

November 4, 2019

Mr. Jeb Hall Concordia Homes 380 Stevens Avenue, Suite 307 Solana Beach, California 92075

LLG Reference: 3-14-2334

Subject:

Safari Highlands Ranch Updated Traffic Operations

Escondido, California

Dear Mr. Hall:

Linscott, Law & Greenspan, Engineers (LLG) has prepared this supplemental analysis as part of the validation of existing counts used in the Safari Highlands Ranch Transportation Impact Analysis (TIA), dated October 4, 2017, using more recent count data.

#### A. BACKGROUND

This letter presents analysis of all study area locations using traffic count data collected in May 2018. Based on this analysis, no new significant impacts were identified on study area street segments. One additional significant impact was identified at the intersection of San Pasqual Road / Old Milky Way.

#### **B. DATA COLLECTION**

Peak hour intersection counts were conducted during the 7-9AM and 4-6PM peak hours on Wednesday, May 16, 2018. Daily street segment counts were conducted on Tuesday, April 17 and Wednesday, April 18, 2018. The two-day average was calculated for use in the analysis.

Attachment A – Volume Figures includes the figures depicting volumes for all the analysis scenarios. Attachment B – Volume Count Sheets includes the intersection and segment count sheets.

#### **ANALYSIS APPROACH**

LLG re-analyzed all eighteen (18) study area intersections and all eighteen (18) street segments using the methodologies applied in the TIA.

**Engineers & Planners** 

Traffic
Transportation
Parking

#### Linscott, Law & Greenspan, Engineers

4542 Ruffner Street Suite 100 San Diego , CA 92111 858.300.8800 T 858.300.8810 F www.llgengineers.com

Pasadena Irvine San Diego Woodland Hills

Philip M. Linscott, PE (1924-2000)
William A. Law, PE (1921-2018)
Jack M. Greenspan, PE (Ret.)
Paul W. Wilkinson, PE (Ret.)
John P. Keating, PE
David S. Shender, PE
John A. Boarman, PE
Clare M. Look-Jaeger, PE
Richard E. Barretto, PE
Keil O. Maberry, PE
Walter B. Musial, PE
An LGZWB Company Founded 1968



#### **ANALYSIS RESULTS**

#### **EXISTING + PROJECT ANALYSIS**

#### Intersections

**Table** A summarizes the results of the Existing + Project peak hour intersection analysis. As seen in *Table* A, the following intersections are calculated to operate at LOS E or worse with the addition of project traffic:

- Intersection #1 Rockwood Road / Cloverdale Road (LOS F during the AM peak hour)
- Intersection #9 San Pasqual Valley Road (SR-78) / Citrus Avenue (LOS F during the AM and PM peak hours)
- Intersection #10 San Pasqual Valley Road (SR-78) / Summit Drive (LOS F during the AM peak hour and E during the PM peak hour)
- Intersection #11 San Pasqual Valley Road (SR-78) / San Pasqual Road / Cloverdale Road (LOS E during the PM peak hour)
- Intersection #17 San Pasqual Road / Sierra Linda Drive / Ryan Drive (LOS E during the AM peak hour)
- Intersection #18 San Pasqual Road / Old Milky Way (LOS E during the AM peak hour)

Significant direct impacts are calculated at Intersections #1, #9, #10, #11 and #17, consistent with those identified in the TIA. The significant direct impact at Intersection #18, San Pasqual Road / Old Milky Way is a new impact due to the 2018 traffic counts. All other intersections are calculated to continue to operate at an acceptable LOS (LOS C or better for intersections within the City of Escondido and LOS D or better for other jurisdictions).

Installation of a traffic signal will fully mitigate the project's impact at Intersection #18.

Attachment C – Analysis Worksheets contains the Synchro intersection analysis output sheets.

#### Street Segments

**Table B** summarizes the results of the Existing + Project daily street segment analysis. As seen in Table B, the following segments are calculated to operate at LOS E or worse:

- Segment #8. San Pasqual Valley Road (SR-78) from 17<sup>th</sup> Avenue to Bear Valley Parkway – LOS F
- Segment #12. Felicita Avenue/17<sup>th</sup> Avenue from Escondido Boulevard to Juniper Street – LOS F



- Segment #13. Felicita Avenue/17<sup>th</sup> Avenue from Juniper Street to San Pasqual Valley Road – LOS E
- Segment #16. Via Rancho Parkway from San Pasqual Road to Beethoven Drive
   LOS F

Consistent with the criteria applied in the TIA, the segment along San Pasqual Valley Road (SR-78) between 17<sup>th</sup> Avenue and Bear Valley Parkway is not considered a significant impact per the County's two-lane highway significance criteria, which defers to the intersection operations along the two-lane highway segment. *Table A* shows that the San Pasqual Valley Road (SR-78) signalized intersections controlled by Caltrans at 17<sup>th</sup> Avenue and Bear Valley Parkway are calculated to continue to operate at acceptable LOS D operations with project traffic.

The remaining three segments (#12, #13 and #16) were previously identified as significant direct impacts in the TIA. Therefore, no new significant direct street segment impacts are identified.

#### EXISTING + CUMULATIVE PROJECTS + PROJECT ANALYSIS

#### Intersections

Table A summarizes the results of the Near-Term (Existing + Cumulative Projects + Project) peak hour intersection analysis. As seen in *Table A*, the following intersections are calculated to operate at LOS E or worse with the addition of Cumulative Projects and project traffic:

- Intersection #1 Rockwood Road / Cloverdale Road (LOS F during the AM peak hour)
- Intersection #9 San Pasqual Valley Road (SR-78) / Citrus Avenue (LOS F during the AM and PM peak hours)
- Intersection #10 San Pasqual Valley Road (SR-78) / Summit Drive (LOS F during the AM and PM peak hours)
- Intersection #11 San Pasqual Valley Road (SR-78) / San Pasqual Road / Cloverdale Road (LOS E during the PM peak hour)
- Intersection #17 San Pasqual Road / Sierra Linda Drive / Ryan Drive (LOS E during the AM peak hour and LOS D during the PM peak hour)
- Intersection #18 San Pasqual Road / Old Milky Way (LOS E during the AM peak hour)

Significant cumulative impacts are calculated at Intersections #1, #9, #10, #11 and #17, consistent with those identified in the TIA. The significant cumulative impact at Intersection #18, San Pasqual Road / Old Milky Way is a new impact due to the



**2018 traffic counts.** All other intersections are calculated to continue to operate at an acceptable LOS (LOS C or better for intersections within the City of Escondido and LOS D or better for other jurisdictions). Installation of a traffic signal will fully mitigate the project's impact at Intersection #18.

Attachment C – Analysis Worksheets contains the Synchro intersection analysis output sheets.

#### **Street Segments**

*Table B* summarizes the results of the Near-Term (Existing + Cumulative Projects + Project) daily street segment analysis. As seen in *Table B*, the following segments are calculated to operate at LOS E or worse:

- Segment #8. San Pasqual Valley Road (SR-78) from 17<sup>th</sup> Avenue to Bear Valley Parkway – LOS F
- Segment #12. Felicita Avenue/17<sup>th</sup> Avenue from Escondido Boulevard to Juniper Street – LOS F
- Segment #13. Felicita Avenue/17<sup>th</sup> Avenue from Juniper Street to San Pasqual Valley Road – LOS E
- Segment #16. Via Rancho Parkway from San Pasqual Road to Beethoven Drive
   LOS F

Consistent with the criteria applied in the TIA, the segment along San Pasqual Valley Road (SR-78) between 17<sup>th</sup> Avenue and Bear Valley Parkway is not considered a significant cumulative impact per the County's two-lane highway significance criteria, which defers to the intersection operations along the two-lane highway segment. *Table A* shows that the San Pasqual Valley Road (SR-78) signalized intersections controlled by Caltrans at 17<sup>th</sup> Avenue and Bear Valley Parkway are calculated to continue to operate at acceptable LOS D operations with project traffic.

The remaining three segments (#12, #13 and #16) were previously identified as significant cumulative impacts in the TIA. Therefore, no new significant cumulative street segment impacts are identified.

#### C. SUMMARY OF SIGNIFICANT IMPACTS & MITIGATION MEASURES

The analysis presented in this addendum concludes the same impacts calculated in the TIA would continue to occur with the updated 2018 traffic volumes. One (1) new significant impact at the intersection of San Pasqual Road/ Old Milky Way was calculated with the updated traffic counts. The following is a summary of the project design features and recommended mitigation measures from the TIA with the additional mitigation required for Intersection #18.



#### **PROJECT DESIGN FEATURES**

Below is a summary of the Project Design Features.

#### **Street Segments**

#### Safari Highlands Ranch Road:

 Provide traffic calming features to reduce speeds along steep grades and horizontal curves. Appendix J of the EIR TIA provides the traffic calming concept plans.

#### Intersections

#### Rockwood Road/ Safari Highlands Ranch Road (Proposed Site Access):

- Install a stop-sign for southbound trips exiting the project site.
- Provide a shared through/left-turn lane in the eastbound direction, shared through/right-turn lane in the westbound direction, and a shared left-turn/right-turn lane in the southbound direction.
- Stripe parallel bar pedestrian crosswalks at the Rockwood Road / Safari Highlands Ranch Road intersection.

#### Rockwood Road/ Old Ranch Road:

- Stripe parallel bar pedestrian crosswalks at the Rockwood Road / Old Ranch Road intersection.
- Install advanced warning signs, per City standards, to inform drivers of this all-way stop-controlled intersection.

#### SIGNIFICANT IMPACTS & MITIGATION MEASURES

Per the applied City of Escondido, City of San Diego, County of San Diego, and Caltrans significance thresholds and the analysis methodologies presented in this report, project-related and cumulative traffic are calculated to cause significant impacts within the study area under the direct and cumulative conditions.

#### Intersections:

County of San Diego

TRA-1. Intersection #1. Rockwood Road/ Cloverdale Road (Near-Term Direct & Cumulative)

#### County of San Diego / Caltrans

- TRA-2. Intersection #9. San Pasqual Valley Road (SR-78)/ Citrus Avenue (Near-Term Direct & Cumulative)
- TRA-3. Intersection #10. San Pasqual Valley Road (SR-78)/ Summit Drive (Near-Term Direct & Cumulative)



TRA-4. Intersection #11. San Pasqual Valley Road (SR-78)/ San Pasqual Road/ Cloverdale Road
(Near-Term Direct & Cumulative)

City of Escondido

TRA-5. Intersection #17. San Pasqual Road / Sierra Linda Drive / Ryan Drive (Near-Term Direct & Cumulative)

City of San Diego (NEW)

TRA-6. Intersection #18. San Pasqual Road/ Old Milky Way (Near-Term Direct & Cumulative)

Caltrans Interchange (Including Freeway Ramp Meter)

No Impacts.

#### Roadway Segments

City of Escondido

- TRA-1. Segment #12. Felicita Avenue/17<sup>th</sup> Avenue: Escondido Boulevard to Juniper Street
  (Near-Term Direct & Cumulative)
- TRA-2. Segment #13. Felicita Avenue/17<sup>th</sup> Avenue: Juniper Street to San Pasqual Valley Road (SR-78)

  (Near-Term Direct & Cumulative)
- TRA-3. Segment #16. Via Rancho Parkway: San Pasqual Road to Beethoven Drive

  (Near-Term Direct & Cumulative)

#### MITIGATION MEASURES AND DESIGN CONSIDERATIONS

The following mitigation measures are recommended to reduce impacts to below significant levels. It should be noted that certain significant and potentially significant environmental impacts, including cumulative impacts, of the project can be mitigated by the implementation of specific mitigation measures by other jurisdictions and/or public agencies. The City will request, but cannot compel, each of those public agencies affected by mitigation measures proposed with the project to implement the identified mitigation measures described in this section.

#### Intersections:

County of San Diego

TRA-1. Intersection #1. Rockwood Road/ Cloverdale Road – Install a traffic signal and restripe the westbound approach to provide one left-turn



lane and one share left-turn/right-turn lane. The south leg of the intersection in the southbound direction shall be restriped to provide an additional receiving lane for the turn left-turning traffic from Rockwood Road. A signal warrant analysis is provided in **Attachment D**.

As an alternative, a roundabout could be installed. Additional right-ofway would likely need to be acquired.

Attachment E includes a sketch of both the traffic signal and roundabout options.

In addition, the project shall construct a raised median or provide a second westbound thru lane along Rockwood Road between Cloverdale Road and San Pasqual Union Elementary. Once completed, either of these improvements would provide for a total daily capacity of 19,000 ADT. As shown in the post-mitigation analysis provided at the end of this report, this improvement would improve operations along this segment from LOS D to LOS B.

Implementation of the recommended mitigation measures at this location would mitigate both the near-term direct and cumulative intersection impacts to below a level of significance.

#### County of San Diego / Caltrans

TRA-2. Intersection #9. San Pasqual Valley Road (SR-78)/ Citrus Avenue - Prohibit southbound left-turns from Citrus Avenue to eastbound San Pasqual Valley Road (SR 78). The provision of a right-turn out only intersection prohibiting southbound left-turning vehicles would result in the rerouting of vehicle trips currently making this maneuver. The 217 AM and 58 PM peak hour trips would be expected to redistribute equally to the San Pasqual Valley Road (SR 78) intersections with Bear Valley Parkway (additional SBL: 109 AM /29 PM) and Summit Drive Parkway (additional SBL: 109 AM /29 PM), ultimately destined to the east on San Pasqual Valley Road (SR 78). The additional trips to Bear Valley Parkway and Summit Drive would not result in any new impacts to these two intersections. Attachment F provides the rerouted traffic volumes and post-mitigation intersection analysis worksheets for all three intersections. Attachment E provides a conceptual drawing of the recommended improvements.



Implementation of the recommended mitigation measures at this location would mitigate both the near-term direct and cumulative intersection impacts to below a level of significance.

TRA-3. Intersection #10. San Pasqual Valley Road (SR-78)/ Summit Drive

– Mitigation measures for proposed intersection modifications are subject to the Caltrans Intersection Control Evaluation (ICE) policy (Traffic Operation Policy Directive 13-02). Alternative intersection design(s) will need to be considered in accordance with the ICE policy.

Implementation of the recommended mitigation measures at this location would mitigate both the near-term direct and cumulative intersection impacts to below a level of significance

TRA-4. Intersection #11. San Pasqual Valley Road (SR-78)/ San Pasqual Road/ Cloverdale Road — The project should widen the eastbound approach to provide dual left-turn lanes. The north leg of the intersection in the northbound direction should be widened to provide an additional receiving lane for a length of approximately 650 feet plus a 150-foot transition lane. The additional receiving lane would improve traffic flow onto northbound Cloverdale Road. Attachment E provides a conceptual drawing of the recommended improvements.

Implementation of the recommended mitigation measures at this location would mitigate both the near-term direct and cumulative intersection impacts to below a level of significance.

#### City of Escondido

TRA-5. Intersection #17. San Pasqual Road / Sierra Linda Drive / Ryan Drive - The project should install a traffic signal at this location. The San Pasqual Road/ Sierra Linda Drive/ Ryan Drive intersection operates at unacceptable LOS D without the addition of project traffic. It should be noted that the project contribution to the traffic volumes at this location amounts to 14% of the combined AM and PM peak hour trips.

Implementation of the recommended mitigation measure at this location would mitigate both the near-term direct and cumulative intersection impact to below a level of significance.

#### City of San Diego

TRA-6. Intersection #18. San Pasqual Road/ Old Milky Way (NEW) – The project should install a traffic signal at this location and provide a



southbound dedicated left-turn lane. Implementation of the recommended mitigation measure at this location would mitigate both the near-term direct and cumulative intersection impact to below a level of significance. *Attachment E* provides a conceptual drawing of the recommended improvements.

#### Street Segments:

City of Escondido

- TRA-7. Segment #12. Felicita Avenue/17<sup>th</sup> Avenue: Escondido Boulevard to Juniper Street Restripe/widen the eastbound approach at the Felicita Avenue / Juniper Street intersection to provide a dedicated eastbound right-turn lane. The new lane will provide additional capacity at a constrained intersection along the impacted segment, thereby mitigating the segment impact. Alternatively, a fair share contribution towards the ultimate improvements on the west side of the Felicita Avenue / Juniper Street intersection would also mitigate the significant impact. Also, widen the east leg of the Escondido Boulevard / Felicita Avenue intersection to provide additional westbound queue storage. Attachment E contains the concept figure showing the intersection improvements at both the Escondido Boulevard and Juniper Street intersections.
- TRA-8. Segment #13. Felicita Avenue/17<sup>th</sup> Avenue: Juniper Street to San Pasqual Valley Road (SR-78) Widen/restripe Felicita Avenue between Juniper Street and San Pasqual Valley Road (SR-78) to provide a two-way left-turn lane as depicted in the concept mitigation figure shown in *Attachment E*.

Implementation of the recommended mitigation measures at this location would mitigate both the near-term direct and cumulative intersection impacts to below a level of significance.

TRA-9. Segment #16. Bear Valley Parkway: San Pasqual Road to Beethoven Drive — Lengthen the southbound right-turn pocket on Bear Valley Parkway at Beethoven Drive to extend it by an additional 150 feet. Based on field observations, during the PM peak hour, vehicles destined for Beethoven Drive are blocked by the long queue of southbound through vehicles. The extension of this turn pocket would allow vehicles to enter into the right-turn lane at a faster rate thus resulting in shorter queues in the through lane and decreased wait times. Also lengthen the northbound right-turn pocket on Bear Valley Parkway at San Pasqual Road by 180 feet. Similar to the southbound right-turn lane extension, the lengthening of this northbound right-turn lane will result in less right-turn vehicles to be blocked by northbound through lane queues.



Attachment E contains concept plans for both the Bear Valley Parkway / Beethoven Drive and Bear Valley Parkway / San Pasqual Road intersections. Implementation of the above recommended mitigation measures at this location, which includes improving the intersections on either end of the segment, would mitigate this near-term direct, near-term cumulative, and long-term cumulative street segment impact to below a level of significance.

Consideration was given to installing a northbound right-turn overlap phase at the Bear Valley Parkway / San Pasqual Road intersection to provide additional mitigation. The westbound to eastbound U-turn would need to be prohibited. Analysis of the ramifications of providing this phasing was conducted. Based on the amount of drivers that use the U-turn and the fact that it would cause an increase in left-turns from the San Pasqual High School onto eastbound San Pasqual Road, this additional mitigation was rejected.

#### D. POST MITIGATION ANALYSIS

Intersections

Table C summarizes the results of the post-mitigation analysis of the impacted intersections. As seen in Table C, implementation of the recommended mitigation measures from the TIA continue to mitigate all significantly impacted locations to below significant levels. In addition, the installation of a traffic signal at Intersection #18. San Pasqual Road/Old Milky Way mitigates this location to acceptable LOS B conditions.

#### E. CONCLUSION

Thus, as seen from the above, only one (1) additional intersection is calculated to be significantly impacted with the updated Year 2018 traffic volumes. This memo includes mitigation measures to mitigate this new impact to a level below significance. The previously recommended mitigation measures will sufficiently mitigate the previously identified significant impacts.

Sincerely,

Linscott, Law & Greenspan, Engineers

John A. Boarman, P.E.

Principal



#### Attachments:

Attachment A – Volumes Figures Attachment B – Traffic Count Data

Attachment C – Peak Hour Intersection Analysis Worksheets

Attachment D - Signal Warrant Analysis

Attachment E – Mitigation Concept Drawings

Attachment F - Rerouted Citrus Avenue Traffic Volumes & Analysis

ce: File

engineers

TABLE A

Mr. Jeb Hall 11/4/19 Page 12

NEAR-TERM INTERSECTION OPERATIONS

Specified         Delay         County of Same																	
City of Escondido         Signal         AM         15.3         C         >100.0         F         >10.0         15.3         C         100.0         F         >10.0         15.3         C         100.0         F         >10.0         15.3         C         100.0         F         >10.0         B         17.8         C         >10.0         F         >10.0         B         17.8         C         70.0         B         17.8         C         70.0         F         710.0         F	Intersection		Jurisdiction	Control Type	Peak Hour	Exist	ing	Exist	ting + Proj	ect	Existi Cumulativ	ng + e Projects	<b>Existin</b> Proje	g + Cumu ects + Proj	lative	Sig?	
City of Escondido         Signal         AM         15.3         C         >100.0         F         >10.0         15.3         C         >100.0         F         >10.0         15.3         C         >100.0         F         >10.0         B         17.8         C         70.0         F         >10.0         F         >10.0         F         >10.0         F         >10.0         P         71.8         7.1         A         11.4         B         5.9         8.3         A         14.4         B         6.3         8.1         A         14.4         B         5.9         8.3         A         14.4         B         6.3         8.1         A         DNB         B         9.3         B         9.1         B         9.3         B         B						Delay a	TOS P	Delay	SOT	۷۷	Delay	ros	Delay	ros	Δ¢		
City of Escondido         AMSC of Escondido	Rockwoo	d Rd /	County of San	p Jooyy	M	15.3	C	0 000	5	0.01		(	0 00		9		
City of Londido         AWSC*         AM         8.3         A         14.4         B         5.9         8.3         A         14.4         B         6.3         8.1	Cloverdale Rd		Diego	OCCUPA	DM	10.6	ם כ	0.0017	٢ ر	7.0.0	13.3	ء ر	0.001	<u>-</u>	0.01<	Direct & Cumulative	
City of Escondido         AWSC4         AM         8.3         A         14.2         B         5.9         8.3         A         14.4         B         5.9         8.3         A         14.4         B         5.9         8.1         A         14.4         B         6.3         B         6.3         B         6.3         B         B         6.3         B					LIM	0.01	q	0./1	ر	7:/	10.6	Ŋ	17.8	ر.	7.7		
City of Escondido         DNE         AM         DNE         144         B         6.3         8.1         A         144         B         6.3         B         6.3         B         6.3         B	Rockwoo	od Rd/	City of	AWSC *	AM	8.3	A	14.2	В	5.9	8.3	4	14.2	В	5.9	No	
City of Escondido         Signal         AM         DNE         DNE         10.2         B         NA         DNE         DNE         PNA         DNE         DNE         DNE         DNE         DNE         DNE         DNE         PNA         DNE         PNA         PNA         PNA         PNA         DNE         PNA         DNE         PNA         PNA         DNE         PNA	Old Kan	ch Kd	Escondido		PM	8.1	A	14.4	В	6.3	8.1	A	14.4	В	6.3		
Liscondido         PM         DNE         DNE         9.1         A         NA         DNE         PNA         DNE         PNA         DNE         PNA         PNA<	Rockwo	od Rd / Safari Highlands	City of	DNE	AM	DNE	DNE	10.2	В	NA	DNE	DNE	10.2	В	NA A	No	
City of Escondido         Signal         AM         29.5         C         30.0         C         0.5         30.0         C         30.5         C         30.5         C         36.5         D         26.6         35.9         D         37.4         D         1.5           City of Escondido         Signal         AM         19.0         B         19.5         B         0.5         19.0         B         19.1         B         0.5         19.0         B         19.5         B         0.5         19.0         B         19.1         B         0.5         19.0         B         19.1         B         0.5         19.0         B         0.5         0.8	Kanch K	d (Site Access)	Escondido		PM	DNE	DNE	9.1	∢	NA	DNE	DNE	9.1	A	NA A		
Escondido         PM         33.9         C         36.5         D         2.6         35.9         D         37.4         D         1.5           City of Escondido         Signal         AM         19.0         B         19.5         B         0.5         19.0         B         19.1         B         0.5           City of Escondido         Signal         AM         24.0         C         26.8         C         2.8         25.6         C         29.4         C         3.8           County of San         Signal         AM         13.6         B         14.2         B         0.6         15.2         B         16.0         B         0.8           County of San         Signal         AM         23.2         C         26.7         C         3.5         B         16.0         B         0.8         1.5         B         0.8         0.8         1.5         B         0.8	Centre C	ity Pkwy /	City of	Signal	AM	29.5	ပ	30.0	Ü	0.5	30.0	S	30.5	ပ	0.5	°Z	
City of Escondido         Signal         AM         19.0         B         19.5         B         0.5         19.0         B         19.5         B         0.5         19.0         B         19.5         B         0.5         19.0         B         0.5         19.1         B         0.5         19.3         B         0.5         19.3         B         0.5         19.3         B         0.5         19.3         B         0.8         0.8         0.8         0.8         0.6         15.2         B         16.0         B         0.8           County of San         Signal         AM         23.2         C         26.7         C         3.5         28.0         C         32.5         C         4.5           Diego/Caltrans         Signal         AM         42.9         D         43.6         D         45.6         D         46.4         D         1.7	rencita	AV6	Escondido		PM	33.9	ပ	36.5	D	2.6	35.9	Д	37.4	Q	1.5		
Escondido Diego/Caltrans         Figural AM	Escondi	do Blvd /	City of	Signal	AM	19.0	В	19.5	В	0.5	19.0	В	19.5	В	0.5	N <sub>o</sub>	
City of Escondido         Signal AM         AM         24.0         C         26.8         C         2.8         C         29.4         C         3.8           Escondido         PM         13.6         B         14.2         B         0.6         15.2         B         16.0         B         0.8           County of San Diego/Caltrans         Signal AM         23.2         C         26.7         C         3.5         28.0         C         4.5         D         4.5         B         0.7         4.5         D         1.7         1.7         D         4.5         D         4.5         D         1.7         1.7         D         4.5         D         1.7         1.7         D         1.7         1.7         D         1.7         1.7         D         1.7         1.7         D         4.6         D	rencita z	406	Escondido		PM	18.3	В	19.1	В	8.0	18.3	В	19.1	В	8.0		
Escondido Diego/Caltrans         PM         13.6         B         14.2         B         0.6         15.2         B         16.0         B         0.8           County of San Diego/Caltrans         Signal         AM         23.2         C         26.7         C         3.5         28.0         C         4.5         6.2           County of San Diego/Caltrans         Signal         AM         42.9         D         43.6         D         44.7         D         45.0         D         1.2           Diego/Caltrans         PM         44.0         D         45.6         D         46.4         D         1.7	Juniper S	St / Felicita Ave	City of	Signal	AM	24.0	Ö	26.8	ပ	2.8	25.6	S	29.4	Ü	3.8	N <sub>o</sub>	
County of San         Signal         AM         23.2         C         26.7         C         3.5         28.0         C         32.5         C         4.5           Diego/ Caltrans         PM         27.2         C         31.7         C         4.5         B         D         42.6         D         6.2           County of San         Signal         AM         42.9         D         43.6         D         0.7         43.8         D         45.0         D         1.2           Diego/ Caltrans         PM         44.0         D         45.6         D         1.6         44.7         D         46.4         D         1.7			Escondido		PM	13.6	В	14.2	В	9.0	15.2	æ	16.0	В	8.0		
County of San         Signal         AM         42.9         D         43.6         D         6.7         A4.7         D         44.7         D         44.7         D         45.6         D         1.7	San Pas	qual Valley Rd (SR-78) /	County of San	Signal	AM	23.2	υ	26.7	C	3.5	28.0	Ö	32.5	Ü	4.5	No	
County of San         Signal         AM         42.9         D         43.6         D         0.7         43.8         D         45.0         D         1.2           Diego/ Caltrans         PM         44.0         D         45.6         D         1.6         44.7         D         46.4         D         1.7	I/ AVC		Diego/ Califans		PM	27.2	ت ت	31.7	Ö	4.5	36.4	Q	42.6	Q	6.2		
Diego, Cautains PM 44.0 D 45.6 D 1.6 44.7 D 46.4 D	San Pas	qual Valley Rd (SR-78) /	County of San	Signal	AM	42.9	Q	43.6	Q	0.7	43.8	Q	45.0	Q	1.2	No	
	Deal va	ney rkwy	Diego/ Caltrans		PM	44.0	Q	45.6	Q	1.6	44.7	Ω	46.4	Q	1.7		

(CONTINUED ON NEXT PAGE)

engineers

Mr. Jeb Hall

11/4/19 Page 13

TABLE A (CONTINUED)
NEAR-TERM INTERSECTION OPERATIONS

=	Intersection	Jurisdiction	Control Type	Peak Hour	Existing	ting	Exis	Existing + Project	ect	Existing + Cumulative Projects	ng + e Projects	Existin	Existing + Cumulative Projects + Project	lative	Sig?
					Delay a	FOS P	Delay	ros	νς	Delay	ros	Delay	ros	۷۷	
6.	San Pasqual Valley Rd (SR-78) /	County of San	MSSC	AM	>100.0	12	>100.0	14	>10.0	>100.0	<u></u>	>100.0	T.	>10.0	Direct &
	Cittus Ave	Diego/ Caluans		PM	65.2	<u>F</u>	>100.0	<u>[14</u>	>10.0	79.3	দ্র	>100.0	[*	>10.0	Cumulative
•															
	<ol> <li>San Pasqual Valley Road (SR- 78) / Summit Drive</li> </ol>	County of San	MSSC	AM	>100.0	<u></u>	>100.0	<u>-</u>	>10.0	>100.0	1	>100.0	<u> </u>	>10.0	Direct &
		Liveo Caluans		PM	53.8	T-	>100.0	<u>-</u>	>10.0	63.1	H	>100.0	Ľ,	>10.0	Cumulative
11.	. San Pasqual Valley Rd (SR-78)	County of San	Signal	AM	34.0	Ö	44.6	Q	10.6	34.2	Ü	44.7	Q	10.5	Direct &
	Sali r'asquai ra/ Cioverdale ra	Diego/ Caltrans		PM	32.5	၁	78.3	E	45.8	32.6	Ü	76.9	3	44.3	Cumulative
12.	2. San Pasqual Valley Rd (SR-78) /	County of San	MSSC	AM	15.3	Ö	16.4	υ	1.1	15.6	Ü	16.8	ŭ	1.2	No
0.000	Catali I alb DWy	Diego/ Califalis		PM	13.6	В	14.6	В	1.0	13.9	В	15.0	В	1.1	
13.	3. San Pasqual Rd / Bear Vollar Dlang	City of	Signal	AM	15.9	В	18.2	В	2.3	16.3	В	18.7	В	2.4	No
	Dear valley Lawy	Escondino		PM	12.3	В	14.3	В	2.0	12.7	В	14.8	В	2.1	
14.	F. Via Rancho Pkwy /	City of	Signal	AM	20.2	ŭ	20.5	၁	0.3	20.3	ن	20.8	C	0.5	N <sub>O</sub>
	בינוסיטונים בינו	Escollatao		PM	26.7	၁	27.9	ŭ	1.2	27.4	Ú	28.8	Ö	1.4	
15.	i. Via Rancho Pkwy /	Caltrans e	Signal	AM	30.4	Ö	31.8	ပ	4.1	30.7	Ŋ	32.4	ပ	1.7	Š
	edinar cur cur			PM	40.8	D	49.6	Q	8.8	43.6	D	53.3	Д	6.7	
16.	5. Via Rancho Pkwy /	Caltrans e	Signal	AM	44.5	Q	51.1	D	9.9	45.9	Ω	53.9	Q	8	Ñ
	odniba do cr-r			PM	34.1	၁	35.1	Q	1.0	34.8	ပ	37.0	Q	2.2	

(CONTINUED ON NEXT PAGE)

Page 14



engineers

# TABLE A (CONTINUED)

# NEAR-TERM INTERSECTION OPERATIONS

Intersection	Jur.	Control Peak Type Hour	Peak Hour	Existing	ting	Exis	Existing + Project	ect	Existing + Cumulative Projects	ng + e Projects	Existin Proj	Existing + Cumulative Projects + Project	lative	Sig?
				Delay B LOS b		Delay LOS	ros	ν (	Delay	ros	Delay LOS	SOT	۷۷	
17. San Pasqual Rd/	City of	MSSC	AM	28.4	D	35.5	E	7.1	26.8	D	37.6	A	10.8	Direct &
ofetia Linda Dt / Kyan Df	Escondido		PM	20.8	၁	28.3	D	7.5	22.0	C	30.3	D	8.3	Cumulative
18. San Pasqual Rd /	City of	MSSC	AM	21.4	C	37.6	E	16.2	23.8	ပ	44.0	Э	20.2	Direct &
Sat Marian Marian	Sall Diego		PM	12.5	В	15.6	ပ	3.1	13.2	В	16.5	ပ	3.3	Cumulative

### Footnotes:

- a. Average delay expressed in seconds per vehicle.
  b. Level of Service.
  c. "\lambda" denotes the maries of the properties of the
- "A" denotes the project-induced increase in delay for intersections located within Caltrans' jurisdiction and in the City of San Diego and City of Escondido. "\Delta" denotes the **project-induced** increase in delay for signalized intersections and project traffic added to the critical movement for unsignalized intersections located in the County of San Diego. Project increases in delay or number of trips only shown for County intersection
- Ġ. ė.
- where LOS E or F operations are reported.

  MSSC Minor Street Stop Controlled intersection. Minor street left turn delay reported.

  The Via Rancho Parkway interchange is maintained by Caltrans. Therefore, LOS D operations are accepted.

FED CB F

FEDCBA

35.1 to 55.0 ≥ 80.1

55.1 to 80.0

10.1 to 20.0 20.1 to 35.0  $0.0 \le 10.0$ 

> 50.1

UNSIGNALIZED

SIGNALIZED

 $0.0 \le 10.0$ 10.1 to 15.0 15.1 to 25.0 25.1 to 35.0 35.1 to 50.0

Delay

Delay

## General Notes:

- For City of Escondido intersections also located within Caltrans jurisdiction, LOS D operations are accepted. DNE = Does not exist.
   NA - Not applicable.
   For City of Escondido int
   Bold typeface represents.
   Sig = Significant Impact?

  - **Bold** typeface represents a significant impact. Sig = Significant Impact? Direct and/or Cumulative.