

Exhibit E

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Traffic Division

August 4, 2022

Mr. Chris Boggs
Janus LLC
P.O. Box 6507
Salinas, California 93912

SUBJECT: 22900 FUJI LANE CANNABIS CULTIVATION FACILITY TRAFFIC ASSESSMENT,
MONTEREY COUNTY, CA
(RICK ENGINEERING COMPANY JOB NUMBER 19670)

Dear Mr. Boggs:

The following traffic assessment has been prepared in accordance with the *Monterey County Guide for the Preparation of Traffic Impact Studies* (March 28, 2014) and coordination with Monterey County staff. This traffic assessment evaluates the potential operational deficiencies and transportation improvements that may need to be considered in association with the proposed cannabis cultivation facility located at 22900 Fuji Lane in unincorporated Monterey County south of the City of Salinas, California. **Exhibit 1** following this letter illustrates the project vicinity map.

Project Description

The project proposes to replace 69,465 square-feet of existing greenhouses for cut flower operations with a proposed 519,629 square-foot cannabis cultivation facility that will include 485,174 square-feet of cultivation greenhouses and an additional 34,455 square-feet for ancillary uses that include drying, storage, processing, and distribution of the harvested cannabis. Access is proposed via an existing driveway for the project property. The existing project driveway would provide full access to and from the site. The project proposes to provide a total of 70 parking stalls including 3 ADA accessible parking stalls. **Exhibit 2** illustrates the project site plan.

The project site was included as one of the 45 cannabis cultivation sites in the approved *Final Multiple Cannabis Cultivation Facilities Traffic Impact Study* (Rick Engineering Company, June 12, 2020), but at the time the study was prepared (2019-2020), 149,981 square-feet of cannabis cultivation greenhouses were proposed based on the historical footprint of both existing and previous greenhouses on the project site.

Study Area and Analysis Scenarios

The study area includes the following intersections for the Level of Service (LOS) assessment:

1. Alisal Road/Fuji Lane (one-way stop-controlled)
2. Old Stage Road/Spence Road (one-way stop-controlled)
3. Fuji Lane/Project Driveway (one-way stop-controlled)

The following scenarios are evaluated in this traffic assessment:

- Existing Conditions (Year 2022 – using June 2019 traffic volumes)
- Near Term (Opening Year 2024) No Project Conditions
- Near Term (Opening Year 2024) Plus Project Conditions

A description of each above-listed analysis scenario is provided below:

- **Existing Conditions (Year 2022 – using June 2019 traffic volumes):** Analysis of the existing vehicular street network and traffic volumes.
- **Near Term Conditions (Opening Year 2024) Without Project:** Vehicular trips generated by the 45 cannabis cultivation sites and other approved and pending cumulative development projects are added to the existing traffic volumes to derive the Near Term (Opening Year 2024) baseline traffic volumes without the project. The near term cumulative development project trips added to the two study intersections are taken directly from the approved *Final Multiple Cannabis Cultivation Facilities Traffic Impact Study* (Rick Engineering Company, June 12, 2020). Because the project site was included as one of the 45 cannabis cultivation sites in the above-referenced study, trips from the previously proposed cannabis cultivation facility on the site are extracted from the near term cumulative development project trips.
- **Near Term Conditions (Opening Year 2024) With Project:** Vehicular trips generated by the proposed project are added to the Near Term (Opening Year 2024) baseline traffic volumes to derive the Near Term (Opening Year 2024) traffic volumes with the proposed project.

Existing Transportation Conditions

The following is a description of the roadways within the study area:

Fuji Lane is built as a two-lane undivided roadway extending south from Alisal Road and terminating approximately six-tenths of a mile south of Alisal Road. Fuji Lane is not a classified roadway in the County of Monterey General Plan Circulation Element. The roadway has no bike lanes, street parking or bus stops and is used primarily for agricultural traffic within the project area. This roadway provides access to driveways that serve agricultural uses.

Alisal Road is classified as a Major Road in the County of Monterey General Plan. It is currently built as a two-lane, undivided roadway that runs northwest-southeast, parallel to US 101. The roadway has no bike lanes, street parking or bus stops and is used primarily for agricultural traffic within the project area. There is no posted speed limit within the project area between west of Fuji Lane and Old Stage Road. This roadway provides access to driveways that serve agricultural uses.

Old Stage Road is classified as a Major Road in the County of Monterey General Plan. It is currently built as a two-lane, undivided roadway that runs northwest-southeast, parallel to US 101. The roadway has no bike lanes, street parking or bus stops and is used primarily for agricultural traffic within the project area. This roadway provides access to driveways that serve agricultural uses.

Alisal Road/Fuji Lane is currently constructed as a three-legged, one-way stop controlled intersection. The uncontrolled eastbound Alisal Road approach currently provides one shared through/right-turn lane. The uncontrolled westbound Alisal Road approach currently provides one shared left-turn/through lane. The stop-controlled northbound Fuji Lane approach currently provides one shared left-turn/right-turn lane.

Old Stage Road/Spence Road is currently constructed as a four-legged, two-way stop controlled intersection; however, the north leg of intersection is unpaved (Spence Road) and no stop sign is currently provided for the southbound approach of the intersection. The uncontrolled eastbound Old Stage Road approach currently provides one shared left-turn/through/right-turn lane. The uncontrolled westbound Old Stage Road approach currently provides one shared left-turn/through/right-turn lane. The stop-controlled northbound Spence Road approach currently provides one shared left-turn/through/right-turn lane. The yield-controlled southbound Spence Road approach currently provides one shared left-turn/through/right-turn lane.

The existing intersection lane configurations and control types at the study intersections are illustrated in **Exhibit 3**.

Existing Traffic Volumes

Intersection turning movement counts that were collected on June 4, 2019 at the US 101/Potter Road and Old Stage Road/Potter Road intersections for the approved *Final Multiple Cannabis Cultivation Facilities Traffic Impact Study* (Rick Engineering Company, June 12, 2020) were used as the existing conditions traffic volumes for the study intersections.

The existing traffic volumes are illustrated in **Exhibit 4**. The intersection turning movement counts are provided in **Attachment A**.

Project Trip Generation

The trip generation for the proposed project was developed based on the trip generation rates that were developed for existing cut flower operations and the 45 cannabis cultivation sites in the approved *Final Multiple Cannabis Cultivation Facilities Traffic Impact Study* (Rick Engineering Company, June 12, 2020). The cannabis cultivation trip generation rate that was developed for the 45 cannabis cultivation sites was derived from actual traffic counts that were collected at two similar representative sites during both harvest season and non-harvest season. The trip generation rate was based on only the cultivation square-footage and does not include the square-footage of ancillary buildings used for drying, storage, processing or distribution of the cannabis products. The trip generation rate of the existing cut flower operations was also derived from actual traffic counts that were collected at a similar representative site. The trip generation of the existing greenhouses was extracted from the cannabis cultivation trip generation to derive the net increase in trip generation with the proposed project.

Table 1 shows the trip generation calculations for the proposed project. **Attachment B** contains the trip generation rates from the approved *Final Multiple Cannabis Cultivation Facilities Traffic Impact Study* (Rick Engineering Company, June 12, 2020).

Table 1 shows that the proposed project is anticipated to generate a net increase of 455 trips per day, with a net increase of 55 trips during the AM peak hour (44 inbound/11 outbound) and a net increase of 65 trips during the PM peak hour (16 inbound/49 outbound).

TABLE 1
 PROJECT TRIP GENERATION

LAND USE	SIZE	RATE	ADT	AM PEAK HOUR						PM PEAK HOUR					
				RATE	SPLIT		VOLUME			RATE	SPLIT		VOLUME		
					IN	OUT	TOTAL	IN	OUT		IN	OUT	TOTAL	IN	OUT
PROPOSED PROJECT TRIP GENERATION															
Cannabis Cultivation Facility (Proposed Use)	485.174* KSF	1.05	509	0.12	80%	20%	58	46	12	0.14	25%	75%	68	17	51
TRIP GENERATION OF EXISTING USE															
Cut Flower Operations (Existing Greenhouses)	69.465 KSF	0.78	-54	0.05	80%	20%	-3	-2	-1	0.05	25%	75%	-3	-1	-2
NET DIFFERENCE IN TRIPS (PROPOSED - EXISTING):				455			55	44	11				65	16	49

Source: *Final Multiple Cannabis Cultivation Facilities Traffic Impact Study* (Rick Engineering Company, June 12, 2020)

*Total cultivation square-footage only. The facility includes 34,455 square-feet for ancillary uses such as drying, storage, processing and distribution of the cannabis products, which were not included in the trip generation calculations.

Project Trip Distribution and Assignment

Trips were manually distributed from the project site based on the trip distribution that was developed for the 45 cannabis cultivation sites in the approved *Final Multiple Cannabis Cultivation Facilities Traffic Impact Study* (Rick Engineering Company, June 12, 2020). The project trip distribution is illustrated in **Exhibit 5**.

Project trips were assigned to the study area roadways based on the project trip generation and the trip distribution percentages shown in Exhibit 5. The project trip assignment is shown in **Exhibit 6**.

Near-Term Conditions/Traffic Volumes

For the near-term conditions without project, this assessment assumes that the traffic mitigation measures from the approved *Final Multiple Cannabis Cultivation Facilities Traffic Impact Study* (Rick Engineering Company, June 12, 2020) have been implemented. Specifically, the following mitigation measure at the Old Stage Road/Spence Road intersection is assumed to be constructed by project opening year.

- *Widen Spence Road to provide a separate right-turn lane and a shared through-left lane for the northbound approach*

It is important to note that the Old Stage Road/Spence Road intersection improvement is funded by the applicants of the 45 cannabis cultivation sites included in the adopted IS/MND. This intersection improvement has been designed, and review/approval of the encroachment permit (encroachment permit # 21EP0208) is currently in process with Monterey County. Based on an update from Monterey County Public Works staff, the encroachment permit is anticipated to be issued by Fall 2022. Construction of the intersection improvement is expected to begin immediately after issuance of the encroachment permit and is anticipated to take approximately 4 weeks to complete. **Exhibit 7** shows the near-term without project transportation conditions.

Vehicular trips generated by the 45 cannabis cultivation sites and other approved and pending cumulative development projects were added to the existing traffic volumes to derive the Near Term (Opening Year 2024) baseline traffic volumes without the project, which were taken directly from the approved *Final Multiple Cannabis Cultivation Facilities Traffic Impact Study* (Rick Engineering Company, June 12, 2020). Because the project site was included as one of the 45 cannabis cultivation sites in the above-referenced study, trips from the previously proposed cannabis cultivation facility on the site were extracted from the near term cumulative development project trips.

Project trips from the pending 22745 Fuji Lane cannabis cultivation project, which includes 217,460 square feet of cultivation greenhouses, were also added to the existing traffic volumes at the study intersections to derive the Near Term (Opening Year 2024) baseline traffic volumes without the project.

Exhibit 8 shows the Near Term (Opening Year 2024) traffic volumes without the project.

The Near Term (Opening Year 2024) traffic volumes with the proposed project were developed by adding the project trips to the Near Term (Opening Year 2024) Without Project traffic volumes. The Near Term (Opening Year 2024) plus Project traffic volumes are illustrated in **Exhibit 9**.

Intersection Level of Service Operations Analysis

Levels of service (LOS) were evaluated at the study intersections for each of the analysis scenarios during the AM and PM peak hours. The AM intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 7:00 AM and 9:00 AM. The PM intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 4:00 PM and 6:00 PM.

Intersection operations were analyzed utilizing the methodologies outlined in the *Highway Capacity Manual 6th Edition (HCM 6)*. **Table 2** displays the LOS analysis results for the study intersections for each analysis scenario during the AM and PM peak hours. **Attachment C** contains the intersection LOS worksheets.

As shown in Table 2, the study intersections currently operate at an acceptable LOS D or better during the peak hours. Table 2 also shows that the Old Stage Road/Spence Road is forecast to operate at LOS D or better during the peak hours for both Near Term conditions without the project, and Near Term conditions with the project.

The Alisal Road/Fuji Lane intersection currently operates at an acceptable LOS C or better during the peak hours and will continue operating at LOS C or better under Near Term conditions either without or with the project.

The Fuji Lane/Project Driveway intersection is forecast to operate at an acceptable LOS A during the peak hours under Near Term conditions with the project.

Conclusions/Recommendations

The findings of this traffic assessment show that the proposed project is anticipated to generate a net increase of approximately 455 trips per day, with a net increase of 55 trips during the AM peak hour (44 inbound/11 outbound) and a net increase of 65 trips during the PM peak hour (16 inbound/49 outbound) on a typical weekday.

The traffic analysis results also show all project study intersections to operate at acceptable levels of services (LOS D or better), both with and without the proposed project. Therefore, no traffic operational impacts are anticipated with the development of the proposed project.

Should you have any questions, please contact either David Mizell or me at (619) 291-0707.

Sincerely,
RICK ENGINEERING COMPANY

Mark Jugar, P.E., T.E., P.T.O.E.
Associate

TABLE 2
 INTERSECTION OPERATIONS SUMMARY

Intersection	Control Type	DIR.	EXISTING				NEAR TERM				NEAR TERM+PROJECT			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay ¹	LOS										
1. Alisal Road / Fuji Lane	OWSC	NBL	10.6	B	15.4	C	11.2	B	17.4	C	11.8	B	19.1	C
2. Old Stage Road/Spence Road	TWSC	NBL	12.9	B	33.4	D	12.7	B	29.1	D	13.0	B	30.0	D
3. Fuji Lane/Project Driveway	OWSC	WBR	-	-	-	-	-	-	-	-	8.4	A	8.8	A

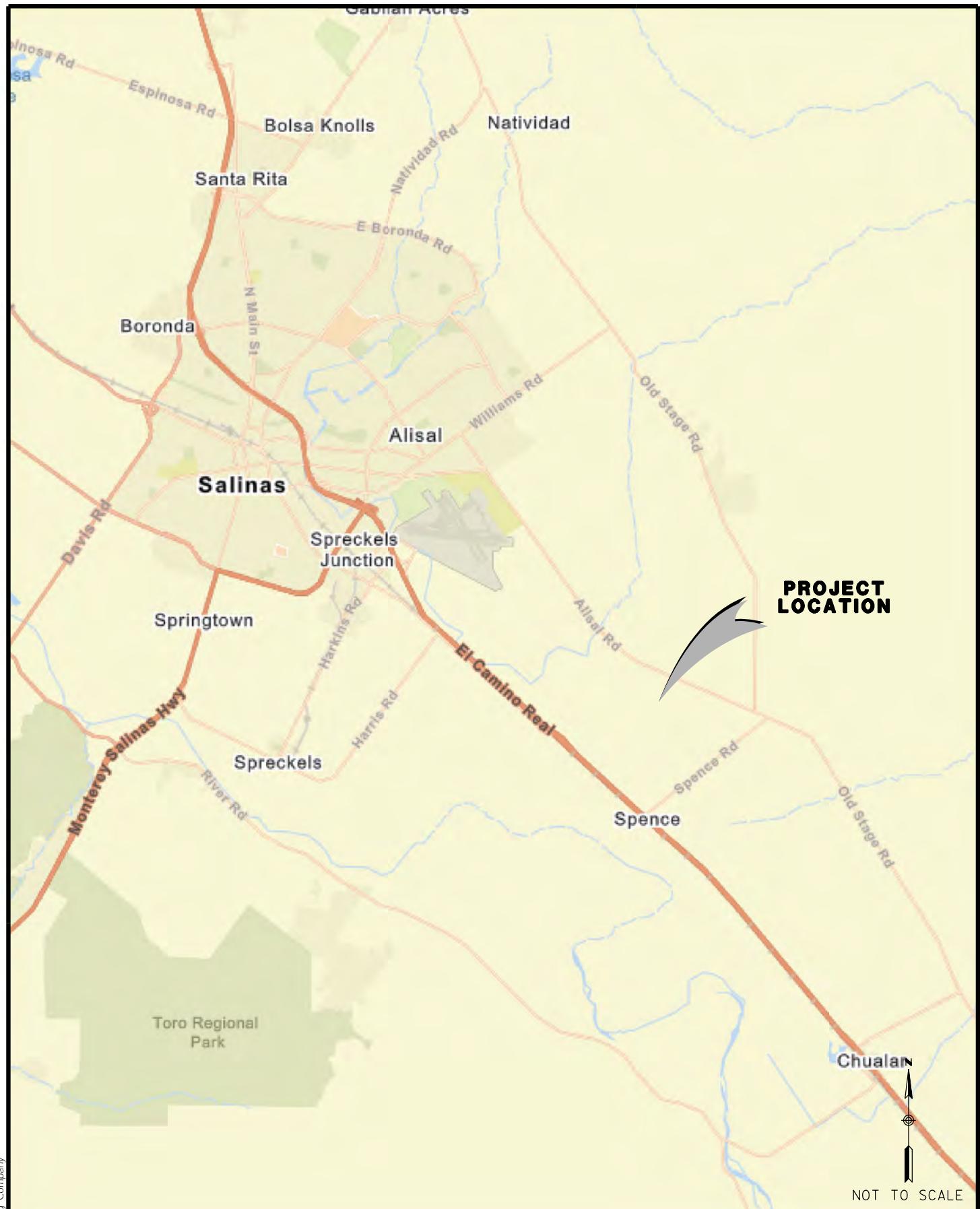
FOOTNOTES:

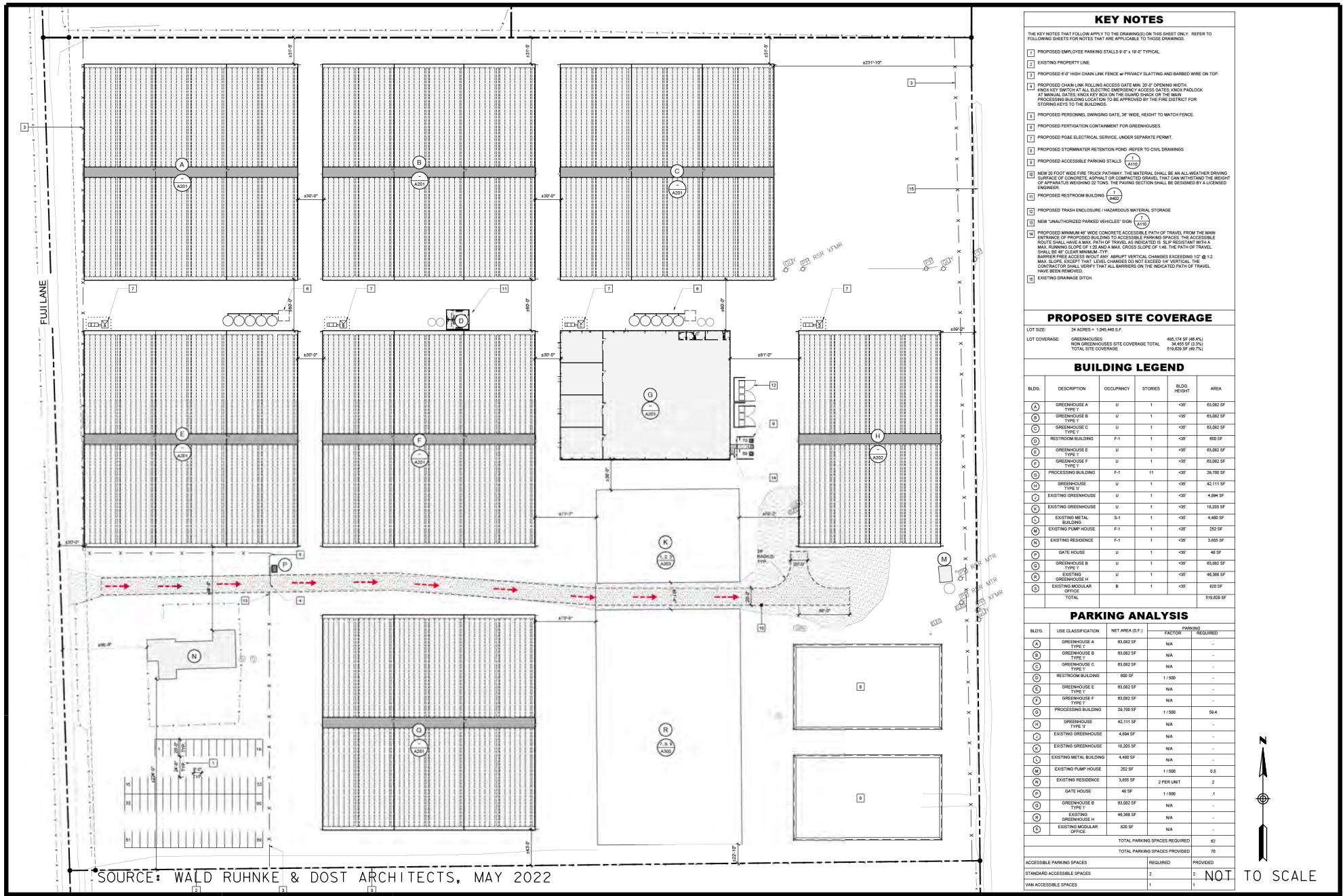
Deficient LOS and delay indicated in **bold**.

OWSC = One-Way Stop Control

1. Delay is measured in seconds per vehicle. Delay and LOS being reported for the OWSC control type are taken from the movement with the worst delay.

Results calculated utilizing the methodologies described in Chapters 18, 19, and 20 of 6th edition of the Highway Capacity Manual (HCM 6).





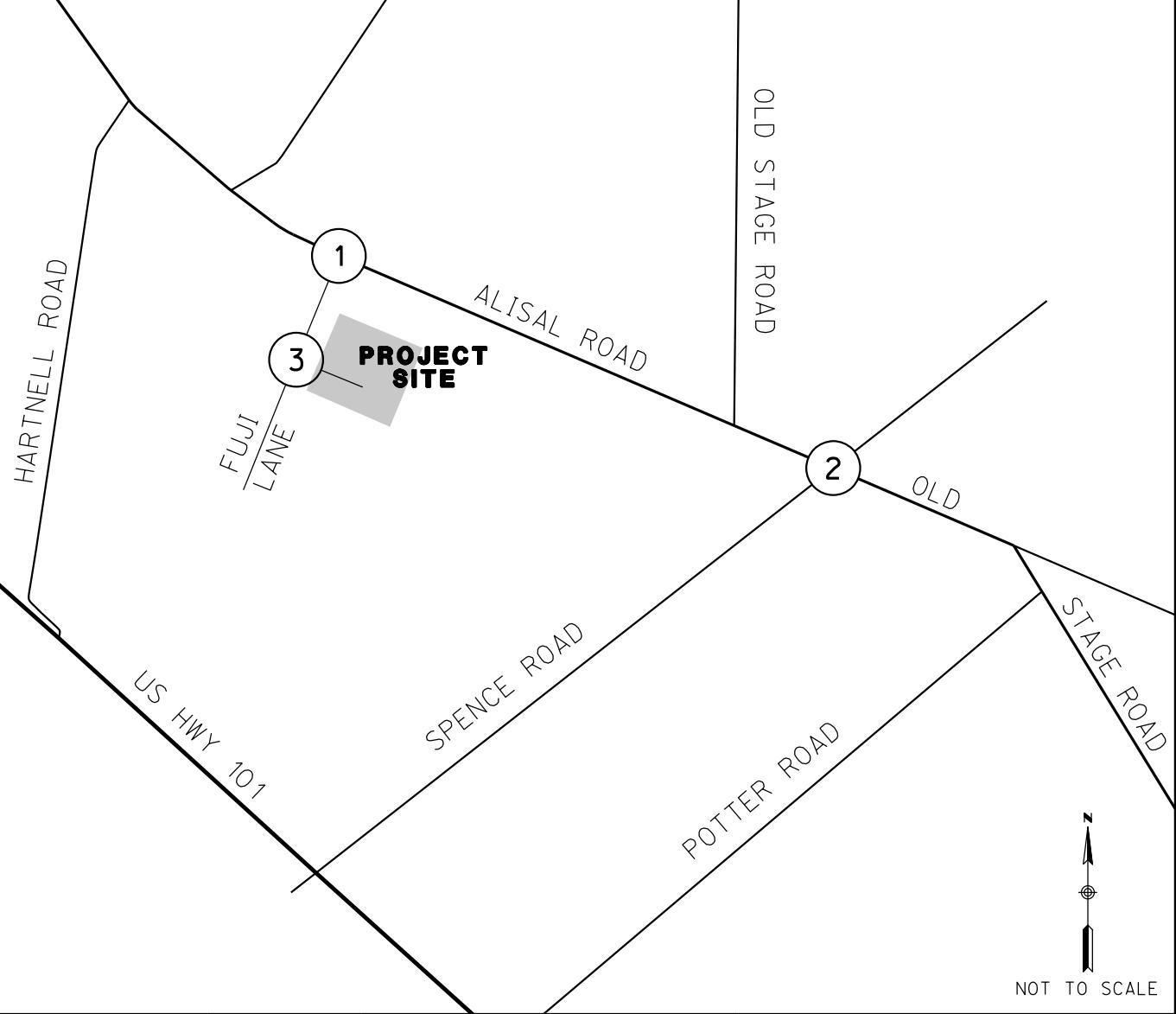
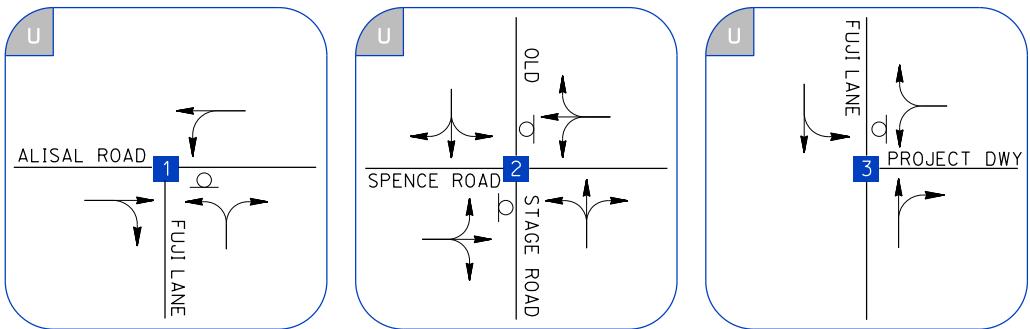
SOURCE: WALD RUHNKE & DOST ARCHITECTS, MAY 2022



EXHIBIT 2

PROJECT SITE PLAN

22900 FUJI LANE TRAFFIC ASSESSMENT



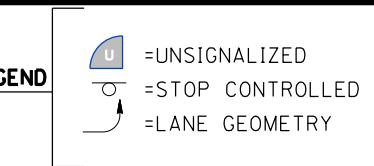
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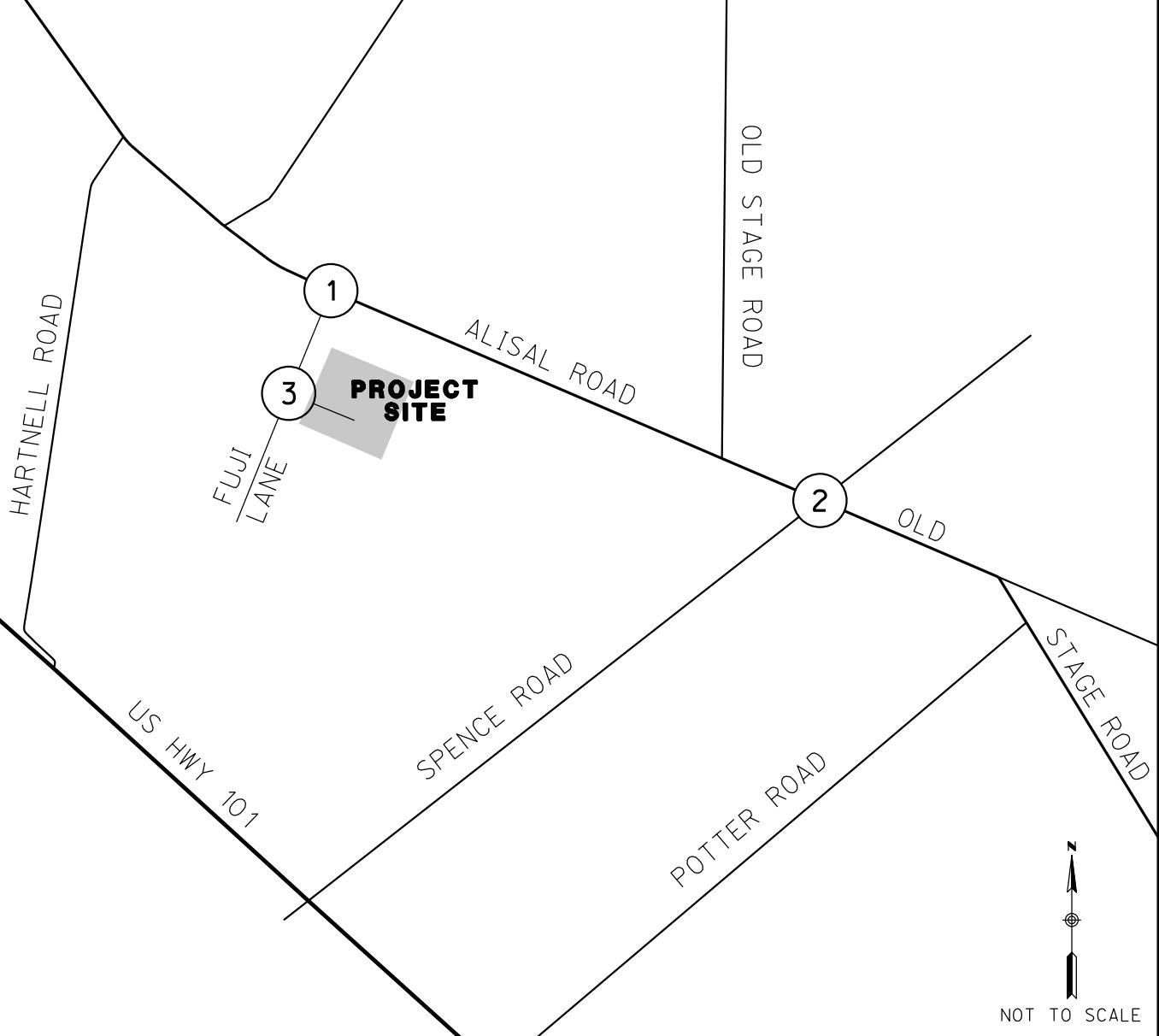
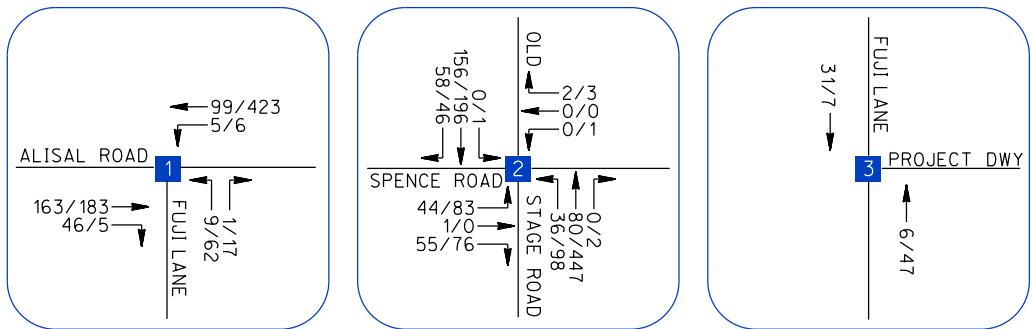
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EXHIBIT 3

EXISTING TRANSPORTATION CONDITIONS





Engineering Company

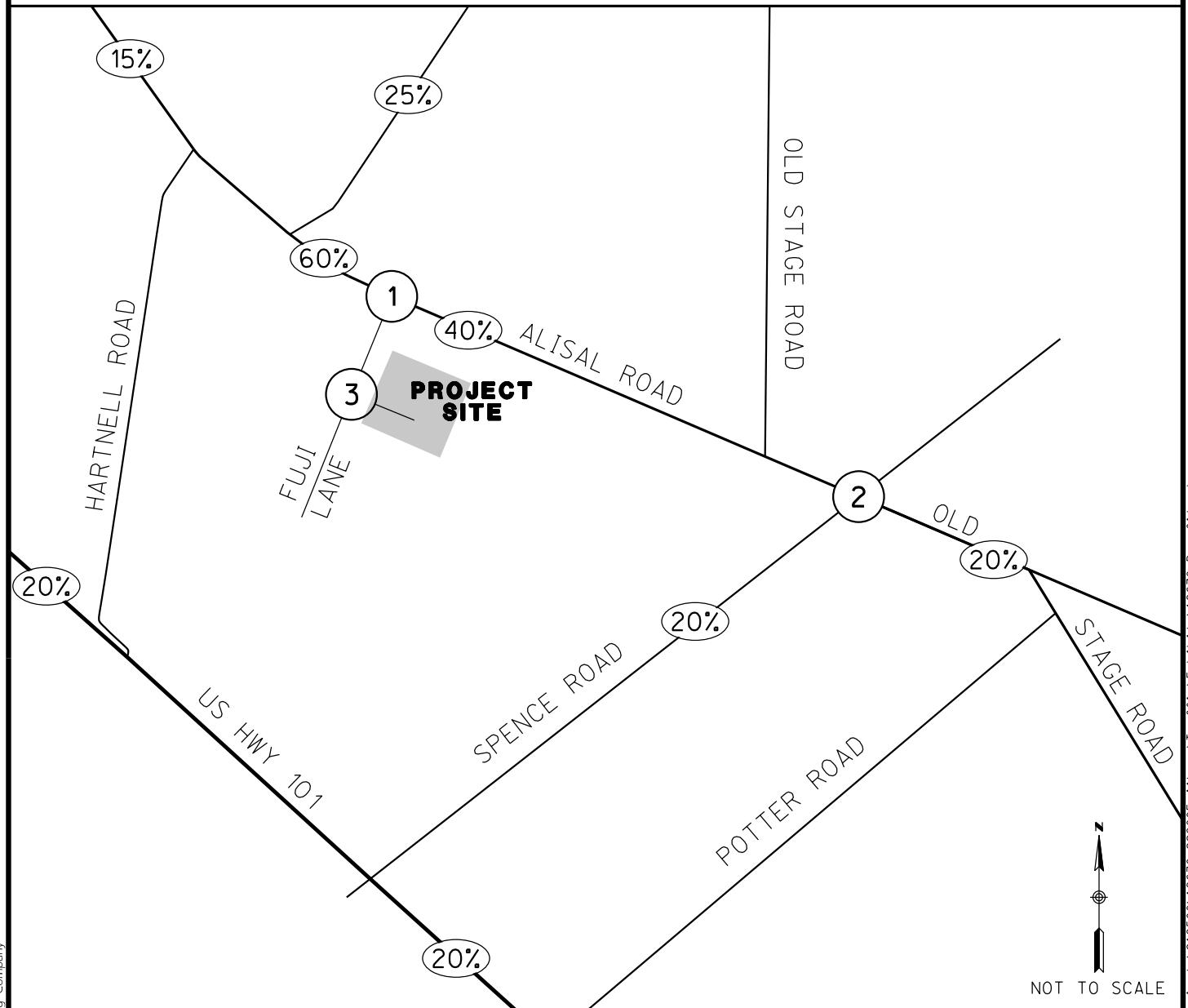
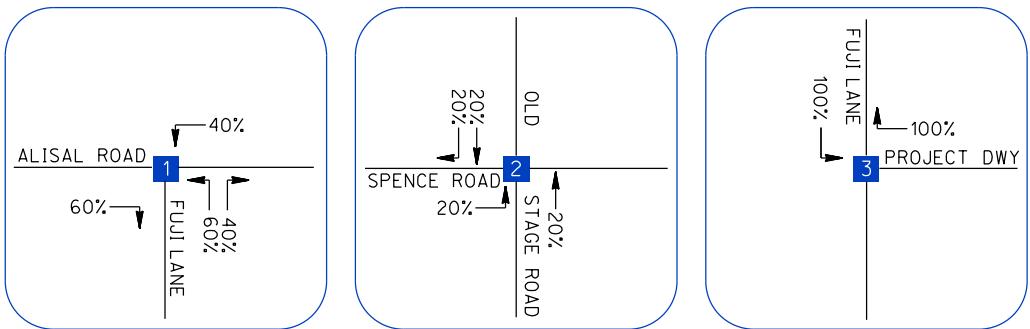
RICK ENGINEERING COMPANY

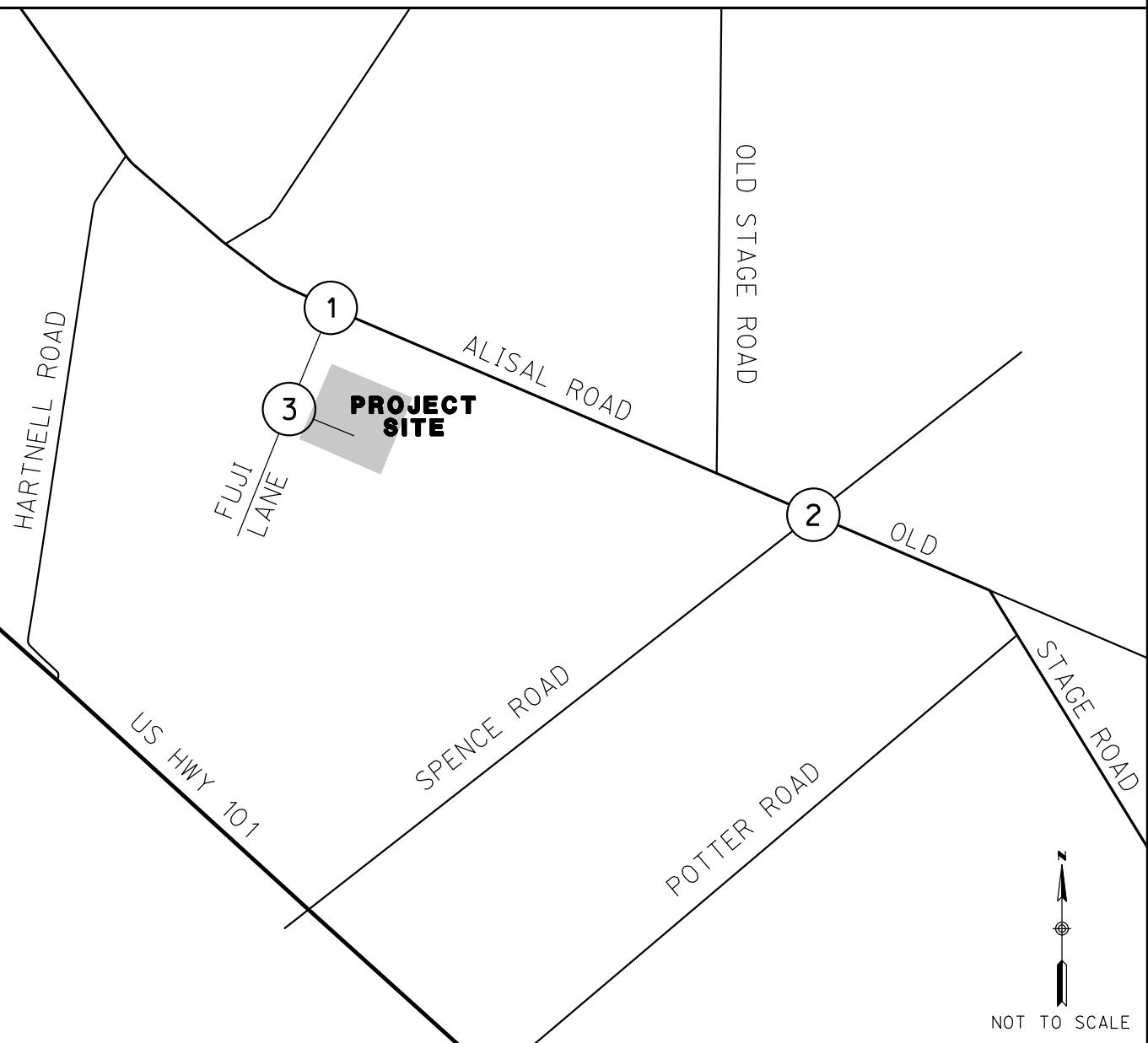
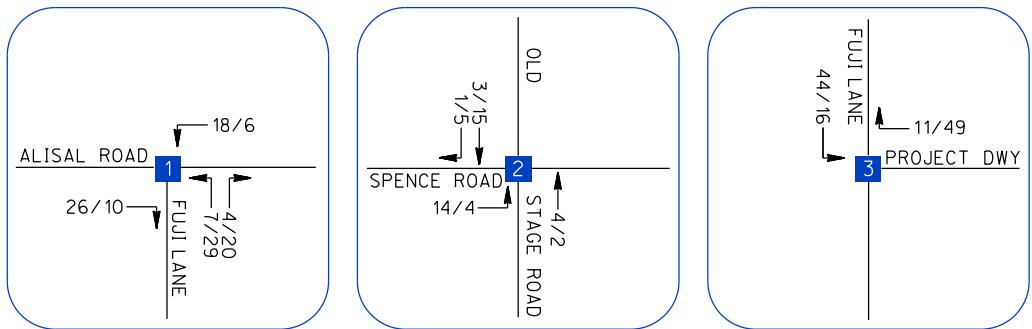
EXHIBIT 4

EXISTING TRAFFIC VOLUMES

22900 FUJI LANE TRAFFIC ASSESSMENT

LEGEND AM/PM=AM/PM PEAK HOUR VOLUMES

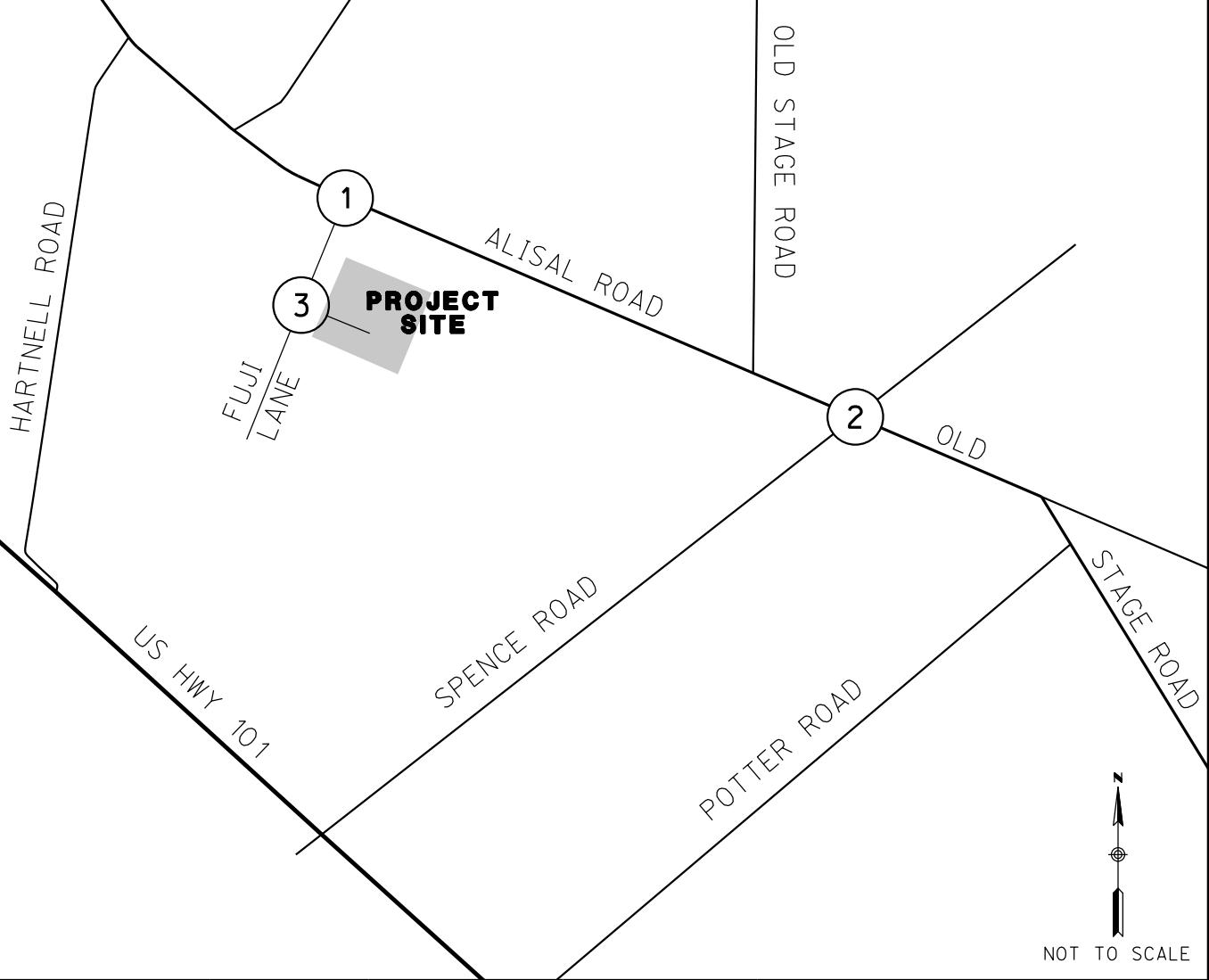
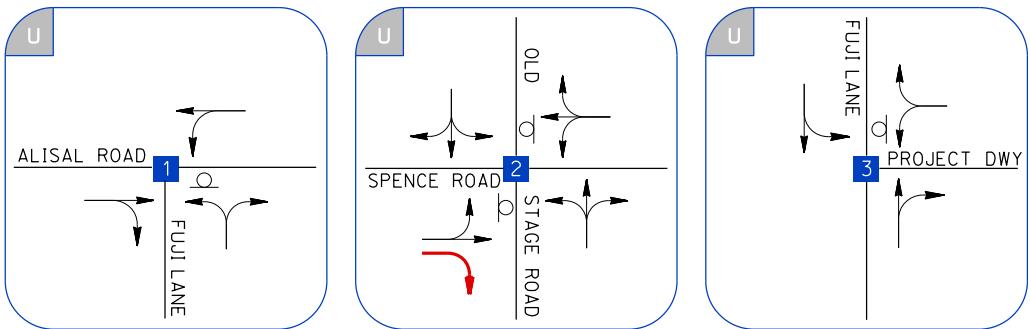


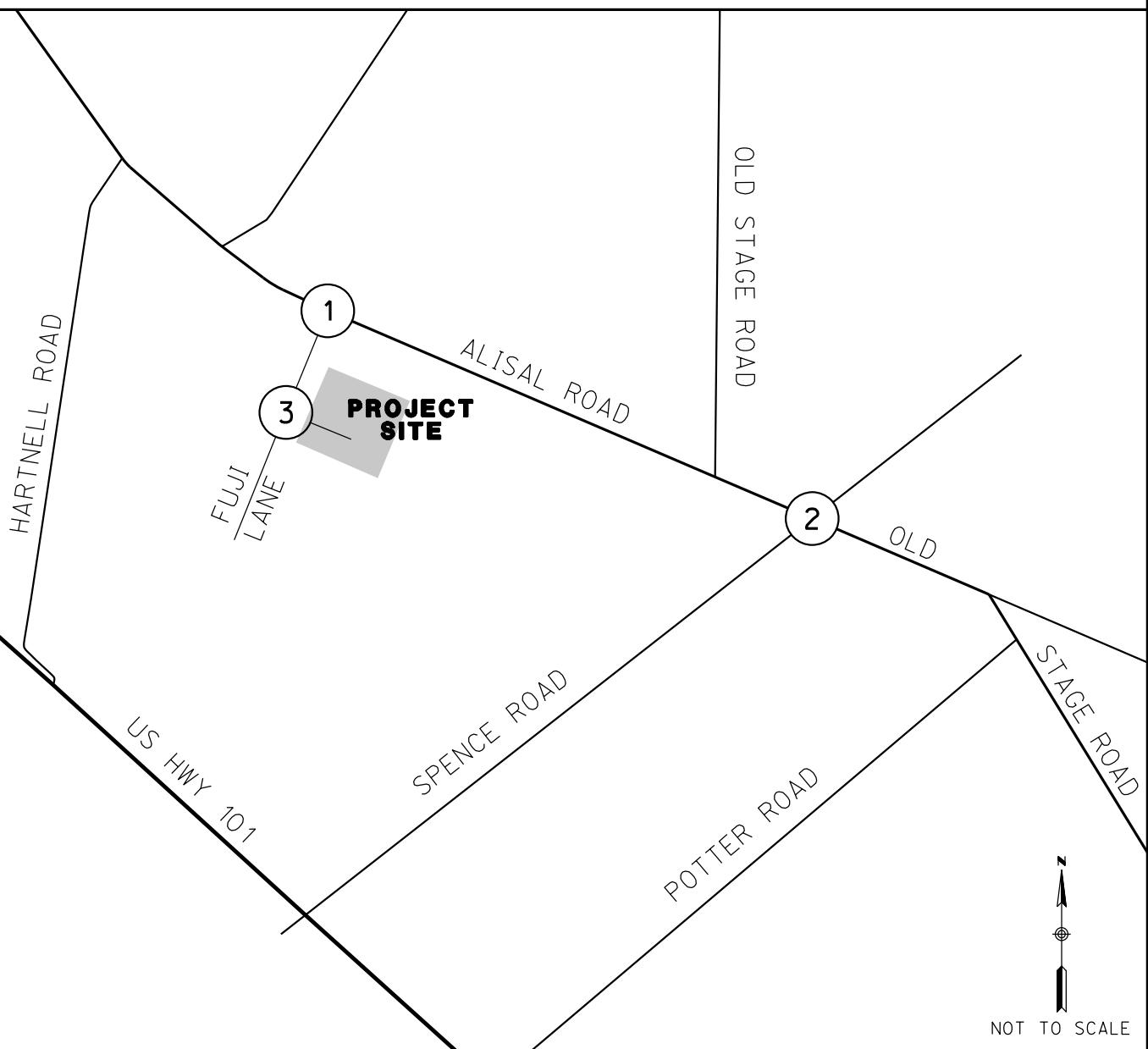
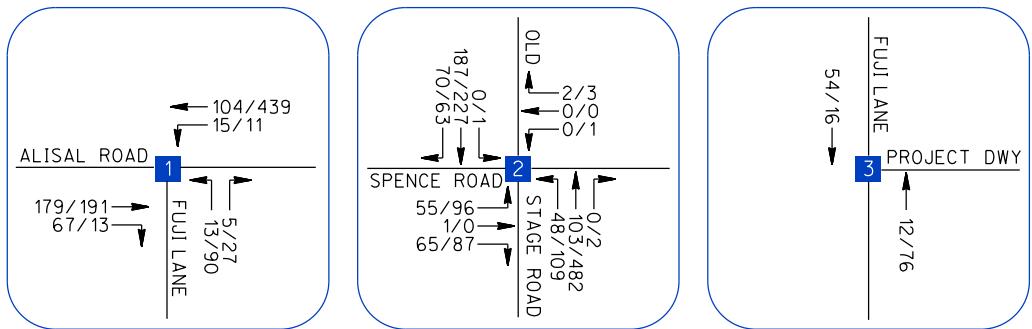


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LEGEND AM/PM=AM/PM PEAK HOUR VOLUMES

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Rick Engineering Company

RICK ENGINEERING COMPANY

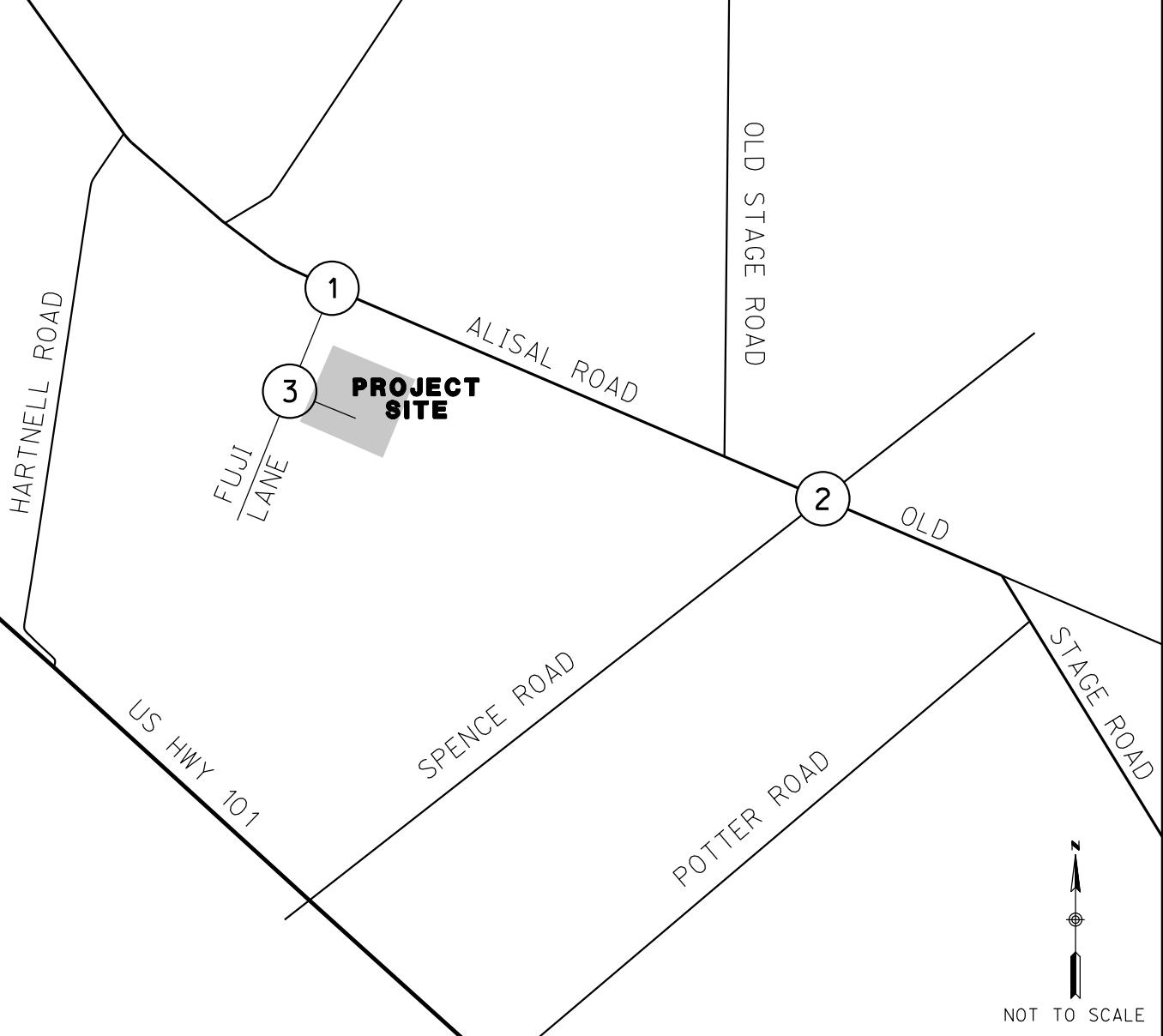
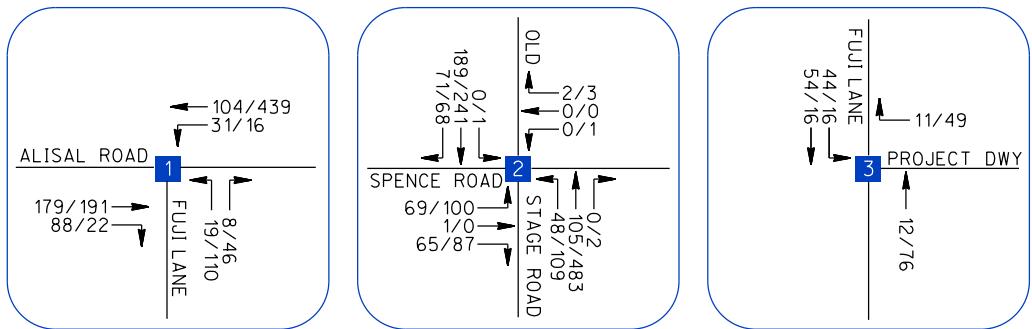
EXHIBIT 8

NEAR TERM TRAFFIC VOLUMES

22900 FUJI LANE TRAFFIC ASSESSMENT

LEGEND AM/PM=AM/PM PEAK HOUR VOLUMES

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Rick Engineering Company

RICK ENGINEERING COMPANY

EXHIBIT 9

NEAR TERM WITH PROJECT TRAFFIC VOLUMES

LEGEND AM/PM=AM/PM PEAK HOUR VOLUMES

ATTACHMENT A



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Rick Engineering Company
5620 Friars Road
San Diego, CA 92110

LOCATION Alisal Rd @ Fuji Ln

LATITUDE 36.6388

COUNTY Monterey

LONGITUDE -121.5657

COLLECTION DATE Thursday, June 6, 2019

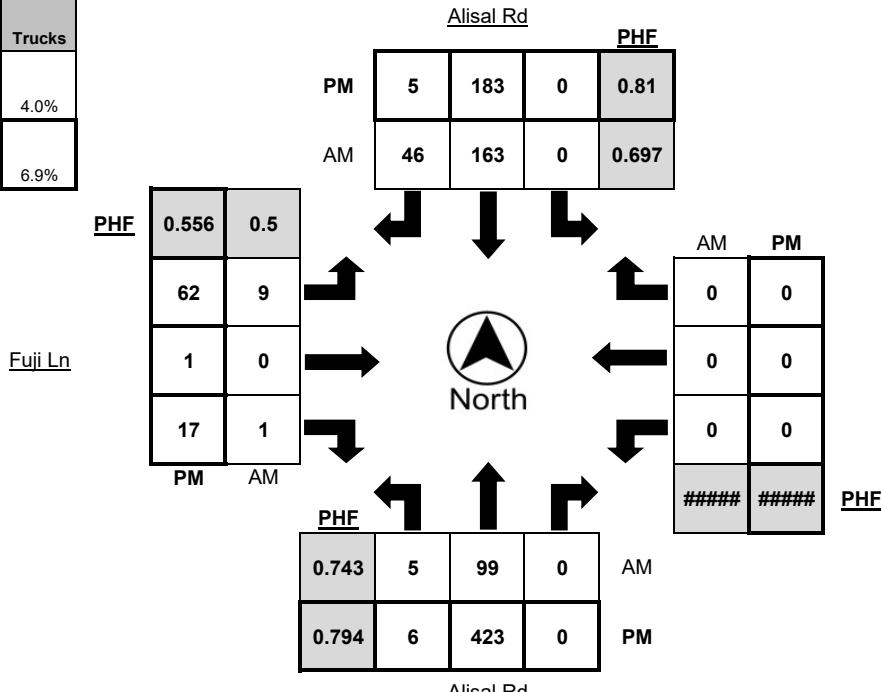
WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	35	0	2	0	48	13	1	5	0	0	1	0	0	0	0
7:15 AM - 7:30 AM	2	19	0	1	0	31	4	1	1	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	2	25	0	2	0	27	11	2	2	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	1	20	0	2	0	57	18	1	1	0	1	0	0	0	0	0
8:00 AM - 8:15 AM	1	21	0	2	0	35	8	7	3	0	1	1	0	0	0	0
8:15 AM - 8:30 AM	0	13	0	0	0	34	4	5	1	0	1	1	0	0	0	0
8:30 AM - 8:45 AM	0	20	0	2	0	18	4	1	1	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	15	0	1	0	24	4	1	2	0	1	0	0	0	0	0
TOTAL	6	168	0	12	0	274	66	19	16	0	4	3	0	0	0	0

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	1	91	0	6	0	41	2	12	19	0	6	0	0	0	0	0
4:15 PM - 4:30 PM	0	88	0	3	0	58	0	7	12	1	3	0	0	0	0	0
4:30 PM - 4:45 PM	0	135	0	0	0	37	2	5	28	0	8	0	0	0	0	0
4:45 PM - 5:00 PM	5	109	0	5	0	47	1	10	3	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	71	0	1	0	53	1	6	8	0	3	2	0	0	0	0
5:15 PM - 5:30 PM	0	78	0	4	0	27	0	7	9	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	36	0	1	0	31	1	5	1	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	34	0	0	0	31	1	7	4	0	0	0	0	0	0	0
TOTAL	6	642	0	20	0	325	8	59	84	1	20	2	0	0	0	0

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 8:00 AM	5	99	0	7	0	163	46	5	9	0	1	1	0	0	0	0
4:00 PM - 5:00 PM	6	423	0	14	0	183	5	34	62	1	17	0	0	0	0	0

	PHF	Trucks
AM	0.800	4.0%
PM	0.830	6.9%





Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230
800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Rick Engineering Company
5620 Friars Road
San Diego, CA 92110

LOCATION Old Stage Rd @ Spence Rd

LATITUDE 36.6299

COUNTY Monterey

LONGITUDE -121.5399

COLLECTION DATE Thursday, June 6, 2019

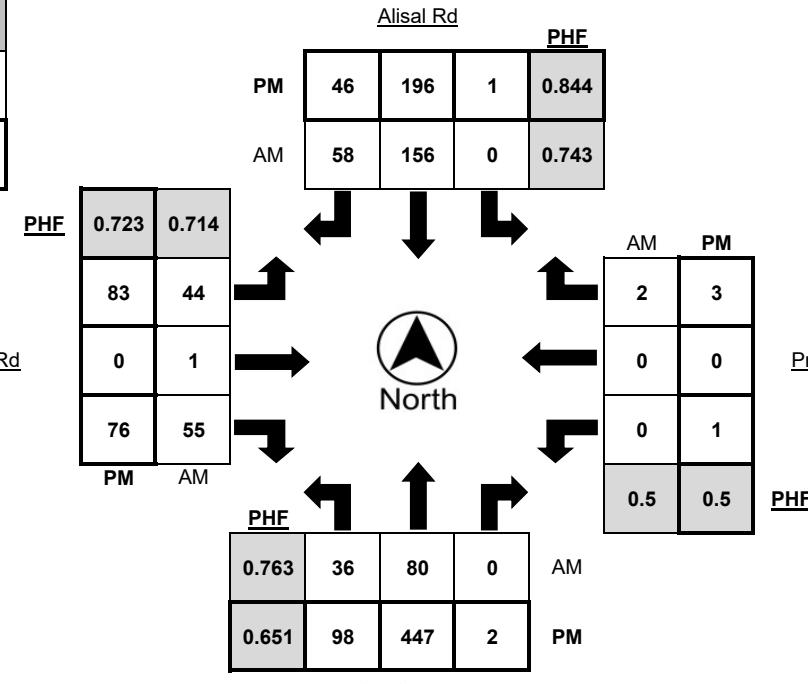
WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	3	30	1	4	0	42	18	11	5	0	14	3	0	0	0	0
7:15 AM - 7:30 AM	7	24	0	5	0	33	15	5	8	0	8	1	0	0	0	0
7:30 AM - 7:45 AM	15	23	0	4	0	28	9	4	12	0	12	3	0	0	0	0
7:45 AM - 8:00 AM	5	16	0	6	0	55	17	6	12	0	13	6	0	0	1	0
8:00 AM - 8:15 AM	9	17	0	5	0	40	17	10	12	1	22	3	0	0	1	1
8:15 AM - 8:30 AM	14	8	0	6	0	26	10	6	6	0	13	2	0	0	0	0
8:30 AM - 8:45 AM	9	21	0	8	0	17	5	4	4	0	16	3	0	0	0	0
8:45 AM - 9:00 AM	11	13	0	4	0	21	10	5	11	0	4	3	0	0	0	0
TOTAL	73	152	1	42	0	262	101	51	70	1	102	24	0	0	2	1

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	18	79	0	8	0	44	13	11	26	0	12	5	0	0	0	0
4:15 PM - 4:30 PM	22	81	0	7	0	59	13	12	17	0	13	2	0	0	1	0
4:30 PM - 4:45 PM	33	176	1	3	1	47	11	10	16	0	20	3	0	0	1	0
4:45 PM - 5:00 PM	25	111	1	7	0	46	9	11	24	0	31	5	1	0	1	0
5:00 PM - 5:15 PM	20	65	0	9	0	48	13	13	19	1	14	2	0	1	0	0
5:15 PM - 5:30 PM	21	95	2	6	1	38	11	9	17	0	15	2	2	0	1	0
5:30 PM - 5:45 PM	15	40	0	4	0	29	7	8	12	0	10	0	0	0	0	0
5:45 PM - 6:00 PM	12	25	1	3	0	37	9	7	15	0	8	4	1	0	0	0
TOTAL	166	672	5	47	2	348	86	81	146	1	123	23	4	1	4	0

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	36	80	0	20	0	156	58	25	44	1	55	13	0	0	2	1
4:00 PM - 5:00 PM	98	447	2	25	1	196	46	44	83	0	76	15	1	0	3	0

	PHF	Trucks
AM	0.908	13.7%
PM	0.779	8.8%



ATTACHMENT B

EXISTING OPERATIONS

Since 29 of the 45 project sites were operating with cannabis cultivation facilities when the existing traffic counts were collected in June 2019, the trips for these 29 sites were subtracted from the project area intersections and all the sites were assumed to operate as cut flower operation sites to reflect an “existing baseline without project” condition. These cannabis cultivation trips and cut flower sites were estimated by utilizing trip rates from existing similar operating facilities in the area. These project traffic generation trip rates will be described later in the report.

Exhibit 4A and Exhibit 4B show the adjusted existing volumes for the baseline analysis.

Table 1 shows that all the project study signalized intersections to currently operate at LOS D or better during the AM and PM peak hours.

Table 1 also shows that all the critical movements of the project area unsignalized intersections to currently operate at LOS D or better during the AM and PM peak hours with the exception of:

- US 101/Hartnell Road (SB left – LOS E and LOS F, AM and PM peak)
- US 101/Spence Road (WB left and EB left – LOS F, AM and PM peak)
- US 101/Potter Road (WB right – LOS F, AM and PM peak)

Table 2 shows that all the County roadway segments are currently operating at LOS B or better.

Table 3 shows that all the project area US 101 freeway segments to operate at LOS D or better during the AM and PM peak hours.

PROJECT TRAFFIC GENERATION

Since ITE (Institute of Transportation Engineer)’s *Trip Generation* publication, does not have any published trip generation rates for cannabis cultivation sites or similar type facilities, the traffic generation for the cannabis cultivation sites were estimated utilizing a derived trip rate based on actual traffic counts collected at two similar representative sites within the County during harvest season, which is 15 days out of the calendar year, and non-harvest season. The traffic data was collected at the representative sites’ access driveways in April 2019, May 2019 and February 2020 on a daily basis (ADT) and during the AM (7-9) and PM (4-6) peak periods. Taking a weighted average of the two sites’ trip rates, the cannabis cultivation sites are estimated to generate 1.05 ADT per 1,000 sf of cultivation square feet, 0.12 AM peak hour trips per 1,000 sf of cultivation square feet and 0.14 PM peak hour trips per 1,000 sf of cultivation square feet. In addition, traffic data from an existing cut flower operation site was also collected to be accounted for in the analysis. This resulted in a trip rate of 0.78 ADT per 1,000 sf of cultivation square feet, 0.05 AM peak hour trips per 1,000 sf of cultivation square feet and 0.05 PM peak hour trips per 1,000 sf of cultivation square feet. **Appendix D** contains the traffic counts and trip generation calculations for the representative sites.

Based on the above trip rates, the traffic generation for each of the cannabis cultivation sites were calculated and summarized in **Table 4** and **Table 5**. It should be noted that the trips summarized, assumes the net additional trips the site would generate assuming the sites were operating as cut flower operations. This is calculated based on the difference between the

cannabis cultivation site trip rates and the cut flower operation trip rates. (0.27 ADT per 1,000 sf of cultivation square feet, 0.07 AM peak hour trips per 1,000 sf of cultivation square feet and 0.09 PM peak hour trips per 1,000 sf of cultivation square feet). **Table 4** shows the near-term project traffic generation for the 45 sites. The total near-term traffic generation for all the sites equates to 2,627 ADT with 641 trips during the AM Peak (513 inbound/128 outbound) and 801 (200 inbound/601 outbound) during the PM Peak. Several of the cultivation sites have anticipated expansion areas that are considered as the long-term buildout in the cumulative scenario. **Table 5** shows the long-term project traffic generation for the 45 sites. The total long-term traffic generation for all the sites equates to 2,759 ADT with 683 trips during the AM Peak (547 inbound/137 outbound) and 845 (211 inbound/634 outbound) during the PM Peak.

To better illustrate the difference in trips between cannabis cultivation rates and cut flower rates, **Table 6** shows the total trips all sites would generate for cannabis cultivation operations and the total trips all sites would generate for cut flower operations along with the net total trips.

TRIP DISTRIBUTION/ASSIGNMENT

The site traffic distribution was estimated based on the sites' proximity to US 101, the nearby major roadways, existing local traffic patterns and existing traffic counts at the project area intersections. **Appendix E** summarizes the project traffic distribution percentages utilized in the analysis. **Exhibit 5A and Exhibit 5B** shows near-term project trip assignment. These project traffic volumes were then assigned to the existing project area intersections. **Exhibit 6A and Exhibit 6B** show the existing + project traffic volumes.

EXISTING + PROJECT OPERATIONS

Table 7 shows that all the project study signalized intersections to continue to operate at LOS D.

Table 7 also shows that all the critical movements of the project area unsignalized intersections to continue to operate at LOS D or better during the AM and PM peak hours with the exception of:

- Old Stage Road/Spence Road (EB left – LOS E, PM peak)
- US 101/Hartnell Road (WB left and SB left – LOS F, AM and PM peak)
- US 101/Spence Road (WB left and EB left – LOS F, AM and PM peak)
- US 101/Potter Road (WB right and SB left – LOS F, AM peak, WB right – LOS F, PM peak)

Table 8 shows that all the County roadway segments continue to operate at LOS B or better.

Table 9 shows that all the project area US 101 freeway segments to continue to operate at LOS D or better during the AM and PM peak hours.

CUMULATIVE (YEAR 2040) TRAFFIC VOLUMES

In order to estimate cumulative traffic volumes, the Association of Monterey Bay Area Governments (AMBAG) regional travel demand model was obtained for both the base year i.e. 2015 and forecast year i.e. 2040, to determine a growth rate for the cumulative traffic volumes (2040). AMBAG staff familiar with the travel demand model confirmed the base model (2015 model) is calibrated and validated against the 2015 traffic counts. The AMBAG forecast year

TABLE 4
NEAR-TERM TRAFFIC GENERATION

Site Number	Record Name	APN	Addr Full Line#	Parcel size (acres)	Proposed Operations				Daily Volumes		AM Peak Hour				PM Peak Hour				
					Cultivation Building Area (SF)	Processing Building Area (SF)	Distribution Building Area (SF)	Manufacturing Building Area (SF)	Daily Trip Rate per Cultivation Area (trips/ksf)	ADT	AM Peak Trip Rate (trips/ksf)	Total Trips	In	Out	PM Peak Trip Rate (trips/ksf)	Total Trips	In	Out	
1	MONTEREY BOTANICALS LLC & GROWERS TRANPLANTING INC	137-141-011-000	22785 FUJI LN, SALINAS, CA 93908	10	227,827		52,800		0.27	62	0.07	16	13	3	0.09	21	5	15	
2	MONTEREY BOTANICALS LLC & GROWERS TRANPLANTING INC	137-141-014-000	22750 FUJI LN, SALINAS, CA 93908	10	210,460		27,280		0.27	57	0.07	15	12	3	0.09	19	5	14	
3	MONTEREY BOTANICALS LLC & GROWERS TRANPLANTING INC	137-141-010-000	22835 FUJI LN, SALINAS, CA 93908	10	227,827		52,800		0.27	62	0.07	16	13	3	0.09	21	5	15	
4	MONTEREY BOTANICALS LLC & GROWERS TRANPLANTING INC	137-051-025-000	23760 Potter Road	9.95		290,000			0.27	78	0.07	20	16	4	0.09	26	7	20	
5	HACKETT MICHAEL L & SYLVIA HACKETT TRS (RIVERVIEW FARMS)	137-051-039-000	23940 POTTER RD, SALINAS, CA 93908	12.3	269,941		7,058		0.27	73	0.07	19	15	4	0.09	24	6	18	
6	MONTEREY HOLDING CO INC (QLORA GROUP INC)	137-121-006-000	20180 SPENCE RD, SALINAS, CA 93908	10.96	268,560		16,786		0.27	73	0.07	19	15	4	0.09	24	6	18	
7	UCHIDA KEISHIRO & HANAKO TRS & UCHIDA HANAKO (ENCINAL ROAD CULTIVATION)	137-111-014-000	25950 ENCINAL RD, SALINAS, CA 93908	9.88	459,510		4,635		0.27	124	0.07	32	26	6	0.09	41	10	31	
8	UCHIDA KEISHIRO & HANAKO TRS & UCHIDA HANAKO (ENCINAL ROAD CULTIVATION)	137-111-015-000	26000 ENCINAL RD, SALINAS, CA 93908	10.57	SHARED W ABOVE	SHARED WITH ABOVE													
9	LUKSIK DANIEL J & JANET S TRS (DIAS LLC)	107-011-006-000	50 ZABALA RD, SALINAS, CA 93908	40.33		140,000	2,400		0.27	38	0.07	10	8	2	0.09	13	3	9	
10	GATANAGA KOICHI & SHINOBU TRS	137-141-013-000	22790 FUJI LN, SALINAS, CA 93908	15	236,000		1,350			0.27	64	0.07	17	13	3	0.09	21	5	16
11	SUR FARMS LLC (QUAIL CREEK FARMS LLC)	137-061-026-000	26900 ENCINAL RD, SALINAS, CA 93908	10	220,000		5,000	5,000	0.27	59	0.07	15	12	3	0.09	20	5	15	
12	HERNANDEZ GUSTAVO RAMIREZ & BARRERA LUCIA N (GRUPO FLOR)	153-011-060-000	18 HARTNELL RD, SALINAS, CA 93908	11.6	82,000		2,264	N		0.27	22	0.07	6	5	1	0.09	7	2	6
13	CASTRO PROPERTY RENTALS LLC (GRUPO FLOR)	153-011-058-000	2272 ALISAL RD, SALINAS, CA 93908	9.59	190,606		3,800	N		0.27	51	0.07	13	11	3	0.09	17	4	13
14 *	CARDENAS NORMA PEREZ (LCG BUSINESS ENTERPRISES LLC)	137-111-031-000	25600 ENCINAL RD, SALINAS, CA 93908	13.7	57,000		2,529	N		1.05	60	0.104	6	5	1	0.126	7	2	5
15	ONITSUKA RYOJI & AKIKO (ONITSUKA BROTHERS LLC)	137-121-022-000	20420 SPENCE RD, SALINAS, CA 93908	20	228,633		6,125	N		0.27	62	0.07	16	13	3	0.09	21	5	15
16	SHINHIRA YOSHIHIRO TRS ET AL (VETGROW LLC)	137-021-043-000	20510 SPENCE RD, SALINAS, CA 93908	10.23	154,588	UNKNWON	UNKNOWN	UNKNOWN		0.27	42	0.07	11	9	2	0.09	14	3	10
17	HACKETT MICHAEL L & SYLVIA HACKETT TRS (SATSUMA PACIFIC FARMS)	137-051-024-000	23820 POTTER RD, SALINAS, CA 93908	10	170,484		10,164	UNKNOWN		0.27	46	0.07	12	10	2	0.09	15	4	12
18	Ushida	137-141-005	2338 Alisal, Salinas, CA 93908	9.32	204,704		3,200			0.27	55	0.07	14	11	3	0.09	18	5	14
19	YONEMITSU PROPERTIES LP (ALVAREZ BROTHERS LLC)	137-061-032-000	26500 ENCINAL RD, SALINAS, CA 93908	19.38	330000		1320	10320	0	0.27	89	0.07	23	18	5	0.09	30	7	22
20	C QUADRANT LLC (BINHAI HARBOR GROUP)	137-021-033-000	20800 SPENCE RD, SALINAS, CA 93908	10	3,457				33,522	0.27	1	0.07	0	0	0	0.09	0	0	0
21	Western Transplanting, LLC	137-111-033-000	25700 Encinal, Salinas, CA 93906	12.5	170,303		3200	2544	0	0.27	46	0.07	12	10	2	0.09	15	4	11
22	VONNEGUT MARTIN TR ET AL (I GOT IT MEMBERSHIP CLUB)	137-021-018-000	20954 SPENCE RD, SALINAS, CA 93908	1.7	N/A	N/A	N/A		3000	0.27	1	0.07	0	0	0	0.09	0	0	0
23	SILVA SERGIO E & CELIA A (MONTEREY VALLEY PRIDE LLC)	153-011-059-000	2262 ALISAL RD, SALINAS, CA 93908	9.7	171,605		3,814	1,179	N/A	0.27	46	0.07	12	10	2	0.09	15	4	12

TABLE 4 (CONTINUED)
NEAR-TERM TRAFFIC GENERATION

24	MINAMI RONNIE K & HIDEO TRS (MONTEREY VALLEY PRIDE LLC)	137-121-023-000	20400 SPENCE RD, SALINAS, CA 93908	21.42	237,750	5,144	same building as processing	N/A	0.27	64	0.07	17	13	3	0.09	21	5	16
25	DEL REAL RAMON G & EVANGELINA DEL REAL TRS (CULTIVAR INC)	137-061-029-000	26800 ENCINAL RD, SALINAS, CA 93908	10	263,680	5000	3000	10,214	0.27	71	0.07	18	15	4	0.09	24	6	18
26	Monterey Grove/Hartenbach	153-011-053-000	2242 Alisal, Salinas, CA 93908	22	239400	10000	1850	2500	0.27	65	0.07	17	13	3	0.09	22	5	16
27	EMERALD VALLEY PROPERTY LLC	137-121-004-000	20220 SPENCE RD, SALINAS, CA 93908	10	214,273	12,000	3,590	6,000	0.27	58	0.07	15	12	3	0.09	19	5	14
28	CFP RE FUND I LLC (FLRISH FARMS LLC)	149-031-038-000	26889 ENCINAL RD, SALINAS, CA 93908	47.23	280,769	10,100	2500	450	0.27	76	0.07	20	16	4	0.09	25	6	19
29	MUNDO PM LP (NEW LEAF FAMILY FARMS INC)	137-121-010-000 & 137-121-013-000	20260 SPENCE RD, SALINAS, CA 93908	10	247,000	8,9223(3,922+5,000 in Bldg. 2,515(515+2,000 in Bldg. 7,000 (1/2 BLDG. D)			0.27	67	0.07	17	14	3	0.09	22	6	17
30	SALINAS QUALITY INVESTMENTS LLC (SALINAS SPENCE ROAD CARE INC)	137-121-012-000	20240 SPENCE RD, SALINAS, CA 93908	11.5	177,965	7200	3123	0	0.27	48	0.07	12	10	2	0.09	16	4	12
31 *	GROWERS TRANSPLANTING INC (NOBLE FARMS LLC)	137-141-006-000	2340 ALISAL RD, SALINAS, CA 93908	9.33	206700	3276	2100	0	1.0510	217	0.127	26	21	5	0.051	11	3	8
32	GROWERS TRANSPLANTING INC (27020 ENCINAL ROAD LLC)	137-061-050-000	27020 ENCINAL RD, SALINAS, CA 93908	48.91	228216	8000	2000	800	0.27	62	0.07	16	13	3	0.09	21	5	15
33	GROWERS TRANSPLANTING INC (360 ESPINOSA ROAD LLC)	253-012-048-000	370 ESPINOSA RD, SALINAS, CA 93907	30	308,159	All three will be in the second building 12254			0.27	83	0.07	22	17	4	0.09	28	7	21
34	GROWERS TRANSPLANTING INC (360 ESPINOSA ROAD LLC)	253-012-047-000	360 ESPINOSA RD, SALINAS, CA 93907	30.3	611,113	7829	1200	2533	0.27	165	0.07	43	34	9	0.09	55	14	41
35	27040 ENCINAL LLC (214 LEWIS ROAD LLC)	137-061-048-000	27040 ENCINAL RD, SALINAS, CA 93908	42.57	326000	8,000	2,200	800	0.27	88	0.07	23	18	5	0.09	29	7	22
36	23640 POTTER ROAD LLC (ECCA INVESTMENTS PARTNERS LLC)	137-051-027-000	23640 POTTER RD, SALINAS, CA 93908	10	272,603	1025	896	N/A	0.27	74	0.07	19	15	4	0.09	25	6	18
37	CAZARES RODOLFO & HORTENCIA TRS (FAITH & FAMILY FARMS LLC)	137-141-015-000	22730 FUJI LN, SALINAS, CA 93908	10	135,300	1,050	814	0	0.27	37	0.07	9	8	2	0.09	12	3	9
38	LNB VENTURES SALINAS LLC	211-021-014-000	398 NATIVIDAD RD, #A, SALINAS, CA 93906	40	176,004	3,000	2,000	0	0.27	48	0.07	12	10	2	0.09	16	4	12

TABLE 4 (CONTINUED)
NEAR-TERM TRAFFIC GENERATION

39	LNB VENTURES SALINAS LLC	137-121-005-000	20200 SPENCE RD, SALINAS, CA 93908	10	268,900	5,600	2,200	0	0.27	73	0.07	19	15	4	0.09	24	6	18
40	Valle Del Sol Properties, LLC	137-141-009-000	22900 FUJI LANE, SALINAS, CA 93908	24	149981	19,000	4,480	6,000	0.27	5	0.07	1	1	0	0.09	2	0	1
41	PRSC LLC (MOLECULAR FARMS LLC)	137-051-026-000	23700 POTTER RD, SALINAS, CA 93908	8,359	99288	6685	400 (office)		0.27	27	0.07	7	6	1	0.09	9	2	7
42	Cali Girls Seeds	167-041-006-000	1230 RIVER ROAD, SALINAS, CA 93908	0.8	190	0	0	0	0.27	0	0.07	0	0	0	0.09	0	0	0
43	RoVaSe, Inc.	269-061-014-000	26100 OLD STAGE ROAD	10	500	576	0	0	0.27	0	0.07	0	0	0	0.09	0	0	0
44	Azzopardi	139-091-008-000	564 RIVER ROAD, SALINAS, CA 93905	7,520	1,984	923	0	0	0.27	2	0.07	1	0	0	0.09	1	0	1
45	RODEO NURSERY	137-121-016-000	2378 Alisal, Salinas, CA 93908	11.56	330,000	UNKNOWN	UNKNOWN	UNKNOWN	0.27	89	0.07	23	18	5	0.09	30	7	22
											TOTAL TRIPS:	2,627	641	513	128	801	200	601

Footnote:

* - Actual traffic counts conducted for these sites

ATTACHMENT C

Scenario 1: 1 Existing 2022 AM

Intersection Level Of Service Report
Intersection 101: Alisal Road / Fuji Lane

Control Type: Two-way stop Delay (sec / veh): 10.6
Analysis Method: HCM 6th Edition Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.015

Intersection Setup

Name	Fuji Lane		Alisal Road		Alisal Road	
Approach	Northbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Fuji Lane		Alisal Road		Alisal Road	
Base Volume Input [veh/h]	9	1	5	99	163	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	10.00	10.00	7.00	7.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	1	5	99	163	46
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	1	27	44	13
Total Analysis Volume [veh/h]	10	1	5	108	177	50
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.59	9.49	7.75	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.26	1.26	0.29	0.29	0.00	0.00
d_A, Approach Delay [s/veh]	10.49		0.34		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			0.44			
Intersection LOS			B			

Scenario 1: 1 Existing 2022 AM

Intersection Level Of Service Report
Intersection 102: Old Stage Road / Spence Road

Control Type: Two-way stop Delay (sec / veh): 12.9
 Analysis Method: HCM 6th Edition Level Of Service: B
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.002

Intersection Setup

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Base Volume Input [veh/h]	44	1	55	0	0	2	36	80	0	0	156	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	13.00	13.00	13.00	2.00	2.00	2.00	17.00	17.00	17.00	12.00	12.00	12.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	1	55	0	0	2	36	80	0	0	156	58
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	15	0	0	1	10	22	0	0	42	16
Total Analysis Volume [veh/h]	48	1	60	0	0	2	39	87	0	0	170	63
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.00	0.07	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.54	12.87	10.47	12.10	11.90	8.71	7.97	0.00	0.00	7.49	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.58	0.58	0.58	0.01	0.01	0.01	0.10	0.10	0.10	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.43	14.43	14.43	0.15	0.15	0.15	2.41	2.41	2.41	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		11.40			8.71			2.47			0.00	
Approach LOS		B			A			A			A	
d_I, Intersection Delay [s/veh]						3.34						
Intersection LOS							B					

Intersection Level Of Service Report
Intersection 101: Alisal Road / Fuji Lane

Control Type: Two-way stop Delay (sec / veh): 15.4
Analysis Method: HCM 6th Edition Level Of Service: C
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.161

Intersection Setup

Name	Fuji Lane		Alisal Road		Alisal Road	
Approach	Northbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Fuji Lane		Alisal Road		Alisal Road	
Base Volume Input [veh/h]	62	17	6	423	183	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	3.00	3.00	18.00	18.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	17	6	423	183	5
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	5	2	115	50	1
Total Analysis Volume [veh/h]	67	18	7	460	199	5
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.02	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	15.37	11.01	7.66	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.66	0.66	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	16.51	16.51	0.39	0.39	0.00	0.00
d_A, Approach Delay [s/veh]	14.44		0.11		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			1.69			
Intersection LOS			C			

Intersection Level Of Service Report
Intersection 102: Old Stage Road / Spence Road

Control Type: Two-way stop Delay (sec / veh): 33.4
 Analysis Method: HCM 6th Edition Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.421

Intersection Setup

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Base Volume Input [veh/h]	83	0	76	1	0	3	98	447	2	1	196	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	9.00	9.00	2.00	2.00	2.00	5.00	5.00	5.00	18.00	18.00	18.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	83	0	76	1	0	3	98	447	2	1	196	46
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	0	21	0	0	1	27	121	1	0	53	13
Total Analysis Volume [veh/h]	90	0	83	1	0	3	107	486	2	1	213	50
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.42	0.00	0.11	0.01	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	33.40	32.47	21.16	24.47	21.09	11.30	8.06	0.00	0.00	8.61	0.00	0.00
Movement LOS	D	D	C	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.90	2.90	2.90	0.03	0.03	0.03	0.27	0.27	0.27	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	72.61	72.61	72.61	0.80	0.80	0.80	6.81	6.81	6.81	0.08	0.08	0.08
d_A, Approach Delay [s/veh]		27.53			14.59			1.45			0.03	
Approach LOS		D			B			A			A	
d_I, Intersection Delay [s/veh]							5.49					
Intersection LOS							D					

Scenario 3: 3 NearTerm AM

Intersection Level Of Service Report
Intersection 101: Alisal Road / Fuji Lane

Control Type: Two-way stop Delay (sec / veh): 11.2
Analysis Method: HCM 6th Edition Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.023

Intersection Setup

Name	Fuji Lane		Alisal Road		Alisal Road	
Approach	Northbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Fuji Lane		Alisal Road		Alisal Road	
Base Volume Input [veh/h]	9	1	5	99	163	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	10.00	10.00	7.00	7.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	3	6	5	16	14
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	2	1	4	0	0	7
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	5	15	104	179	67
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	4	28	49	18
Total Analysis Volume [veh/h]	14	5	16	113	195	73
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.16	9.74	7.88	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.29	2.29	0.96	0.96	0.00	0.00
d_A, Approach Delay [s/veh]	10.78		0.98		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			0.80			
Intersection LOS			B			

Intersection Level Of Service Report
Intersection 102: Old Stage Road / Spence Road

Control Type: Two-way stop Delay (sec / veh): 12.7
Analysis Method: HCM 6th Edition Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.002

Intersection Setup

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Base Volume Input [veh/h]	44	1	55	0	0	2	36	80	0	0	156	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	13.00	13.00	13.00	2.00	2.00	2.00	17.00	17.00	17.00	12.00	12.00	12.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	10	0	0	0	12	22	0	0	30	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	3	0	0	0	0	0	0	1	0	0	1	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	55	1	65	0	0	2	48	103	0	0	187	70
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	0	18	0	0	1	13	28	0	0	51	19
Total Analysis Volume [veh/h]	60	1	71	0	0	2	52	112	0	0	203	76
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	No		
Number of Storage Spaces in Median	1	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.00	0.09	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.31	12.72	10.14	13.47	12.94	8.83	8.13	0.00	0.00	7.54	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.37	0.37	0.30	0.01	0.01	0.01	0.14	0.14	0.14	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	9.25	9.25	7.58	0.16	0.16	0.16	3.39	3.39	3.39	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		11.15			8.83			2.58			0.00	
Approach LOS		B			A			A			A	
d_I, Intersection Delay [s/veh]							3.31					
Intersection LOS							B					

Scenario 4: 4 NearTerm PM

Intersection Level Of Service Report
Intersection 101: Alisal Road / Fuji Lane

Control Type: Two-way stop Delay (sec / veh): 17.4
Analysis Method: HCM 6th Edition Level Of Service: C
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.250

Intersection Setup

Name	Fuji Lane		Alisal Road		Alisal Road	
Approach	Northbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Fuji Lane		Alisal Road		Alisal Road	
Base Volume Input [veh/h]	62	17	6	423	183	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	3.00	3.00	18.00	18.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	19	5	3	16	8	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	9	5	2	0	0	3
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	90	27	11	439	191	13
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	7	3	119	52	4
Total Analysis Volume [veh/h]	98	29	12	477	208	14
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.25	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.38	12.56	7.71	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.16	1.16	0.03	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	29.07	29.07	0.68	0.68	0.00	0.00
d_A, Approach Delay [s/veh]	16.28		0.19		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]			2.58			
Intersection LOS			C			

Intersection Level Of Service Report
Intersection 102: Old Stage Road / Spence Road

Control Type: Two-way stop Delay (sec / veh): 29.1
Analysis Method: HCM 6th Edition Level Of Service: D
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.007

Intersection Setup

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Base Volume Input [veh/h]	83	0	76	1	0	3	98	447	2	1	196	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	9.00	9.00	2.00	2.00	2.00	5.00	5.00	5.00	18.00	18.00	18.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	0	11	0	0	0	11	34	0	0	27	16
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	1	0	0	0	0	0	0	1	0	0	4	1
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	0	87	1	0	3	109	482	2	1	227	63
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	0	24	0	0	1	30	131	1	0	62	17
Total Analysis Volume [veh/h]	104	0	95	1	0	3	118	524	2	1	247	68
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	No		
Number of Storage Spaces in Median	1	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.37	0.00	0.13	0.01	0.00	0.01	0.10	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	25.52	25.32	10.57	29.14	24.21	11.65	8.24	0.00	0.00	8.74	0.00	0.00
Movement LOS	D	D	B	D	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.67	1.67	0.44	0.04	0.04	0.04	0.32	0.32	0.32	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	41.70	41.70	10.96	0.92	0.92	0.92	7.95	7.95	7.95	0.08	0.08	0.08
d_A, Approach Delay [s/veh]		18.38			16.02			1.51			0.03	
Approach LOS		C			C			A			A	
d_I, Intersection Delay [s/veh]							4.04					
Intersection LOS							D					

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Scenario 5 NearTerm+P AM
7/22/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
101	Alisal Road / Fuji Lane	Two-way stop	HCM 6th Edition	NB Left	0.038	11.8	B
102	Old Stage Road / Spence Road	Two-way stop	HCM 6th Edition	NEB Thru	0.002	13.0	B
103	Fuji Lane / Project Driveway	Two-way stop	HCM 6th Edition	NWB Right	0.010	8.4	A

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

Intersection Level Of Service Report
Intersection 101: Alisal Road / Fuji Lane

Control Type: Two-way stop Delay (sec / veh): 11.8
Analysis Method: HCM 6th Edition Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.038

Intersection Setup

Name	Fuji Lane		Alisal Road		Alisal Road	
Approach	Northbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Fuji Lane		Alisal Road		Alisal Road	
Base Volume Input [veh/h]	9	1	5	99	163	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	10.00	10.00	7.00	7.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	2	4	5	16	9
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	9	5	22	0	0	33
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	8	31	104	179	88
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	8	28	49	24
Total Analysis Volume [veh/h]	21	9	34	113	195	96
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.01	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.79	9.94	7.98	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.16	0.16	0.08	0.08	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.89	3.89	2.11	2.11	0.00	0.00
d_A, Approach Delay [s/veh]	11.24		1.85		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			1.30			
Intersection LOS			B			

Intersection Level Of Service Report
Intersection 102: Old Stage Road / Spence Road

Control Type: Two-way stop Delay (sec / veh): 13.0
Analysis Method: HCM 6th Edition Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.002

Intersection Setup

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Base Volume Input [veh/h]	44	1	55	0	0	2	36	80	0	0	156	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	13.00	13.00	13.00	2.00	2.00	2.00	17.00	17.00	17.00	12.00	12.00	12.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	10	0	0	0	12	20	0	0	29	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	17	0	0	0	0	0	0	5	0	0	4	1
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	1	65	0	0	2	48	105	0	0	189	71
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	0	18	0	0	1	13	29	0	0	51	19
Total Analysis Volume [veh/h]	75	1	71	0	0	2	52	114	0	0	205	77
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	No		
Number of Storage Spaces in Median	1	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.00	0.09	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.58	12.99	10.16	13.53	12.99	8.84	8.14	0.00	0.00	7.54	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.48	0.48	0.30	0.01	0.01	0.01	0.14	0.14	0.14	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.92	11.92	7.60	0.16	0.16	0.16	3.40	3.40	3.40	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		11.41			8.84			2.55			0.00	
Approach LOS		B			A			A			A	
d_I, Intersection Delay [s/veh]							3.55					
Intersection LOS							B					

Intersection Level Of Service Report
Intersection 103: Fuji Lane / Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	8.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Fuji Lane		Fuji Lane		Project Driveway	
Approach	Northeastbound		Southwestbound		Northwestbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Fuji Lane		Fuji Lane		Project Driveway	
Base Volume Input [veh/h]	6	0	0	30	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	13	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	3	0	44	11	0	11
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	0	44	54	0	11
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	11	14	0	3
Total Analysis Volume [veh/h]	12	0	44	54	0	11
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.03	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.30	0.00	9.46	8.40
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.08	0.08	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.11	2.11	0.78	0.78
d_A, Approach Delay [s/veh]	0.00		3.28		8.40	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			3.42			
Intersection LOS			A			

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Scenario 6 NearTerm+P PM
7/22/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
101	Alisal Road / Fuji Lane	Two-way stop	HCM 6th Edition	NB Left	0.314	19.1	C
102	Old Stage Road / Spence Road	Two-way stop	HCM 6th Edition	SWB Left	0.007	30.0	D
103	Fuji Lane / Project Driveway	Two-way stop	HCM 6th Edition	NWB Right	0.050	8.8	A

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

Intersection Level Of Service Report
Intersection 101: Alisal Road / Fuji Lane

Control Type: Two-way stop Delay (sec / veh): 19.1
Analysis Method: HCM 6th Edition Level Of Service: C
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.314

Intersection Setup

Name	Fuji Lane		Alisal Road		Alisal Road	
Approach	Northbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Fuji Lane		Alisal Road		Alisal Road	
Base Volume Input [veh/h]	62	17	6	423	183	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	3.00	3.00	18.00	18.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	4	2	16	8	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	38	25	8	0	0	13
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	46	16	439	191	22
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	13	4	119	52	6
Total Analysis Volume [veh/h]	120	50	17	477	208	24
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.31	0.06	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.11	14.08	7.74	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.72	1.72	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	42.93	42.93	0.97	0.97	0.00	0.00
d_A, Approach Delay [s/veh]	17.63		0.27		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]			3.49			
Intersection LOS			C			

Scenario 6: 6 NearTerm+P PM

Intersection Level Of Service Report
Intersection 102: Old Stage Road / Spence Road

Control Type: Two-way stop Delay (sec / veh): 30.0
 Analysis Method: HCM 6th Edition Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.007

Intersection Setup

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Spence Road			Spence Road			Old Stage Road			Old Stage Road		
Base Volume Input [veh/h]	83	0	76	1	0	3	98	447	2	1	196	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	9.00	9.00	2.00	2.00	2.00	5.00	5.00	5.00	18.00	18.00	18.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	0	11	0	0	0	11	33	0	0	26	16
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	5	0	0	0	0	0	0	3	0	0	19	6
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	100	0	87	1	0	3	109	483	2	1	241	68
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	0	24	0	0	1	30	131	1	0	65	18
Total Analysis Volume [veh/h]	109	0	95	1	0	3	118	525	2	1	262	74
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	No		
Number of Storage Spaces in Median	1	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.40	0.00	0.13	0.01	0.00	0.01	0.10	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	26.51	26.31	10.72	30.01	24.85	11.66	8.31	0.00	0.00	8.74	0.00	0.00
Movement LOS	D	D	B	D	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.82	1.82	0.45	0.04	0.04	0.04	0.32	0.32	0.32	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	45.45	45.45	11.26	0.94	0.94	0.94	8.11	8.11	8.11	0.08	0.08	0.08
d_A, Approach Delay [s/veh]		19.16			16.25			1.52			0.03	
Approach LOS		C			C			A			A	
d_I, Intersection Delay [s/veh]							4.17					
Intersection LOS							D					

Intersection Level Of Service Report
Intersection 103: Fuji Lane / Project Driveway

Control Type: Two-way stop Delay (sec / veh): 8.8
Analysis Method: HCM 6th Edition Level Of Service: A
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.050

Intersection Setup

Name	Fuji Lane		Fuji Lane		Project Driveway	
Approach	Northeastbound		Southwestbound		Northwestbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Fuji Lane		Fuji Lane		Project Driveway	
Base Volume Input [veh/h]	48	0	0	5	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	0	0	6	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	14	0	16	5	0	49
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	76	0	16	16	0	49
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	0	4	4	0	12
Total Analysis Volume [veh/h]	76	0	16	16	0	49
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	7.39	0.00	9.37	8.85
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.03	0.03	0.16	0.16
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.80	0.80	3.92	3.92
d_A, Approach Delay [s/veh]	0.00		3.69		8.85	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			3.51			
Intersection LOS			A			