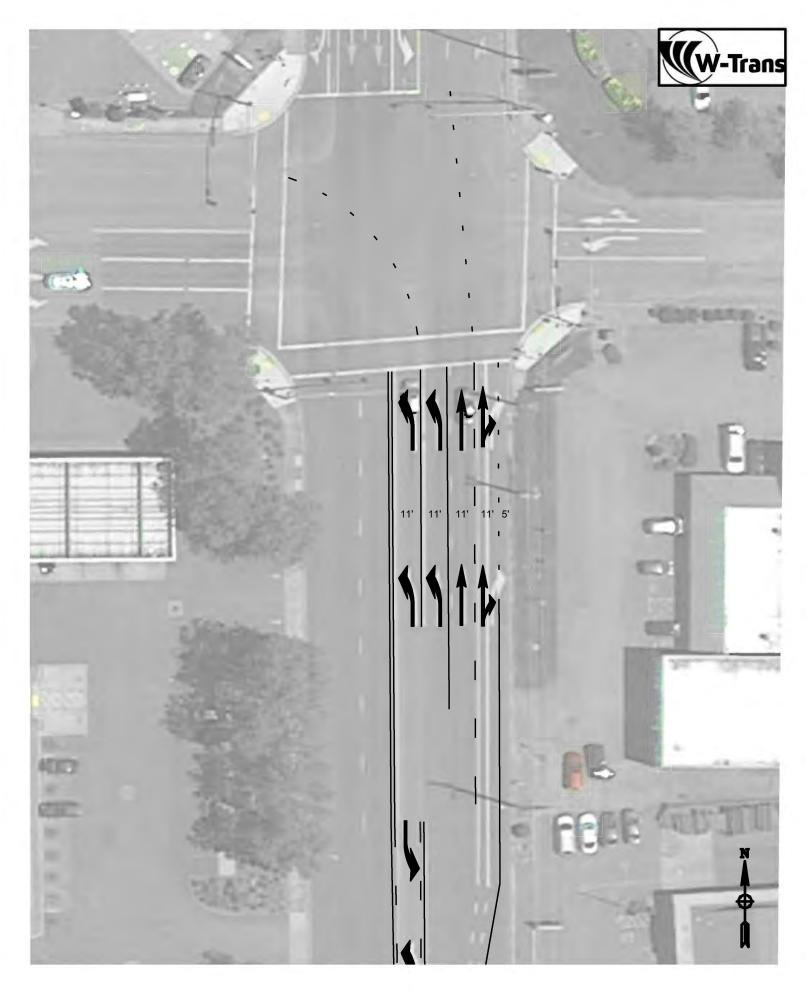
Los Pinos Apartments TIS PM Future Plus Project

### **Appendix D**

Concept Striping Plan from the Final Traffic Impact Study for the Ghilotti Construction Yard







**GHILOTTI CONSTRUCTION YARD TIS** 

Concept Striping Plan



### **Appendix E**

**SIMTRAFFIC Projections** 





Intersection: 1: Santa Rosa Ave & East Robles Ave

ovement Soctions Convod	89 2	MB -	WB	B -	B ⊢	B P	SB -	SB	SB P	
Maximum Queue (ft)	34	2 -	22	3 2	- 66	63	20 -		89	
Queue (ft)	9	23	78	∞	93	43	15		12	
ine (ft)	42	20	22	28	68	98	88		45	
ance (ft)	319		380		2578	2578		1331	1331	
n Blk Time (%)										
Penalty (veh)										
Bay Dist (ft)		100		100			100			
Blk Time (%)					0					
Penalty (veh)					0					

Intersection: 2: S Moorland Ave & Todd Rd/US 101 South Ramps

Movement	EB	EB	WB	WB	NB	NB	NB	
Directions Served	⊢	œ	_	TR	_	ď	R	
Maximum Queue (ft)	133	104	292	139	250	72	30	
Average Queue (ft)	8	61	103	21	142	೫	e	
95th Queue (ft)	119	86	190	11	217	26	17	
Link Distance (ft)	02	02		318	255	255		
Upstream Blk Time (%)	54	9			0			
Queuing Penalty (veh)	0	0			0			
Storage Bay Dist (ft)			260				150	
Storage Blk Time (%)	25		-					
Queuing Penalty (veh)	0		2					

Intersection: 3: US 101 Overpass & Todd Rd

	į		į							
Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	
Directions Served	⊥	⊢	ď	٦	LT	⊢	٦	ď	2	
Maximum Queue (ft)	23	25	22	182	96	75	135	66	77	
Average Queue (ft)	56	21	43	82	43	42	79	27	44	
95th Queue (ft)	23	25	29	<u>1</u> 2	8/	69	120	29	89	
Link Distance (ft)	999			211	211	211		264		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		180	180				100		100	
Storage Blk Time (%)							2	0		
Queuing Penalty (veh)							7	0		

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SimTraffic Report Page 1

## Queuing and Blocking Report

04/07/2020

Intersection: 4: Santa Rosa Ave & Todd Rd

04/07/2020

Microtrons Served L IT R 1 T T T S S S S S S S S S S S S S S S S	Monomont	8	8	0	Q/V	Q/V	2	2	2	9	00	9	0
L	Movement	Q	Q	Q	AVD	VVD	QN	QN	QN	QN	OD	o O	OD
162   146   67   87   60   282   65   86   57   40     53   57   42   19   19   128   27   38   10   11     95   89   68   57   46   233   47   74   34   32     211   211   211   701   2840   2840     65   280   200   205     7   1   0   0     1   0   0	Directions Served	٦	П	ď	٦	TR	٦	⊥	Τ	ď	_	⊢	_
53 57 42 19 128 27 38 10 11 95 89 68 57 46 233 47 74 34 32 211 211 211 701 2840 2840 65 280 200 205 2 1 0 0	Maximum Queue (ft)	162	146	29	87	09	282	65	98	22	40	71	88
95 89 68 57 46 233 47 74 34 32 211 211 211 211 701 2840 2840 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Average Queue (ft)	23	22	42	19	19	128	27	38	10	7	4	45
211 211 211 701 2840 2840 3 65 280 206 205 2 1 0 1 0 0	95th Queue (ft)	92	88	89	22	46	233	47	74	34	32	75	83
65 280 200 2 1 0 1 0 0	Link Distance (ft)	211	211	211		701		2840	2840			2578	2578
65 280 200 2 1 0 1 0 0	Upstream Blk Time (%)												
65 280 200 2 1 0 1 0 0	Queuing Penalty (veh)												
2 1	Storage Bay Dist (ft)				65		280			200	205		
Queuing Penalty (veh) 1 0 0	Storage Blk Time (%)				7	-	0						
	Queuing Penalty (veh)				<b>-</b>	0	0						

Intersection: 4: Santa Rosa Ave & Todd Rd

SB	œ	25	41	09				205		
Jovernent	Jirections Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	(doy) Alcado painon

Intersection: 5: S Moorland Ave & US 101 Overpass

SB	LT	303	121	265	255	_	2			
SB	٦	276	172	258	255	0	<del>-</del>			
NB	TR	92	20	83	292					
B26	⊢	41	2	16	420					
WB	LR	218	72	147	147	τ-	7			
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Queuing Penalty (veh)

### Network Summary Network wide Queuing Penalty: 25

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SimTraffic Report Page 2

Movement	EB	WB	WB	NB	BB	RB	SB	SB	SB	
Directions Served	LTR	_	TR	_	⊢	TR	_	⊢	TR	
Maximum Queue (ft)	23	ᆶ	\$	48	73	74	45	49	29	
Average Queue (ft)	15	9	33	4	37	88	11	21	17	
95th Queue (ft)	43	29	28	33	75	8	怒	26	48	
Link Distance (ft)	319		380		2578	2578		1331	1331	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		100		100			100			
Storage Blk Time (%)		0								
Queuing Penalty (veh)		0								i

Intersection: 2: S Moorland Ave & Todd Rd/US 101 South Ramps

Movement	EB	EB	WB	WB	NB	NB	NB
Directions Served	⊢	œ	_	T	_	ď	Z.
Maximum Queue (ft)	82	4	297	66	268	29	20
Average Queue (ft)	83	74	119	20	188	36	10
95th Queue (ft)	9	86	199	6	282	72	38
Link Distance (ft)	20	20		318	255	255	
Upstream Blk Time (%)	78	∞			က		
Queuing Penalty (veh)	0	0			œ		
Storage Bay Dist (ft)			260				150
Storage Blk Time (%)	21		-				
Queuing Penalty (veh)	0		<del>-</del>				

Intersection: 3: US 101 Overpass & Todd Rd

Directions Served T T R L LT T L R R R R Adamman Queue (ft) 53 68 78 138 147 115 53 113 54 68 27 32 46 80 51 46 66 27 52 52 54 55 65 67 118 98 84 96 84 99 95 54 108 Distance (ft) 566 211 211 211 211 264 9 95 108 108 108 108 108 108 108 108 108 108	Movement	8	B	B	WB	WB	WB	NB B	NB NB	BB	İ
(%) 180 180 180 177 53 584 180 180 180 180 180 180 180 180 180 180	Directions Served	⊢	⊢	œ	_	그	F	_	œ	œ	
27 32 46 80 51 46 66 27 55 65 67 118 98 84 96 49 (%) eh) 10 180 180 100 100	Maximum Queue (ft)	23	89	8/	138	147	115	117	23	113	
55 65 67 118 98 84 96 49 566 211 211 211 264 ) 180 180 100	Average Queue (ft)	27	32	46	8	21	46	99	27	52	
566 211 211 264 (%) (eh) (h) 180 180 100 7 %) eth) 3	95th Queue (ft)	22	92	29	118	86	8	96	49	92	
(%) (%) 180 180 100 100 11 13 14 15 16 16 17 18 19 19 19 19 19 19 19 19 19 10 10 11 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19	Link Distance (ft)	299			211	211	211		264		
180 180 100	Upstream Blk Time (%)										
180 180 100 100 1	Queuing Penalty (veh)										
− w	Storage Bay Dist (ft)		180	180				100		100	
Queuing Penalty (veh) 3 2	Storage Blk Time (%)							-		0	
	Queuing Penalty (veh)							က		2	

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SimTraffic Report Page 1

# Queuing and Blocking Report

Intersection: 4: Santa Rosa Ave & Todd Rd

04/07/2020

Movement	8	EB	EB	WB	WB	æ	æ	8	NB	SB	SB	SB
Directions Served	_	느	œ	_	표	_	⊢	⊢	œ	_	⊢	-
Maximum Queue (ft)	177	189	108	43	63	228	135	108	21	39	98	20
Average Queue (ft)	28	92	53	13	23	116	48	23	2	10	4	38
95th Queue (ft)	124	135	93	35	46	194	92	104	19	26	28	9/
Link Distance (ft)	211	211	211		701		2840	2840			2578	2578
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				65		280			200	205		
Storage Blk Time (%)					0							
Queuing Penalty (veh)					C							

Intersection: 4: Santa Rosa Ave & Todd Rd

SB	œ	06	42	02			205		
		Maximum Queue (ft)		95th Queue (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	1

Intersection: 5: S Moorland Ave & US 101 Overpass

	T 1						3 4			
	LR TR					_	6			
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 30

AM Existing Plus Project Los Pinos Apartments TIS W-Trans

SimTraffic Report Page 2

Intersection: 1: Santa Rosa Ave & East Robles Ave

Movement	EB	WB	WB	NB NB	NB	B	SB	SB	SB	
Directions Served	LTR	_	TR	_	⊢	TR	_	⊢	TK	
Maximum Queue (ft)	23	72	8/	4	86	128	72	99	69	
Average Queue (ft)	9	37	32	13	88	32	19	56	23	
95th Queue (ft)	51	63	92	36	06	104	21	09	24	
Link Distance (ft)	319		380		2578	2578		1331	1331	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		100		100			100			
Storage Blk Time (%)					0					
Queuing Penalty (veh)					0					

Intersection: 2: S Moorland Ave & Todd Rd/US 101 South Ramps

EB WB WB B25 NB NB	R L TR T L R	112 85 318 386 450 289 268 30	85 314 368 429 270 72	86 324 374 441 282 208	70 318 411 255	68 41 72 87 34	0 0 0 0	260 150	56 91 0 2	
									26	0
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Queuing Penalty (veh)

Intersection: 3: US 101 Overpass & Todd Rd

Directions Served T T R Maximum Queue (ft) 581 280 230 Average Queue (ft) 366 239 221 95th Queue (ft) 658 376 252					2	2		. 10	
581 280 366 239 658 376	œ	_	그	F	_	œ	œ	F	
366 239 658 376	230		266	269	174	338	138	37	Ī
658 376	221		227	113	126	6/	89	က	
	252		247	271	186	253	117	17	
Link Distance (ft) 566			211	211		264		420	
Upstream Blk Time (%) 6			80	22		2			
Queuing Penalty (veh) 0			229	62		20			
0	180				100		100		
Storage Blk Time (%) 5	72				22		<del>-</del>		
Queuing Penalty (veh) 3	4				106		9		

AM Future Los Pinos Apartments TIS W-Trans

SimTraffic Report Page 1

## Queuing and Blocking Report

04/07/2020

Intersection: 4: Santa Rosa Ave & Todd Rd

04/07/2020

Movement	EB	EB	EB	WB	WB	BB	B	B	SB	SB	SB	SB
Directions Served	_	П	œ	_	TR	_	⊢	⊢	_	⊢	⊢	~
Maximum Queue (ft)	129	112	172	06	716	340	2874	2855	38	1382	1382	265
Average Queue (ft)	29	75	29	22	463	336	2691	2669	15	979	748	258
95th Queue (ft)	107	109	112	80	797	84	3317	3341	35	1261	1298	303
Link Distance (ft)	211	211	211		701		2840	2840		2578	2578	
Upstream Blk Time (%)					16		8	78				
Queuing Penalty (veh)					0		0	0				
Storage Bay Dist (ft)				65		280			205			205
Storage Blk Time (%)				က	90	100		က		<del>-</del>	9	93
Queuing Penalty (veh)				2	24	252		_		0	13	200

Intersection: 5: S Moorland Ave & US 101 Overpass

Movement	WB	B26	B27	B27	NB	SB	SB	
Directions Served	LR	⊢	⊢		TL	_	LT	
Maximum Queue (ft)	237	527	84	326	807	303	303	
Average Queue (ft)	221	497	295	311	9//	276	277	
95th Queue (ft)	232	515	326	325	813	291	298	
Link Distance (ft)	147	420	264	264	768	255	255	
Upstream Blk Time (%)	85	92	65	20	91	42	43	
Queuing Penalty (veh)	802	868	318	245	0	186	190	
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary
Network wide Queuing Penalty: 4293

Intersection: 1: Santa Rosa Ave & East Robles Ave

		ì				I				
SB	TR	69	23	54	1331					
SB	⊥	99	56	09	1331					
SB	_	72	19	21				100		
NB	TR	128	32	4	2578					
NB	⊢	88	88	6	2578				0	0
NB	_	4	13	36				100		
WB	TR	78	35	92	380					
WB	_	72	37	83				100		
EB	LTR	23	9	21	319					
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Queuing Penalty (veh)

Intersection: 2: S Moorland Ave & Todd Rd/US 101 South Ramps

NB	Я	30	9	25				150		
NB	œ	268	72	208	255	<del>-</del>	œ		2	<b>—</b>
NB	_	289	270	282	255	용	186			
B25	⊢	450	429	441	411	87	0			
WB	TR	386	368	374	318	72	0		0	0
WB	_	318	314	324		4	0	260	91	255
EB	œ	82	82	98	02	89	0			
EB	⊢	112	9/	119	20	43	0		26	0
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Queuing Penalty (veh)

Intersection: 3: US 101 Overpass & Todd Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	B27	Ì
Directions Served	⊢	⊢	~	_	LT	⊢	_	ď	~	⊢	
Maximum Queue (ft)	281	280	230	241	266	569	174	338	138	37	Ī
Average Queue (ft)	366	239	221	226	227	113	126	79	89	က	
95th Queue (ft)	658	376	252	237	247	271	186	253	117	17	
Link Distance (ft)	266			211	211	211		264		420	
Upstream Blk Time (%)	9			98	8	22		2			
Queuing Penalty (veh)	0			244	229	62		50			
		180	180				100		100		
Storage Blk Time (%)		2	72				22		<del>-</del>		
Queuing Penalty (veh)		က	4				106		9		

AM Future Los Pinos Apartments TIS W-Trans

SimTraffic Report Page 1

## Queuing and Blocking Report

04/07/2020

Intersection: 4: Santa Rosa Ave & Todd Rd

04/07/2020

Movement	EB	EB	EB	WB	WB	BB	B	B	SB	SB	SB	SB
Directions Served	_	П	œ	_	TR	_	⊢	⊢	_	⊢	⊢	~
Maximum Queue (ft)	129	112	172	06	716	340	2874	2855	38	1382	1382	265
Average Queue (ft)	29	75	29	22	463	336	2691	2669	15	979	748	258
95th Queue (ft)	107	109	112	80	797	84	3317	3341	35	1261	1298	303
Link Distance (ft)	211	211	211		701		2840	2840		2578	2578	
Upstream Blk Time (%)					16		8	78				
Queuing Penalty (veh)					0		0	0				
Storage Bay Dist (ft)				65		280			205			205
Storage Blk Time (%)				က	90	100		က		<del>-</del>	9	93
Queuing Penalty (veh)				2	24	252		_		0	13	200

Intersection: 5: S Moorland Ave & US 101 Overpass

Movement	WB	B26	B27	B27	NB	SB	SB	
Directions Served	씸	⊢	⊢		TR	_	LT	
Maximum Queue (ft)	237	527	341	326	807	303	303	
Average Queue (ft)	221	497	295	311	9//	276	27.7	
95th Queue (ft)	232	515	326	325	813	291	298	
Link Distance (ft)	147	420	264	264	292	255	255	
Upstream Blk Time (%)	82	92	65	20	91	42	43	
Queuing Penalty (veh)	802	868	318	245	0	186	190	
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

### Network Summary

Network wide Queuing Penalty: 4293

AM Future Los Pinos Apartments TIS SimTraffic Report W-Trans Page 2

Movement	EB	WB	WB	NB	NB	BB	SB	SB	SB	14
Directions Served	LTR	_	TR	_	⊢	TR	_	⊢	T	
Maximum Queue (ft)	48	74	22	48	112	116	20	89	89	۰
Average Queue (ft)	22	33	34	15	21	25	19	27	28	
95th Queue (ft)	47	63	28	33	9	26	45	28	99	
Link Distance (ft)	319		380		2578	2578		1331	1331	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		100		100			100			
Storage Blk Time (%)					0					
Queuing Penalty (veh)					0					

Intersection: 2: S Moorland Ave & Todd Rd/US 101 South Ramps

Movement	EB	EB	WB	WB	B25	NB	NB	NB
Directions Served	⊢	œ	_	TR	⊢	_	œ	R
Maximum Queue (ft)	109	122	317	367	450	298	311	75
Average Queue (ft)	8	88	315	367	430	269	88	12
95th Queue (ft)	107	4	320	367	442	283	267	45
Link Distance (ft)	02	02		318	411	255	255	
Upstream Blk Time (%)	33	62	38	72	\$	32	4	
Queuing Penalty (veh)	0	0	0	0	0	193	24	
Storage Bay Dist (ft)			260					150
Storage Blk Time (%)	25		87	က				
Queuing Penalty (veh)	0		244	13				

Intersection: 3: US 101 Overpass & Todd Rd

Directions Served T T R L LT T L R R T T L R R T T L Maximum Queue (ft) 494 280 230 266 246 260 174 336 175 64 Average Queue (ft) 139 174 225 225 151 132 109 72 4 Sign Queue (ft) 566 246 316 195 312 146 27 2 44 220 24 4 420 Cueuning Penalty (veh) 201 236 64 316 196 310 100 2 4 Queuning Penalty (veh) 201 236 64 31	Movement	8	B	B	WB	WB	WB	NB B	NB B	R	B27	İ
(%) 7.0 (%) 7.0 (%) 8.0 (7.4 (7.5 (7.5 (7.5 (7.5 (7.5 (7.5 (7.5 (7.5	Directions Served	⊢	⊢	œ	_	ᆸ	⊢	_	œ	œ	⊢	
(%) 140 139 174 225 225 151 132 109 72 146 148 335 272 244 246 316 195 312 146 146 146 146 146 146 146 146 146 146	Maximum Queue (ft)	494	280	230	265	246	260	174	336	175	64	
428 335 272 244 246 316 195 312 146 566 27 211 211 211 204 864 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Average Queue (ft)	140	139	174	225	225	151	132	109	72	4	
(%) 566 211 211 214 284 (%) 70 82 22 4 (91) (92) (93) (94) (94) (95) (95) (95) (95) (95) (95) (95) (95	95th Queue (ft)	428	335	272	244	246	316	195	312	146	27	
(%) 70 82 22 4 4 (eli) 201 236 64 31 (f) 180 180 201 236 64 31 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f) 100 7 (f)	Link Distance (ft)	299			211	211	211		264		420	
180 180 201 236 64 31 100 1	Upstream Blk Time (%)				02	85	22		4			
180 180 100 1 0 2 40 32 0 1 25 156	Queuing Penalty (veh)				201	236	28		31			
0 2 40 0 1 25	Storage Bay Dist (ft)		180	180				100		100		
0 1 25	Storage Blk Time (%)	0	2	40				32		τ-		
	Queuing Penalty (veh)	0	-	52				156		9		

AM Future Plus Project Los Pinos Apartments TIS W-Trans

SimTraffic Report Page 1

## Queuing and Blocking Report

Intersection: 4: Santa Rosa Ave & Todd Rd

04/07/2020

Movement	B	EB	EB	WB	WB	2	æ	8	NB	SB	SB	SB
Directions Served	_	L	œ	_	Ŧ	_	F	F	œ	-	F	ľ
Maximum Queue (ft)	156	179	123	06	999	340	2855	2855	20	39	1559	1692
Average Queue (ft)	73	95	49	24	417	336	2680	2664	-	10	790	1061
95th Queue (ft)	129	162	87	98	029	343	3299	3324	œ	30	1697	1858
Link Distance (ft)	211	211	211		701		2840	2840			2578	2578
Upstream Blk Time (%)							77	75				
Queuing Penalty (veh)							0	0				
Storage Bay Dist (ft)				65		280			200	205		
Storage Blk Time (%)				က	86	100		0				
Queuing Penalty (veh)				-	56	251		0				1

# Intersection: 4: Santa Rosa Ave & Todd Rd

Movement	SB	
Directions Served	R	
Maximum Queue (ft)	265	
Average Queue (ft)	261	
95th Queue (ft)	285	
Link Distance (ft)		
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	205	
Storage Blk Time (%)	96	
Queuing Penalty (veh)	204	

# Intersection: 5: S Moorland Ave & US 101 Overpass

SB	LT	304	569	298	255	40	180			
SB	7	296	270	302	255	33	147			
NB	TR	820	9//	818	89/	82	0			
B27		353	310	342	264	43	214			
B27	⊥	337	289	321	264	29	294			
B26	⊥	528	200	521	420	92	914			
WB	LR	266	225	247	147	8	804			
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Queuing Penalty (veh)

Network Summary
Network wide Queuing Penalty: 4230

AM Future Plus Project Los Pinos Apartments TIS W-Trans

SimTraffic Report Page 2

Intersection: 1: Santa Rosa Ave & East Robles Ave

Movement Directions Served Maximum Queue (ft) Average Queue (ft) 95th Queue (ft) Link Distance (ft) Link Distance (ft) Queuing Penalty (veh) Storage Bay Dist (ft)	LTR 31 22 23 43 319	WB 24 24 52 100 100	MB TT 28 28 380 380	NB 67 14 45 100	136 62 62 117 2578	NB TR 158 79 140 2578	SB 20 100 100 100 100 100 100 100 100 100	SB 68 24 1331	SB 88 31 73 1331	
ime (%)					2					
alty (veh)					0					

Intersection: 2: S Moorland Ave & Todd Rd/US 101 South Ramps

Intersection: 3: US 101 Overpass & Todd Rd

Movement	B	EB	EB	WB	WB	WB	BB	BB	NB	ì
Directions Served	⊢	L	œ	_	L	F	_	œ	~	
Maximum Queue (ft)	02	74	7	4	136	134	118	73	86	Ī
Average Queue (ft)	88	3	48	83	62	75	8	32	54	1
95th Queue (ft)	92	25	89	141	106	118	119	23	88	ĺ
Link Distance (ft)	999			211	211	211		264		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		180	180				100		100	
Storage Blk Time (%)							က		0	
Queuing Penalty (veh)							20		-	

Los Pinos Apartments TIS W-Trans

SimTraffic Report Page 1

## Queuing and Blocking Report

04/07/2020

Intersection: 4: Santa Rosa Ave & Todd Rd

04/07/2020

Directions Served	EB	ER	EB	MB	WB	8	SE SE	SE SE	NB	SB	SB	SB
200000000000000000000000000000000000000	_	느	œ	_	エ	_	⊢	⊢	œ	_	⊢	-
Maximum Queue (ft)	160	174	132	46	130	198	148	181	40	84	143	158
Average Queue (ft)	96	86	51	23	09	137	77	97	10	4	8	93
95th Queue (ft)	150	152	91	51	105	190	131	166	53	47	129	142
Link Distance (ft)	211	211	211		701		2840	2840			2578	2578
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				65		280			200	205		
Storage Blk Time (%)				0	12			0				
Queuing Penalty (veh)				0	4			0				ı

Intersection: 4: Santa Rosa Ave & Todd Rd

SB	~	86	22	\$				205		
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Onening Penalty (veh)

Intersection: 5: S Moorland Ave & US 101 Overpass

Movement	WB	B26	B27	NB	SB	SB	
Directions Served	LR	⊢	⊢	TR	_	LT	
Maximum Queue (ft)	243	314	279	268	306	304	
Average Queue (ft)	150	42	13	93	273	267	
95th Queue (ft)	245	178	111	196	302	327	
Link Distance (ft)	147	420	264	292	255	255	
Upstream Blk Time (%)	24		0		34	29	
Queuing Penalty (veh)	140		0		136	115	
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

### Network Summary Network wide Queuing Penalty: 458

Intersection: 1: Santa Rosa Ave & East Robles Ave

Movement	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	LTR	_	TR	_	⊢	TR	_	⊢	TR	
Maximum Queue (ft)	72	20	22	69	183	161	69	73	109	Ì
Average Queue (ft)	23	7	56	4	83	72	22	52	22	
95th Queue (ft)	49	46	22	46	122	124	21	65	75	
Link Distance (ft)	319		380		2578	2578		1331	1331	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		100		100			100			
Storage Blk Time (%)					_					
Queuing Penalty (veh)					0					

Intersection: 2: S Moorland Ave & Todd Rd/US 101 South Ramps

Movement	EB	EB	WB	WB	NB	NB	NB	
Directions Served	⊢	œ	_	TL	_	ď	~	
Maximum Queue (ft)	19	122	265	220	274	74	30	
Average Queue (ft)	85	83	145	26	204	33	4	
95th Queue (ft)	102	110	235	132	295	25	21	
Link Distance (ft)	02	02		318	255	255		
Upstream Blk Time (%)	33	4			10			
Queuing Penalty (veh)	0	0			53			
Storage Bay Dist (ft)			260				150	
Storage Blk Time (%)	22		_					
Queuing Penalty (veh)	0		_					

Intersection: 3: US 101 Overpass & Todd Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	
Directions Served	⊥	⊥	ď	_	LT	⊥	٦	ď	2	
Maximum Queue (ft)	11	74	102	129	164	118	153	136	98	
Average Queue (ft)	46	뚕	51	88	29	61	9/	34	29	
95th Queue (ft)	73	7	\$	136	140	96	126	77	06	
Link Distance (ft)	299			211	211	211		264		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		180	180				100		100	
Storage Blk Time (%)							2	0	0	
Queuing Penalty (veh)							15	0	_	

Los Pinos Apartments TIS W-Trans

SimTraffic Report Page 1

### Queuing and Blocking Report

04/07/2020

04/07/2020

				III SECTION 4. SAINA NOSA AVE & LOUGING								
Movement	H	H	H	WB	WB	æ	æ	æ	N N	87.	87.	8.
Directions Served	9 -		2	_	¥		<u>-</u>	<u>-</u>	2		9 -	
Maximum Queue (ft)	161	181	106	88	188	305	154	169	40	39	152	135
Average Queue (ft)	88	94	26	34	78	147	9/	92	7	£	73	22
95th Queue (ft)	152	158	92	71	150	263	136	159	53	25	125	133
Link Distance (ft)	211	211	211		701		2840	2840			2578	2578
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				9		280			200	205		
Storage Blk Time (%)				2	15	<b>←</b>						
Onening Penalty (veh)				6	יב	4						

Intersection: 4: Santa Rosa Ave & Todd Rd

Movement SB  Movement SB  Maximum Queue (ft) 96  Average Queue (ft) 57  Seh Queue (ft) 89  Cueuing Penalty (veh) 205  Storage BJ I'rime (%) Queuing Penalty (veh) Queuing Penalty (veh)			
ed (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft)	Movement	SB	
() () () () () ()	Directions Served	х.	
h) (4) 22 (4) (4) (4) (4) (4) (4) (4) (4) (4) (4)	Maximum Queue (ft)	96	
h) h) h)	Average Queue (ft)	27	
	95th Queue (ft)	88	
	Link Distance (ft)		
	Upstream Blk Time (%)		
	Queuing Penalty (veh)		
Storage Blk Time (%) Queuing Penalty (veh)	Storage Bay Dist (ft)	205	
Queuing Penalty (veh)	Storage Blk Time (%)		
	Queuing Penalty (veh)		

Intersection: 5: S Moorland Ave & US 101 Overpass

Movement	WB	B26	B27	NB	SB	SB	
Directions Served	R	F	⊢	TR	_	LT	
Maximum Queue (ft)	219	514	28	436	288	286	
Average Queue (ft)	120	110	4	108	226	175	
95th Queue (ft)	247	412	22	278	331	345	
Link Distance (ft)	147	420	264	292	255	255	
Upstream Blk Time (%)	23	4			13	15	
Queuing Penalty (veh)	135	23			21	61	
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

### Network Summary Network wide Queuing Penalty: 328

Intersection: 1: Santa Rosa Ave & East Robles Ave

SB	TR	102	34	75	1331					
SB	⊢	82	32	69	1331				0	0
SB	_	89	33	62				100	0	0
NB	TR	147	75	138	2578					
BB	⊢	139	61	122	2578				τ-	0
BB	_	32	10	3				100		
WB	TR	28	78	21	380					
WB	_	09	54	23				100		
EB	LTR	69	<b>5</b> 8	29	319					
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Queuing Penalty (veh)

Intersection: 2: S Moorland Ave & Todd Rd/US 101 South Ramps

B	В	46	7	08				150		
		188 4			22	2	7	15		
		291 1			ï		160			
B25	⊢	456	429	444	411	8	0			
WB	TR	389	369	381	318	83	0		0	<del>-</del>
WB	_	318	314	321		61	0	260	92	170
EB	ď	120	06	108	20	8	0			
EB	⊢	26	99	108	20	22	0		21	0
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Queuing Penalty (veh)

Intersection: 3: US 101 Overpass & Todd Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	B27	B26	B26
Directions Served	T	⊥	ď	_	LT	⊥	٦	ď	ď	⊢	⊥	
Maximum Queue (ft)	74	126	72	223	216	214	156	112	139	27	48	9
Average Queue (ft)	78	4	71	155	137	32	8	37	22	2	က	0
95th Queue (ft)	29	93	134	259	257	195	135	133	108	25	41	2
Link Distance (ft)	266			211	211	211		264		420	147	147
Upstream Blk Time (%)				10	9	2		_			0	
Queuing Penalty (veh)				56	17	9		12			0	
Storage Bay Dist (ft)		180	180				100		100			
Storage Blk Time (%)		0	0				2		τ-			
Queuing Penalty (veh)		0	0				47		7			

Los Pinos Apartments TIS W-Trans

SimTraffic Report Page 1

# Queuing and Blocking Report

04/13/2020

Intersection: 4: Santa Rosa Ave & Todd Rd

04/13/2020

Movement	EB	EB	EB	WB	WB	BB	B	BB	NB	SB	SB	SB
Directions Served	_	П	œ	_	TR	_	⊢	⊥	œ	_	⊢	-
Maximum Queue (ft)	117	119	184	90	241	340	2684	2681	30	38	256	278
Average Queue (ft)	62	09	83	36	97	339	1857	1818	7	10	148	155
95th Queue (ft)	106	104	154	80	197	341	2991	2969	23	59	231	239
Link Distance (ft)	211	211	211		701		2840	2840			2578	2578
Upstream Blk Time (%)			0				16	=				
Queuing Penalty (veh)			0				0	0				
Storage Bay Dist (ft)				65		280			200	205		
Storage Blk Time (%)				2	30	88	0	τ-			<del>-</del>	2
Queuing Penalty (veh)				4	14	337	0	0			0	4

Intersection: 4: Santa Rosa Ave & Todd Rd

Directions Served Maximum Queue (ft) Average Queue (ft)	R 198	
95th Queue (ft) Link Distance (ft)	134	
Jpstream Blk Time (%) Queuing Penalty (veh)		
Storage Bay Dist (ft)	205	
Storage Blk Time (%)	0	
Queuing Penalty (veh)	_	

Intersection: 5: S Moorland Ave & US 101 Overpass

ovement	WB	B26	B27	B27	NB	SB	SB	
rections Served	LR	⊥	⊥		TR	٦	LT	
faximum Queue (ft)	249	524	343	336	807	302	298	
vverage Queue (ft)	223	476	242	189	9//	273	272	
5th Queue (ft)	239	614	405	430	827	295	310	
Link Distance (ft)	147	420	264	264	89/	255	255	
tream Blk Time (%)	8	84	38	22	94	41	44	
Queuing Penalty (veh)	499	516	118	69	0	300	318	
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

### Network Summary Network wide Queuing Penalty: 2634

Intersection: 1: Santa Rosa Ave & East Robles Ave

	TR				ì					
SB	⊢	109	38	87	1331				0	0
SB	_	89	32	24				100	0	C
NB	TR	172	98	152	2578					
NB	⊢	151	92	130	2578				2	C
NB	_	25	15	45				100		
WB	TR	8	53	92	380				0	C
WB	_	62	22	\$				100		
B	LTR	29	53	61	319					
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	One line Penalty (yeh)

Intersection: 2: S Moorland Ave & Todd Rd/US 101 South Ramps

		277 41			255	2	11	150		
NB	_	282	269	280	255	뚕	166			
B25	⊢	465	430	449	411	92	0			
WB	TR	393	369	382	318	\$	0		0	0
WB	_	317	314	322		61	0	260	32	171
EB	ď	124	9	11	02	\$	0			
EB	⊢	106	61	105	20	17	0		46	0
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Queuing Penalty (veh)

Intersection: 3: US 101 Overpass & Todd Rd

Movement	8	B	EB	WB	WB	WB	NB	NB	NB	İ
Directions Served	⊢	F	œ	_	그	F	_	œ	~	
Maximum Queue (ft)	11	125	44	207	204	172	162	148	119	Ī
Average Queue (ft)	怒	25	99	122	96	73	85	33	53	
95th Queue (ft)	7	11	129	219	204	147	146	26	95	
Link Distance (ft)	266			211	211	211		264		
Upstream Blk Time (%)				9	4	<del>-</del>				
Queuing Penalty (veh)				17	7	2				
Storage Bay Dist (ft)		180	180				100		100	
Storage Blk Time (%)		0	0				9	0	0	
Queuing Penalty (veh)		0	0				29	0	က	

Los Pinos Apartments TIS W-Trans

SimTraffic Report Page 1

## Queuing and Blocking Report

04/09/2020

04/09/2020

Intersection: 4: Santa Rosa Ave & Lodd Rd	nta Kosa	Ave &	ppo I	P Y							
Movement	EB	EB	EB	WB	WB	B	æ	B	NB	SB	SB
Directions Served	_	П	ď	_	TR	_	⊢	⊢	ď	_	⊢
Maximum Queue (ft)	121	127	196	06	240	340	2417	2366	128	47	235
Average Queue (ft)	63	62	98	36	97	339	1561	1509	9	10	142
95th Queue (ft)	106	113	152	28	193	342	2703	2663	66	31	217
Link Distance (ft)	211	211	211		701		2840	2840			2578
Upstream Blk Time (%)			0				7	4			
Queuing Penalty (veh)			τ-				0	0			
Storage Bay Dist (ft)				65		280			200	202	
Storage Blk Time (%)				5	25	88	0	2			τ-
Queuing Penalty (veh)				က	12	331	_	~			0

Intersection: 4: Santa Rosa Ave & Todd Rd

Movement	SB	
Directions Served	R	
Maximum Queue (ft)	203	
Average Queue (ft)	63	
95th Queue (ft)	131	
Link Distance (ft)		
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	205	
Storage Blk Time (%)		
Queuing Penalty (veh)		

# Intersection: 5: S Moorland Ave & US 101 Overpass

SB	LT	313	274	299	255	42	302			
SB	_	299	273	294	255	43	311			
NB	TR	801	765	880	89/	88	0			
B27		328	142	382	264	15	47			
B27	⊥	342	210	404	564	28	98			
B26	⊥	519	466	909	420	9/	472			
WB	LR	249	224	240	147	85	209			
Movement	Directions Served	Maximum Queue (ft)	Average Queue (ft)	95th Queue (ft)	Link Distance (ft)	Upstream Blk Time (%)	Queuing Penalty (veh)	Storage Bay Dist (ft)	Storage Blk Time (%)	Queuing Penalty (veh)

Network Summary
Network wide Queuing Penalty: 2518



### **Appendix F**

**VMT Findings** 





### **Los Pinos Apartments Project VMT Assessment**

W-Trans 6/1/2020

### Baseline VMT

13.59 Project Base VMT/Capita from SCTA Model (TAZ 569)

50 Project Units 2.34 Occupancy/Unit 1590 Base Unadjusted Residential VMT (mi) 117 Residents ("capita")

### **Applied Significance Threshold**

15.56 VMT/Capita Sonoma Countywide Average

13.23 Significance Threshold = 15% below Average

### Project-Specific VMT Adjustments

13.59 Project Base VMT/Capita from SCTA Model (TAZ 569)

-2.7% Project Reduction Required to meet Significance Threshold

### A. Density

50 Project Units

2.49 Project Acres

20.08 Project Density

11.5% VMT Reduction (compared to ITE Single Family) source: CAPCOA

-1.56 Adjustment to SCTA VMT/Capita

### B. Integrate Affordable Housing

4% of units (2 apts) restricted to very low income (30-50% MFI) sources: San Jose VMT Evaluation Tool Methodology,

1.0% VMT Reduction The California Housing Partnership

-0.14 Adjustment to SCTA VMT/Capita

### **Combined Project-Specific Adjustments**

12.5% Combined VMT Reduction

-1.70 Adjustment to SCTA VMT/Capita

### VMT Significance

13.59 Average VMT/Capita in TAZ
 1590 Unadjusted Residential VMT (mi)
 11.89 Project VMT/Capita with Adjustments
 1391 Adjusted Project Residential VMT (mi)

13.23 Significance Threshold -199 VMT Reduction (mi)

YES Threshold met

