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**Focused Vehicle Collision and Left-Turn
Lane Requirement Analysis
Parable Winery Use Permit Minor
Modification
P23-00230-MM**



Technical Memorandum

March 15, 2024

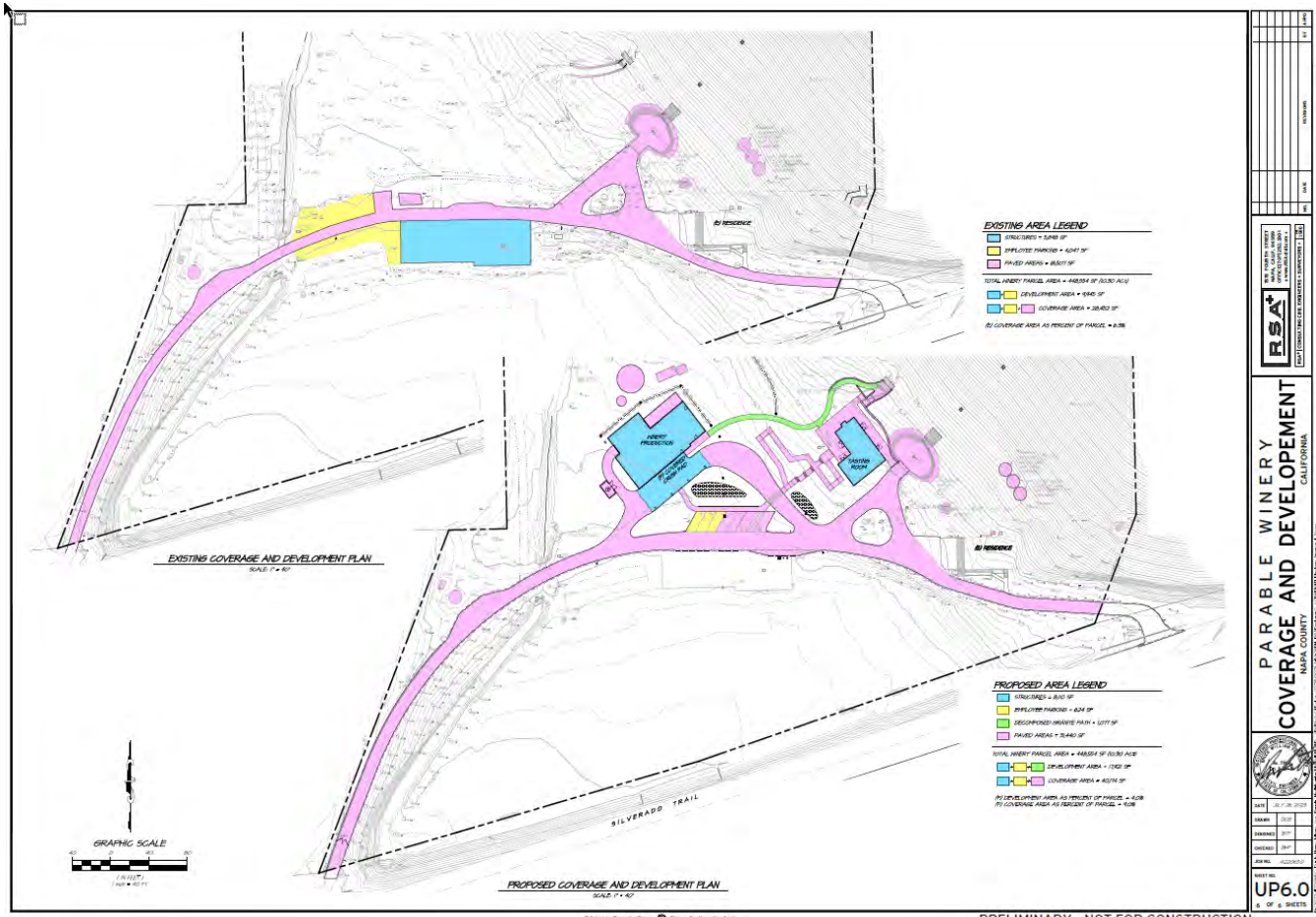
To	Trey Eppright Parable Winery	Contact No.	
Copy to	Josh Devore , Partner Dickenson, Peatman, & Fogarty Frank Penry , PE, TE, PTOE, GHD Rob Tuma , Field Technician, GHD	Email	peter.galloway@ghd.com frank.penry@ghd.com
From	Peter Galloway , Senior Transportation Planner, GHD <i>PJG</i>	Project No.	12626165
Project Name	Parable Winery Use Modification Project		
Subject	Focused Vehicle Collision and Left-Turn Lane Requirement Analysis (Updated)		
Attachments	Radar Speed Surveys, Parable Winery Trip Generation, Average Daily Traffic (ADT) Counts, Napa County Left-Turn Lane Warrant Graph		

1. Introduction

The following technical memorandum provides a focused vehicle collision and left-turn lane requirement analysis for the proposed Parable Winery Use Modification project in Calistoga, CA (Napa County). Based on recent County comments related to this draft technical memorandum; the collision, trip generation, and left-turn lane analyses/discussions have been updated to reflect County input.¹ The project site is located at 4300 Silverado Trail approximately 3,600 feet north of the east-west cross street Larkmead Lane (see Figure 1—Project Site Plan). Vehicle access to the project site would be gained at two (2) driveways; the north driveway would serve inbound traffic (only) and the south driveway outbound traffic (only). Both project driveways are approximately 930-feet apart on Silverado Trail.

At the request of the project applicant, supplemental transportation and safety analyses have been performed for proposed project driveway access and vehicle safety along Silverado Trail in the project study area. Specifically, vehicle collision analyses have been performed along Silverado Trail at the proposed project driveways and project frontage (between Clover Flat Road & Dutch Henry Canyon Road) based on Napa County and the California Highway Patrol vehicle collision data. In addition, left-turn lane warrant analyses have been performed for both project driveways based on the most recent Napa County Roadway and Street Standards. In addition to the above transportation analysis for the proposed project, vehicle sight distance

¹ Anna Vickroy, PE, TE, TJKM Transportation Consultants (for Napa County Public Works), Parable Winery P23-00230 Use Permit Minor Modification & Variance, Comments on Focused Vehicle Collision and Left-Turn Lane Requirement Analysis (GHD, December 2023), January 19, 2024.



Source: RSA Consulting Civil Engineers/Surveyors, 2023

Figure 1—Project Site Plan

analyses for the proposed project driveways were performed by RSA for coordinating driveway access and safety and are referenced in our vehicle sight distance evaluation for this study.²

The following updated sections provide detailed analysis of the overall project setting, data collection, vehicle collision analysis, proposed project trip generation, left-turn lane driveway warrant analysis, and findings.

2. Project Setting/Description

The term “Project” as used in this technical memorandum will refer to the proposed Parable Winery Use Modification development at 4300 Silverado Trail in Calistoga. As noted, the project site is located approximately 3,600 feet north of Larkmead Lane on the east side of Silverado Trail and is served by two (2) driveway access points. Along the project frontage of Silverado Trail the roadway has one 12-foot travel lane in each direction with Class II bike lanes (6-foot) on both sides of the roadway. In addition, Silverado Trail is striped for southbound passing zone that starts just past the proposed project’s northern driveway and extends south for approximately 500-feet. Similarly, Silverado Trail is striped for a northbound passing zone that initiates approximately 230-feet south of the proposed project’s south driveway and extends for 500-feet.

Based on current permitted (entitled) uses and proposed project use modifications, the Winery-related activities during the Harvest season can be described as follows:

² RSA, Sight Distance Report, Prepared for Parable Winery (APN 020-120-028), October 12, 2023.

Permitted Uses:

- Production 20,000 gallons
- Employment 3 full-time employees (weekday & weekend)
- Visitation 34 visitors (weekday) & 35 visitors (weekend)

Proposed Project Use Modification Uses:

- Production 20,000 gallons
- Employment 3 full-time employees (weekday & weekend)
- Visitation 20 visitors (weekday) & 20 visitors (weekend)

Due to the disagreement as to the existing entitlements for the property between the County and the applicant, GHD has evaluated the proposed project under both baselines as follows:

- Baseline #1: Permitted visitation of 34 weekday daily visitors and 35 weekend daily visitors (project applicant's understanding);
- Baseline #2: Zero permitted visitors (Napa County's understanding).

Please refer to **Section 5: Project Trip Generation** for a full analysis of both Baseline #1 and Baseline #2.

As the applicant contends (with proposed project use modifications), there would be a net reduction in the number of daily visitors to the project site. The reduction in Winery visitation would amount to 14 daily visitors on a weekday and 15 daily visitors on weekends (Saturday). At this time, the marketing events would consist of 30 or 50 guests (largest event) occurring less than once per month.

3. Collision History Analysis

A collision analysis was conducted for the study area to determine any trends or patterns that may indicate a safety issue at project driveway intersections or the Silverado Trail roadway segment in the study area. Collision rates are calculated based on records provided by the California Highway Patrol as published in their State-wide Integrated Traffic Records System (SWITRS) database. Based on County input, the collision analysis was extended by two (2) additional years to account for the destruction of the Winery in the 2020 Glass Fire. Consequently, (rather than a five-year period), the most current seven (7) year period from January 1, 2016, through December 31, 2022, was analyzed. Collision characteristics and rates for the Silverado Trail roadway segment between Clover Flat Road and Dutch Henry Canyon Road along the project frontage (including the Parable Winery driveways) were evaluated as shown in **Table 1**.

Based on a review of the collision data, there were no vehicle collisions at the Parable Winery north and south driveways. However, over the seven-year period there was a total of seven vehicle collisions along the Silverado Trail study segment. In addition, the calculated collision rate for the Silverado Trail roadway segment was compared to the average collision rate for similar facilities state-wide, as indicated in the *2020 Collision Data on California State Highways* (Caltrans). As presented in **Table 1**, the roadway segment is experiencing a collision rate (0.89) lower than the 2020 California Average for similar facilities (1.31).

A review of the specific collision data indicates that six of the seven collisions involved hitting a "fixed-object" on Silverado Trail. The other vehicle collision was more severe and involved a "head-on" accident that occurred approximately 900-feet south of the Parable Winery frontage on Silverado Trail. While any vehicle collision is unfortunate, none of the fixed-object or head-on vehicle collisions were associated with driveway access at the Parable Winery to/from Silverado Trail within the roadway segment. Therefore, the Silverado Trail roadway segment between Clover Flat Road and Dutch Henry Canyon Road and Parable Winery driveways would be

Table 1: Collision History Analysis: Silverado Trail Between Clover Flat Rd. & Dutch Henry Canyon Rd. (January 1, 2016 through December 31, 2022)

Segment ID	Segment	By Severity					By Type					By Year						Bicycle Involved Collisions	Pedestrian Involved Collisions	Total Collisions (2018-2022)	24-Hr Entering Volume	Collision Rate (Per Million Vehicle Miles)	CA Average Collision Rate (Per Million Vehicle Miles)				
		Fatal	Severe Injury	Injury (Other Visible)	Injury (Complaint of Pain)	Property Damage Only	Head-On	Sideswipe	Rear End	Broadside	Hit Object	Vehicle/Pedestrian	Other	2016	2017	2018	2019							2020	2021	2022	
A	Silverado Trail (btwn. Clover Flat Rd. & Dutch Henry Cyn. Rd.)	0	1	0	2	4	1	0	0	0	6	0	0	2	1	0	1	1	1	1	1	0	0	7	5423	0.89	1.31

considered to be operating acceptably from a vehicle safety standpoint. The roadway segment is below the State’s average collision rate and the majority of collisions are fixed-object in nature.

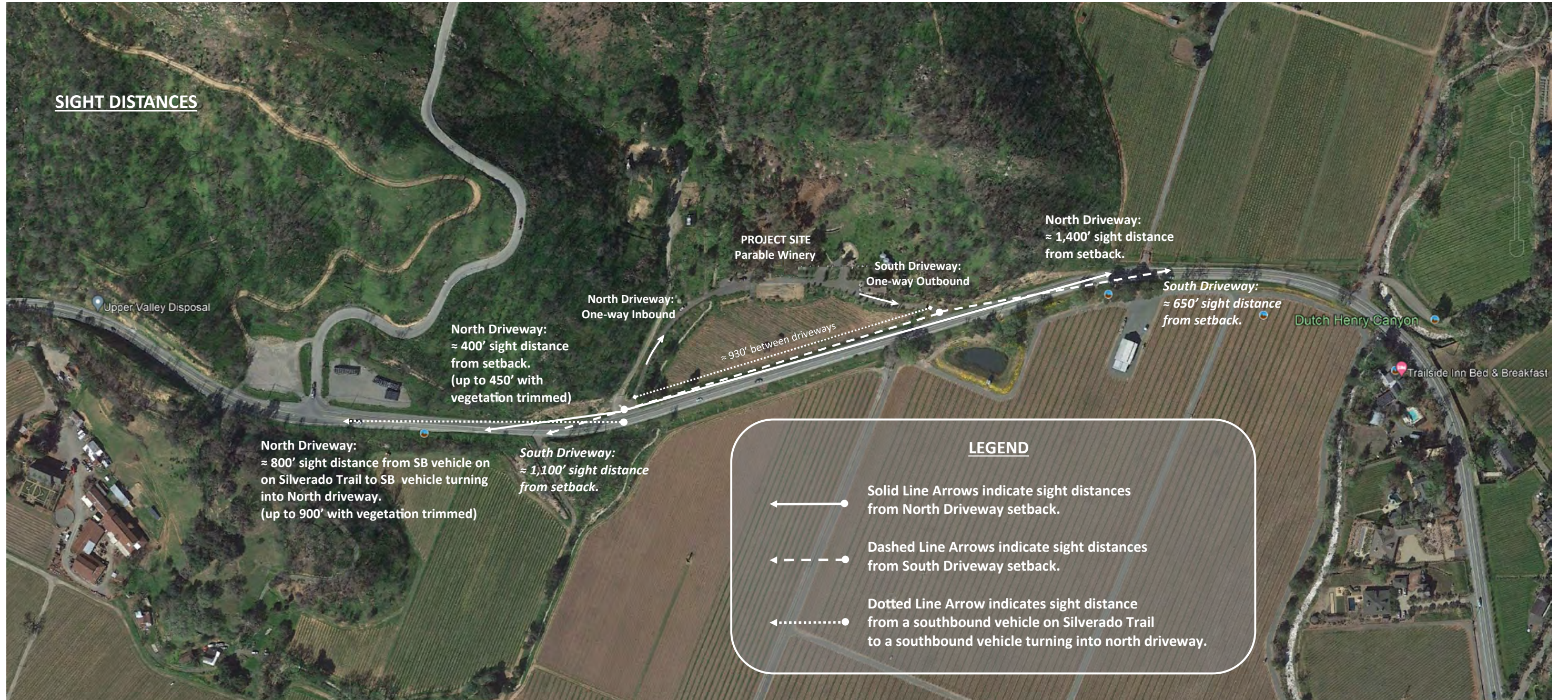
4. Vehicle Sight Distance

Radar speed surveys were conducted on Silverado Trail for the roadway segment along the proposed project frontage and project driveways. The vehicle speed limit along Silverado Trail in the project study area is posted at 55 mph. The "critical" vehicle speed (the speed at which 85% of all surveyed vehicles travel at or below) along Silverado Trail was measured at 58 mph between the two project driveways (see Radar Speed Survey Summaries—attached). Caltrans’ design standards indicate that measured vehicle speeds require a stopping sight distance of 548 feet both north and south of each project driveway measured along the travel lanes of Silverado Trail. Based on field measurements shown in **Figure 2**, vehicle sight distance from the Parable Winery south driveway for outbound vehicles (stop-sign controlled vehicles) is approximately 650-feet to the south and 1,400-feet to the north. At the Parable Winery’s north driveway (inbound vehicles only), the vehicle sight distance for southbound vehicles on Silverado Trail to a stopped vehicle on Silverado Trail turning east into the project driveway is approximately 800-feet. For vehicles traveling northbound along Silverado Trail and turning right into the north project driveway, the vehicle sight distance is 1,400-feet. Therefore, the vehicle sight distance recommendations based on Caltrans requirements would be met at both Parable Winery driveways for the speed limit and measured vehicle speeds along Silverado Trail. Vehicle sight distance is further confirmed in the RSA vehicle sight distance analysis for the proposed project previously referenced.

5. Driveway Spacing

The distance between the Parable Winery north and south driveways on Silverado Trail is approximately 930-feet. While research on specific driveway spacing can vary depending on category (residential, commercial, or private); municipalities and public agencies generally have minimum distance requirements for driveway spacing to reduce vehicle conflicts and improve overall safety for vehicle ingress/egress. Specific distance requirements are typically based on posted speed limits, classification of roadway, or the amount of traffic generated by a development. As noted in the Vehicle Sight Distance section (above), the Parable Winery driveways require a stopping sight distance of 548-feet based on surveyed vehicle speeds of 58 mph on Silverado Trail. Caltrans sight distance requirements are met for both the north and south Parable Winery driveways and the 930-foot spacing between the two driveways is one component contributing to these minimum standards.

Consideration has also been given to “gap acceptance” for vehicles exiting the project site. Caltrans and AASHTO guidelines indicate a *corner sight distance* (more conservative than stopping sight distance) time gap



Parable Winery Driveway Sight Distances

Project No. 12626165

FIGURE 2

for unsignalized intersections. Specifically, the guidelines indicate a standard gap acceptance of 7.5 seconds for a vehicle to make a left-turn from a minor street (driveway) across traffic lanes and merge into through-traffic safely (two-lane highway).³ For vehicles exiting the Parable Winery south driveway, there is currently 650-feet of sight distance available looking to the south and 1,400-feet of sight distance looking to the north. For the surveyed vehicle speed of 58 mph on Silverado Trail, the *corner sight distance* requirement is 638-feet of sight distance. Therefore, the 7.5 second gap acceptance for vehicles exiting the Parable Winery south driveway would be met. With a distance of approximately 930-feet between the north and south Parable Winery driveways; a vehicle traveling 60 mph would take 10.5 seconds to reach the second Winery driveway using the more conservative corner sight distance requirements. Given the satisfaction of the 7.5 second gap acceptance for the outbound south Winery driveway and 10.5 second buffer between the two driveways for vehicles traveling at-speed (60 mph), the available evidence indicates that the two Winery driveways are operating safely as separate, distinct intersections serving the proposed project. Each project driveway carries its own daily trip generation (traffic) as a result of the distance between the driveways and limited access operation.

6. Project Trip Generation

Daily and peak hour trip generation has been based on the most recent Napa County PBES Winery Trip Generation Worksheets for permitted and proposed Winery uses (attached). Based on permitted Winery uses and proposed project use modifications associated with the Parable Winery activities, the increase/decrease in daily and peak hour traffic volumes have been calculated based on two different baseline assumptions.

GHD has used two different baselines as follows:

1. Baseline #1--Project Applicant Understanding: Permitted winery uses are acknowledged by the County that allows 20,000 gallons of production, 3 full-time employees, and 34 daily visitors (weekday) and 35 daily visitors (weekend)
2. Baseline #2--Napa County Understanding: Permitted winery uses (only) are acknowledged by the County that allows 20,000 gallons of production, 3 full-time employees, and zero (0) permitted visitation.

Baseline 1: Project Applicant Understanding (With Permitted Visitation Levels)

As calculated in **Table 2**, with permitted visitation levels allowed the proposed project use modification uses would create an overall net decrease in vehicle trips to/from the site. Both Winery production (20,000 gallons) and employment (3 full-time employees, weekday/weekend) would remain unchanged from permitted project uses. However, overall weekday and weekend daily visitation would be reduced to 20 visitors per day. Current permitted visitation levels allow 34 weekday visitors and 35 weekend visitors (per day). The resulting decrease in visitation with proposed project use modifications would result in a reduction of 11 daily trips during both weekday and weekend conditions. Peak hour project trips would be reduced by 4 trips on a weekday and 6 trips on a weekend.

Baseline 2: Napa County Understanding (Without Permitted Visitation Levels)

As calculated in **Table 3**, without permitted visitation levels allowed the proposed project use modification uses would create an overall net increase in vehicle trips to/from the site. Both Winery production (20,000 gallons) and employment (3 full-time employees, weekday/weekend) would remain unchanged from Baseline 1 permitted project uses. However, overall weekday and weekend daily visitation would increase from zero to 20 visitors per day for both weekday and weekend conditions. The resulting increase in visitation with proposed project use modifications would result in the addition of 15 daily trips during the weekday and 14 daily trips during weekend conditions. Peak hour project trips would increase by 6 trips on a weekday and 8 trips on a weekend.

³ Caltrans, Highway Design Manual, Chapter 200, Geometric Design and Structure Standards, Table 405.1A, Corner Sight Distance Time Gap for Unsignalized Intersections (7.5 second rule), July 1, 2020.

Table 2:**Baseline #1: Project Applicant Understanding (With Permitted Visitation); Parable Winery Daily and Peak Hour Trip Generation**

	Permitted Uses Harvest Trips	Proposed Uses Harvest Trips	Net Increase/Decrease Harvest Trips	Existing Residence	Net Change In Permitted & Proposed Trips	Total Daily & Peak Hour Trips At Driveways ⁽¹⁾
Maximum Daily & Weekday Trips						
<i>Maximum Weekday Traffic (Friday)</i>						
Weekday Daily Trips	38	27	-11	10	-1	37
Weekday Peak Hour Trips	14	10	-4	1	-3	11
<i>Maximum Weekend Traffic (Saturday)</i>						
Weekend Daily Trips	37	26	-11	10	-1	36
Weekend Peak Hour Trips	19	13	-6	1	-5	14

Source: Napa County Planning, Building, & Environmental Services (PBES), Use Permit/Major Modification Application, Winery Trip Generation Worksheets, Weekday and Weekend Daily and Peak Hour Trip Generation, July 24, 2023 (attached).

(1) Project trips at driveways represent proposed uses trips plus existing residence trips.

Table 3:**Baseline #2: Napa County Understanding (Without Permitted Visitation); Parable Winery Daily and Peak Hour Trip Generation**

	Permitted Uses Harvest Trips	Proposed Uses Harvest Trips	Net Increase/Decrease Harvest Trips	Existing Residence	Net Change In Permitted & Proposed Trips	Total Daily & Peak Hour Trips At Driveways ⁽¹⁾
Maximum Daily & Weekday Trips						
<i>Maximum Weekday Traffic (Friday)</i>						
Weekday Daily Trips	12	27	15	10	25	37
Weekday Peak Hour Trips	4	10	6	1	7	11
<i>Maximum Weekend Traffic (Saturday)</i>						
Weekend Daily Trips	12	26	14	10	24	36
Weekend Peak Hour Trips	5	13	8	1	9	14

Source: Napa County Planning, Building, & Environmental Services (PBES), Use Permit/Major Modification Application, Winery Trip Generation Worksheets, Weekday and Weekend Daily and Peak Hour Trip Generation, July 24, 2023 (attached).

(1) Project trips at driveways represent proposed uses trips plus existing residence trips.

It is noted that an existing residence is present on the Parable Winery grounds currently under use. Therefore, Napa County requires the trip generation associated with the residence of 10 daily trips and 1 peak hour trip be added to overall proposed project use trips. The addition of 10 daily trips and 1 peak hour trip from residential uses would still result in a decrease in overall project trips under Baseline #1 assumptions. Specifically, there would be a net reduction of 1 daily trip on both the weekday/weekend and 3 peak hour trips (weekday) and 5 peak hour trips (weekend) as compared to permitted levels.

Under the Napa County Understanding Baseline #2 assumptions, daily and peak hour proposed uses (Harvest Trips) would increase to 25 daily trips and 7 peak hour trips for maximum weekday traffic volumes. During weekend maximum traffic volumes, there would be 24 daily trips and 9 peak hour trips.

For the Napa County left-turn lane warrant analysis, the County requires the use of total proposed daily trips resulting from the requested approval at the impacted roadway facility. Including the additional 10 daily trips from the existing residence, the proposed project would generate 37 daily trips on a weekday and 36 daily trips on the weekend (Saturday).

7. Napa County Left-Turn Lane Warrant Analysis

Napa County left-turn lane warrant analyses have been based on the Napa County Roadway and Street Standards (Section 17: Traffic Control Devices).⁴ The specific guidelines for left-turn installation are presented as follows:

Left-Turn Lane Warrants: Use Permits or modifications thereof shall trigger the application of the following warrants to determine the necessity for the left-turn lane for the proposed use:

- (a) Application of the following Left-Turn Lane Warrant Graph based on road average daily traffic (ADT) and the projected ADT of the proposed use. The chart is a representation of probable conflict between turning traffic and advancing traffic. Private Road or Driveway ADT is the total ADT utilizing the facility. A left-turn lane will not be considered for uses generating an ADT of 10 or less;
- (b) If the corner sight distance in advancing direction, measured from the driveway, is less than required per Caltrans design standards (usually the posted speed limit multiplied by 11, read in feet) a left-turn lane shall be installed;
- (c) If traffic conditions or turning movements pose a considerable threat to public safety, as determined by the Director of Public Works, a left-turn lane shall be installed.

For the purpose of this study, (as described above), a “facility” is considered a driveway and/or roadway serving the proposed project. These facilities would include the Parable Winery driveways and Silverado Trail.

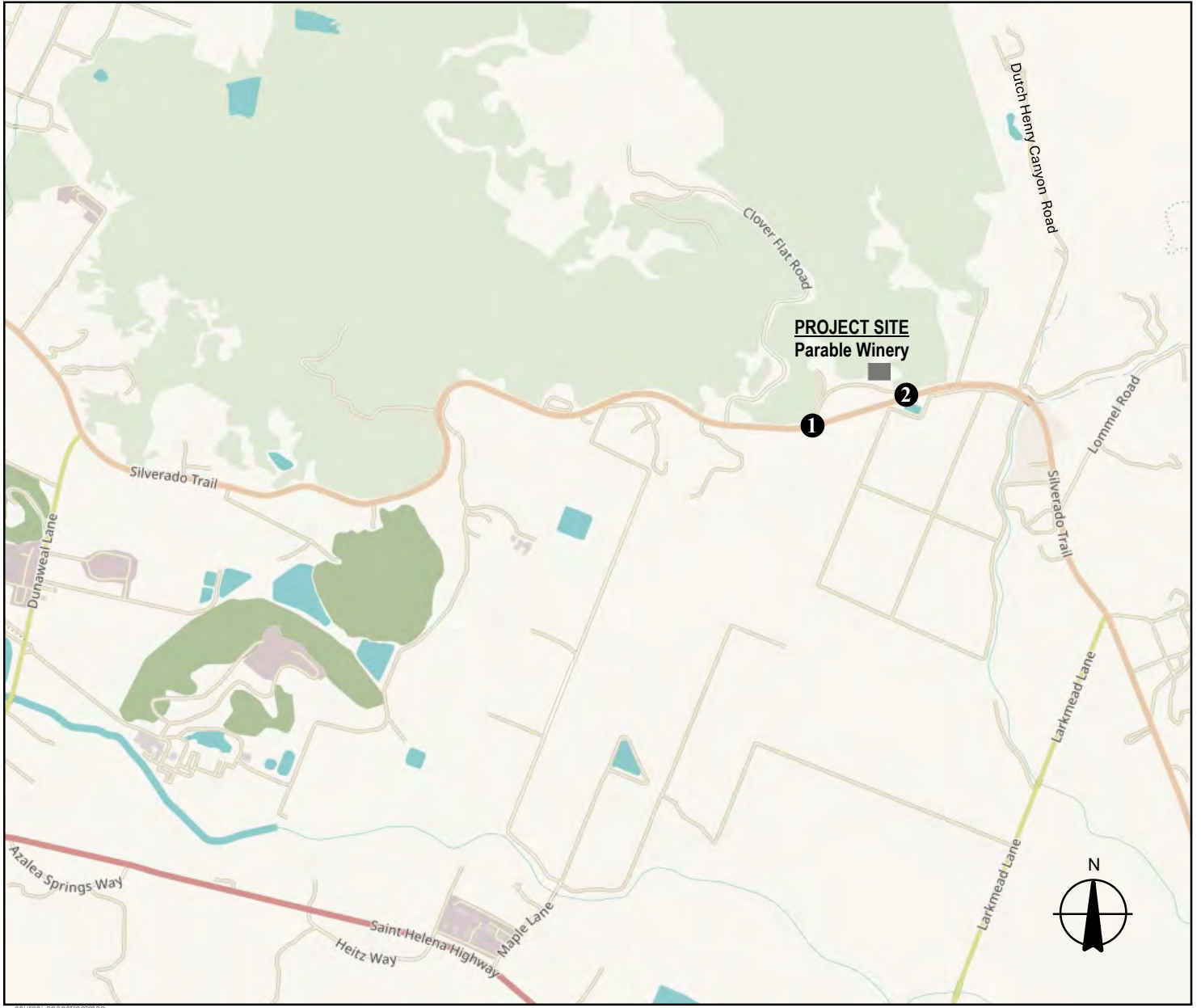
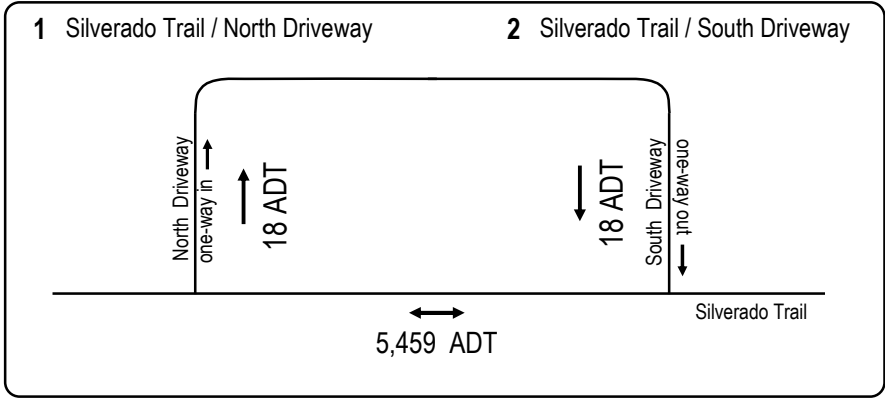
Average Daily Traffic (ADT) counts were conducted on Silverado Trail between the two Parable Winery driveways on consecutive Friday and Saturday’s during the harvest season consistent with Napa County guidelines (attached).⁵ The highest recorded ADT volume occurred on a Friday at 5,423 along Silverado Trail at the project frontage.

The proposed project’s driveways were evaluated for the left-turn lane warrant using Baseline #2 assumptions that assumes the County does not recognize existing permitted visitation levels. As shown in **Table 3**, the proposed project is expected to generate 27 weekday daily trips and 26 weekend daily trips. With 10 daily trips added to the totals from the existing residence, overall daily project trip generation would be 37 weekday trips and 36 weekend trips. With one project driveway limited to inbound flow (north driveway) and one project driveway limited to outbound flow (south driveway), this access design would equate to 18 daily trips at the north driveway and 18 daily trips at the south driveway (36-37 total daily project trips) as shown in **Figure 3**.

Existing plus Project daily volumes for a weekday Friday (worst case) were compared with the Napa County guidelines for installing a southbound left-turn lane on Silverado Trail at the Parable Winery north driveway. (see County left-turn lane warrant graph for weekday conditions---attached). As noted, the Napa County left-turn lane warrant is based on the combination of proposed project daily trips at the driveway and overall daily volumes on Silverado Trail. With 18 project daily trips at the north project driveway and 5,459 daily trips on Silverado Trail, a southbound left-turn lane *would not be warranted* on Silverado Trail based on County daily volume warrant requirements. Based on review of the County’s left-turn lane warrant graph, an ADT of 5,459 on Silverado Trail would allow approximately 28 driveway trips before meeting the County’s requirements for installation of a left-turn lane. With 18 daily trips at each project driveway, a left-turn lane would not be warranted at the inbound Parable Winery north driveway.

⁴ 2023 Napa County Road and Street Standards, Planning, Building, and Environmental Services (PBES), Chapter 17, Traffic Control Devices, April 18, 2023

⁵ Counts Unlimited, Average Daily Traffic (ADT) counts, 4300 Silverado Trail, October 27,28 & November 3,4, 2023.



**Average Daily Traffic (ADT) Volumes
Existing Plus Project Conditions**

Project No. 12626165

FIGURE 3

8. Conclusions

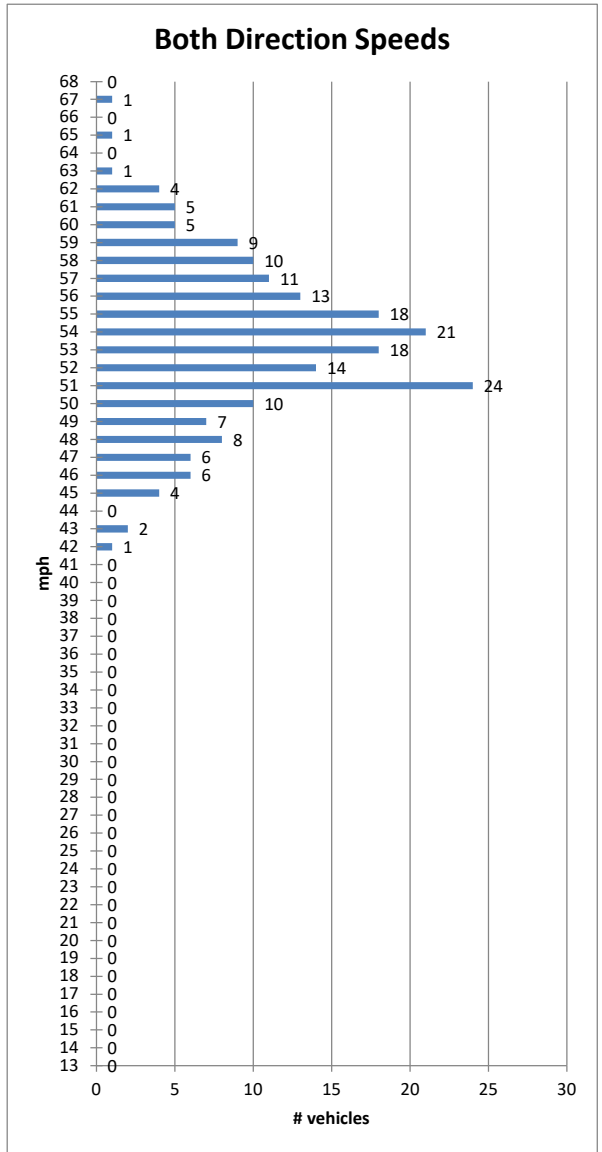
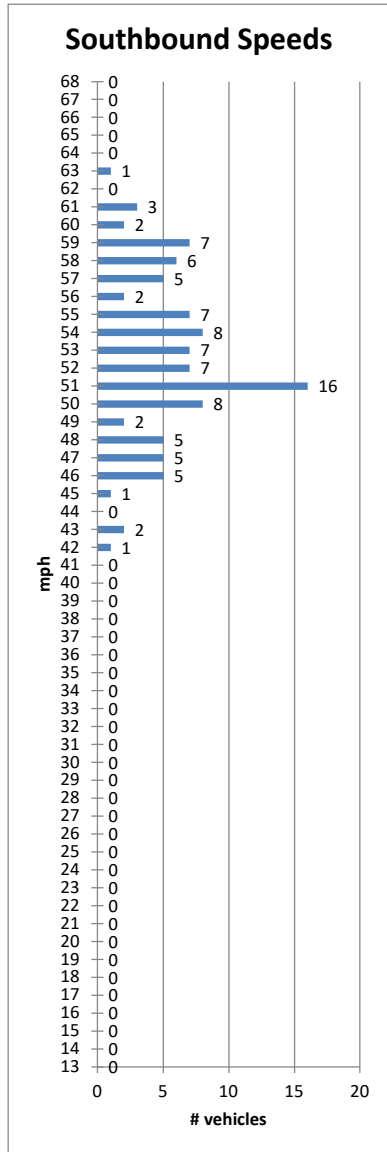
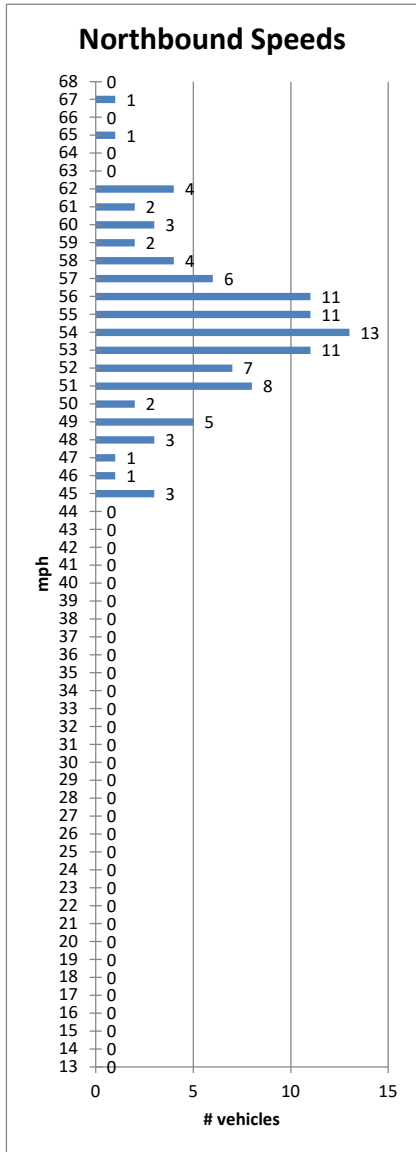
GHD has evaluated the proposed Parable Winery Use Modification project for vehicle safety along Silverado Trail and for satisfaction of the Napa County left-turn lane warrant. Vehicle collision analyses along the Silverado Trail roadway segment between Clover Flat Road and Dutch Henry Canyon Road indicate no significant vehicle safety issues. The vehicle collision rate is below the State average for similar facilities and there have been no collisions at the Parable Winery project driveways over the past seven years. Based on a review of the County's left-turn lane warrant graph, an ADT of 5,459 on Silverado Trail would allow approximately 28 driveway trips with Existing plus Project conditions before meeting the County's requirements for installation of a left-turn lane. Based on the empirical daily trip generation of 36 total daily project trips (18 inbound north driveway, 18 outbound south driveway), a left-turn lane would not be warranted at the Parable Winery north (inbound) driveway.

DRAFT

RADAR SPEED SURVEY SUMMARY

Road: Silverado Trail
Location: approaching Parable Winery (between the driveways)
Napa County, CA
Speed Limit: 55 mph

Date: 11/10/23
Time: 2:00-3:30 pm
Weather: Clear



No. of Surveys = 100
 Average Speed = 54.4
 50th Percentile = 54.0
85th Percentile = 58.0
 90th Percentile = 60.0
 95th Percentile = 62.0

No. of Surveys = 100
 Average Speed = 52.7
 50th Percentile = 52.0
85th Percentile = 58.0
 90th Percentile = 59.0
 95th Percentile = 60.0

No. of Surveys = 200
 Average Speed = 53.5
 50th Percentile = 53.5
85th Percentile = 58.0
 90th Percentile = 59.0
 95th Percentile = 61.0

Pace Speed = 51-60 mph
 No. in Pace, Above, Below = 77, 8, 15
 % in Pace, Above, Below = 77, 8, 15

Pace Speed = 50-59 mph
 No. in Pace, Above, Below = 73, 6, 21
 % in Pace, Above, Below = 73, 6, 21

Pace Speed = 50-59 mph
 No. in Pace, Above, Below = 149, 17, 34
 % in Pace, Above, Below = 75, 8, 17

Sample Variance = 19.37
 Stndrd. Deviation = 4.40
 Range 1*S = 0.73
 Range 2*S = 0.94
 Range 3*S = 0.99

Sample Variance = 20.46
 Stndrd. Deviation = 4.99
 Range 1*S = 0.67
 Range 2*S = 0.98
 Range 3*S = 1

Sample Variance = 20.54
 Stndrd. Deviation = 4.53
 Range 1*S = 0.73
 Range 2*S = 0.965
 Range 3*S = 0.995



A Tradition of Stewardship
A Commitment to Service

WINERY TRIP GENERATION WORKSHEET

Planning, Building & Environmental Services

1195 Third Street, Suite 210

Napa, CA 94559-3082

(707) 253-4417

PROJECT DESCRIPTION

Clear Form

Winery Name: Parable Winery--Baseline 1. With Existing Permitted Visitation Date Prepared: 11/28/23

Existing Entitled Winery		Harvest	Non-Harvest
Number of Full Time Employees*	Weekday	3	3
	Weekend	3	3
Number of Part Time Employees*	Weekday	0	0
	Weekend	0	0
Maximum Daily Visitation	Weekday	34	18
	Weekend	35	19
Annual Gallons of Production		20,000	20,000
Annual Tons of Grape Haul		125.0	N/A
Number of Visitors at the Largest Event that occurs two or more times per month, on average	Weekday		
	Weekend		

Proposed Winery		Harvest	Non-Harvest
Number of Full Time Employees*	Weekday	3	3
	Weekend	3	3
Number of Part Time Employees*	Weekday	0	0
	Weekend	0	0
Maximum Daily Visitation	Weekday	20	20
	Weekend	20	20
Annual Gallons of Production		20,000	20,000
Annual Tons of Grape Haul		125.0	N/A
Number of Visitors at the Largest Event that occurs two or more times per month, on average	Weekday		
	Weekend		

*Number of full time and part time employees should represent the max number of employees that will be working on any given day (including all vendors and contractors employed for the largest event that occurs two or more times per month on average).

TRIP GENERATION

Existing Winery						Harvest	Non-Harvest
<i>Maximum Daily Weekday Traffic (Friday)</i>							
	<u>Harvest</u>	<u>Non-Harvest</u>					
FT Employees	3	3	3.05 one way trips/employee	FT Employee Daily Trips	9.2	9.2	
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0	
Max Visitors	34	18	2.6 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	26.2	13.8	
Max Event	0	0	2.6 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0	
Gallons of Production	20,000		0.000018 truck trips	Production Daily Trips	0.4	0.4	
Tons of Grape Haul#	125.0		0.013889 truck trips	Grape Haul Daily Trips	1.7	0.0	
Total Weekday Daily Trips					38	24	
Total Weekday Peak Hour Trips*					14	9	
<i>Maximum Daily Weekend Traffic (Saturday)</i>							
	<u>Harvest</u>	<u>Non-Harvest</u>					
FT Employees	3	3	3.05 one way trips/employee	FT Employee Daily Trips	9.2	9.2	
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0	
Max Visitors	35	19	2.8 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	25.0	13.6	
Max Event	0	0	2.8 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0	
Gallons of Production	20,000		0.000018 truck trips	Production Daily Trips	0.4	0.4	
Tons of Grape Haul#	125.0		0.013889 truck trips	Grape Haul Daily Trips	1.7	0.0	
Total Weekend Daily Trips					37	24	
Total Weekend Peak Hour Trips*					19	11	
<i>Maximum Annual Traffic</i>							
Total Annual Trips**						9,816	

Proposed Winery						Harvest	Non-Harvest
<i>Maximum Daily Weekday Traffic (Friday)</i>							
	<u>Harvest</u>	<u>Non-Harvest</u>					
FT Employees	3	3	3.05 one way trips/employee	FT Employee Daily Trips	9.2	9.2	
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0	
Max Visitors	20	20	2.6 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	15.4	15.4	
Max Event	0	0	2.6 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0	
Gallons of Production	20,000		0.000018 truck trips	Production Daily Trips	0.4	0.4	
Tons of Grape Haul#	125.0		0.013889 truck trips	Grape Haul Daily Trips	1.7	0.0	
Total Weekday Daily Trips					27	25	
Total Weekday Peak Hour Trips*					10	9	
<i>Maximum Daily Weekend Traffic (Saturday)</i>							
	<u>Harvest</u>	<u>Non-Harvest</u>					
FT Employees	3	3	3.05 one way trips/employee	FT Employee Daily Trips	9.2	9.2	
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0	
Max Visitors	20	20	2.8 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	14.3	14.3	
Max Event	0	0	2.8 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0	
Gallons of Production	20,000		0.000018 truck trips	Production Daily Trips	0.4	0.4	
Tons of Grape Haul#	125.0		0.013889 truck trips	Grape Haul Daily Trips	1.7	0.0	
Total Weekend Daily Trips					26	24	
Total Weekend Peak Hour Trips*					13	12	
<i>Maximum Annual Traffic</i>							
Total Annual Trips**						9,175	

Net New Trips				Harvest	Non-Harvest	
<i>Maximum Weekday Traffic (Friday)</i>						
If total net new daily trips is greater than 40, a TIS is required				Net New Weekday Daily Trips	-11	1
				Net New Weekday Peak Hour Trips*	-4	0
<i>Maximum Weekend Traffic (Saturday)</i>						
If total net new daily trips is greater than 40, a TIS is required				Net New Weekend Daily Trips	-11	0
				Net New Weekend Peak Hour Trips*	-6	1
<i>Maximum Annual Traffic</i>						
A Traffic Impact Study is NOT Required				Net New Annual Trips**	-641	

#Trips associated with Grape Haul represent harvest season only.

*Weekday peak hour trips are calculated as 38% of daily trips associated with visitors and production plus one trip per employee. Weekend peak hour trips are calculated as 57% of daily trips associated with visitors and production plus one trip per employee.

**Annual trips represent a conservative calculation that assumes 11 weeks of harvest, all weekdays are Fridays, all weekends are Saturdays, and assumes that the largest event that occurs two or more times per month on average occurs every day.



A Tradition of Stewardship
A Commitment to Service

WINERY TRIP GENERATION WORKSHEET

Planning, Building & Environmental Services

1195 Third Street, Suite 210

Napa, CA 94559-3082

(707) 253-4417

PROJECT DESCRIPTION

Clear Form

Winery Name: Parable Winery--Baseline 2. No Existing Permitted Visitation Date Prepared: 11/28/23

Existing Entitled Winery		Harvest	Non-Harvest
Number of Full Time Employees*	Weekday	3	3
	Weekend	3	3
Number of Part Time Employees*	Weekday	0	0
	Weekend	0	0
Maximum Daily Visitation	Weekday	0	0
	Weekend	0	0
Annual Gallons of Production		20,000	20,000
Annual Tons of Grape Haul		125.0	N/A
Number of Visitors at the Largest Event that occurs two or more times per month, on average	Weekday		
	Weekend		

Proposed Winery		Harvest	Non-Harvest
Number of Full Time Employees*	Weekday	3	3
	Weekend	3	3
Number of Part Time Employees*	Weekday	0	0
	Weekend	0	0
Maximum Daily Visitation	Weekday	20	20
	Weekend	20	20
Annual Gallons of Production		20,000	20,000
Annual Tons of Grape Haul		125.0	N/A
Number of Visitors at the Largest Event that occurs two or more times per month, on average	Weekday	0	0
	Weekend	0	0

*Number of full time and part time employees should represent the max number of employees that will be working on any given day (including all vendors and contractors employed for the largest event that occurs two or more times per month on average).

Parable Winery--Baseline 2. No Existing Permitted Visitation

TRIP GENERATION

Existing Winery					Harvest	Non-Harvest	
<i>Maximum Daily Weekday Traffic (Friday)</i>							
	<u>Harvest</u>	<u>Non-Harvest</u>					
FT Employees	3	3	3.05 one way trips/employee	FT Employee Daily Trips	9.2	9.2	
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0	
Max Visitors	0	0	2.6 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	0.0	0.0	
Max Event	0	0	2.6 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0	
Gallons of Production	20,000		0.000018 truck trips	Production Daily Trips	0.4	0.4	
Tons of Grape Haul#	125.0		0.013889 truck trips	Grape Haul Daily Trips	1.7	0.0	
					Total Weekday Daily Trips	12	10
					Total Weekday Peak Hour Trips*	4	4
<i>Maximum Daily Weekend Traffic (Saturday)</i>							
	<u>Harvest</u>	<u>Non-Harvest</u>					
FT Employees	3	3	3.05 one way trips/employee	FT Employee Daily Trips	9.2	9.2	
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0	
Max Visitors	0	0	2.8 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	0.0	0.0	
Max Event	0	0	2.8 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0	
Gallons of Production	20,000		0.000018 truck trips	Production Daily Trips	0.4	0.4	
Tons of Grape Haul#	125.0		0.013889 truck trips	Grape Haul Daily Trips	1.7	0.0	
					Total Weekend Daily Trips	12	10
					Total Weekend Peak Hour Trips*	5	4
<i>Maximum Annual Traffic</i>							
					Total Annual Trips**	3,804	

Proposed Winery					Harvest	Non-Harvest	
<i>Maximum Daily Weekday Traffic (Friday)</i>							
	<u>Harvest</u>	<u>Non-Harvest</u>					
FT Employees	3	3	3.05 one way trips/employee	FT Employee Daily Trips	9.2	9.2	
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0	
Max Visitors	20	20	2.6 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	15.4	15.4	
Max Event	0	0	2.6 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0	
Gallons of Production	20,000		0.000018 truck trips	Production Daily Trips	0.4	0.4	
Tons of Grape Haul#	125.0		0.013889 truck trips	Grape Haul Daily Trips	1.7	0.0	
					Total Weekday Daily Trips	27	25
					Total Weekday Peak Hour Trips*	10	9
<i>Maximum Daily Weekend Traffic (Saturday)</i>							
	<u>Harvest</u>	<u>Non-Harvest</u>					
FT Employees	3	3	3.05 one way trips/employee	FT Employee Daily Trips	9.2	9.2	
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0	
Max Visitors	20	20	2.8 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	14.3	14.3	
Max Event	0	0	2.8 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0	
Gallons of Production	20,000		0.000018 truck trips	Production Daily Trips	0.4	0.4	
Tons of Grape Haul#	125.0		0.013889 truck trips	Grape Haul Daily Trips	1.7	0.0	
					Total Weekend Daily Trips	26	24
					Total Weekend Peak Hour Trips*	13	12
<i>Maximum Annual Traffic</i>							
					Total Annual Trips**	9,175	

Net New Trips		Harvest	Non-Harvest
<i>Maximum Weekday Traffic (Friday)</i>			
If total net new daily trips is greater than 40, a TIS is required		Net New Weekday Daily Trips	15
		Net New Weekday Peak Hour Trips*	6
		15	5
<i>Maximum Weekend Traffic (Saturday)</i>			
If total net new daily trips is greater than 40, a TIS is required		Net New Weekend Daily Trips	14
		Net New Weekend Peak Hour Trips*	8
		14	8
<i>Maximum Annual Traffic</i>			
A Traffic Impact Study is NOT Required		Net New Annual Trips**	5,371

#Trips associated with Grape Haul represent harvest season only.

*Weekday peak hour trips are calculated as 38% of daily trips associated with visitors and production plus one trip per employee. Weekend peak hour trips are calculated as 57% of daily trips associated with visitors and production plus one trip per employee.

**Annual trips represent a conservative calculation that assumes 11 weeks of harvest, all weekdays are Fridays, all weekends are Saturdays, and assumes that the largest event that occurs two or more times per month on average occurs every day.

Counts Unlimited, Inc.

County of Napa
 Silverado Trail
 B/ Exit Driveway - Entry Driveway
 48 Hour Directional Volume Count

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

CNP001
 Site Code: 223-231029A

Start Time	10/27/23 Fri	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		1	49			6	47				
12:15		6	42			1	58				
12:30		6	37			4	45				
12:45		5	34	18	162	3	53	14	203	32	365
01:00		4	44			2	57				
01:15		9	57			0	42				
01:30		5	39			2	46				
01:45		2	43	20	183	4	48	8	193	28	376
02:00		1	45			2	45				
02:15		2	42			0	73				
02:30		1	54			2	52				
02:45		3	54	7	195	1	71	5	241	12	436
03:00		2	52			4	73				
03:15		3	41			3	51				
03:30		2	63			3	73				
03:45		4	51	11	207	1	75	11	272	22	479
04:00		5	54			0	78				
04:15		4	52			2	90				
04:30		3	37			3	75				
04:45		8	40	20	183	4	80	9	323	29	506
05:00		10	49			3	94				
05:15		7	43			7	62				
05:30		10	53			4	48				
05:45		10	44	37	189	12	59	26	263	63	452
06:00		16	55			5	44				
06:15		17	33			8	43				
06:30		29	32			5	47				
06:45		52	21	114	141	15	27	33	161	147	302
07:00		37	30			32	29				
07:15		32	18			20	20				
07:30		24	16			27	19				
07:45		35	23	128	87	31	14	110	82	238	169
08:00		50	22			40	14				
08:15		41	14			37	11				
08:30		51	14			42	10				
08:45		43	12	185	62	41	14	160	49	345	111
09:00		40	14			48	16				
09:15		52	10			40	13				
09:30		36	12			42	12				
09:45		35	15	163	51	48	15	178	56	341	107
10:00		49	16			50	10				
10:15		54	15			29	17				
10:30		47	7			40	11				
10:45		41	7	191	45	38	12	157	50	348	95
11:00		34	12			52	12				
11:15		42	10			48	6				
11:30		49	10			39	11				
11:45		35	6	160	38	49	5	188	34	348	72
Total		1054	1543	1054	1543	899	1927	899	1927	1953	3470
Combined Total		2597		2597		2826		2826		5423	
AM Peak	-	10:00	-	-	-	11:00	-	-	-	-	-
Vol.	-	191	-	-	-	188	-	-	-	-	-
P.H.F.	-	0.884	-	-	-	0.904	-	-	-	-	-
PM Peak	-	-	03:30	-	-	-	04:15	-	-	-	-
Vol.	-	-	220	-	-	-	339	-	-	-	-
P.H.F.	-	-	0.873	-	-	-	0.902	-	-	-	-
Percentage		40.6%	59.4%			31.8%	68.2%				

Counts Unlimited, Inc.

County of Napa
 Silverado Trail
 B/ Exit Driveway - Entry Driveway
 48 Hour Directional Volume Count

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

CNP001
 Site Code: 223-231029A

Start Time	10/28/23 Sat	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		8	43			7	50				
12:15		0	40			5	45				
12:30		13	37			4	47				
12:45		3	43	24	163	0	41	16	183	40	346
01:00		0	49			3	51				
01:15		2	45			2	58				
01:30		3	57			5	58				
01:45		4	57	9	208	2	43	12	210	21	418
02:00		3	46			0	56				
02:15		2	36			4	50				
02:30		4	49			0	69				
02:45		4	40	13	171	1	49	5	224	18	395
03:00		3	48			3	49				
03:15		1	60			1	34				
03:30		3	42			3	52				
03:45		2	45	9	195	0	39	7	174	16	369
04:00		3	53			0	33				
04:15		0	46			0	56				
04:30		2	51			1	49				
04:45		2	51	7	201	2	45	3	183	10	384
05:00		2	47			3	44				
05:15		4	35			4	38				
05:30		4	38			6	33				
05:45		14	40	24	160	2	31	15	146	39	306
06:00		11	41			2	27				
06:15		9	44			6	31				
06:30		9	35			5	28				
06:45		13	34	42	154	17	24	30	110	72	264
07:00		12	16			13	18				
07:15		14	20			15	16				
07:30		18	14			17	15				
07:45		13	13	57	63	10	12	55	61	112	124
08:00		14	19			28	12				
08:15		21	14			25	16				
08:30		22	17			26	9				
08:45		29	14	86	64	19	13	98	50	184	114
09:00		27	13			26	0				
09:15		25	16			26	8				
09:30		31	12			31	7				
09:45		26	8	109	49	32	10	115	25	224	74
10:00		33	14			41	7				
10:15		37	9			37	15				
10:30		33	8			38	11				
10:45		37	8	140	39	37	9	153	42	293	81
11:00		38	11			47	10				
11:15		22	4			45	15				
11:30		44	9			50	12				
11:45		36	9	140	33	47	7	189	44	329	77
Total		660	1500	660	1500	698	1452	698	1452	1358	2952
Combined Total		2160		2160		2150		2150		4310	
AM Peak	-	10:15	-	-	-	11:00	-	-	-	-	-
Vol.	-	145	-	-	-	189	-	-	-	-	-
P.H.F.	-	0.954	-	-	-	0.945	-	-	-	-	-
PM Peak	-	-	01:00	-	-	-	02:00	-	-	-	-
Vol.	-	-	208	-	-	-	224	-	-	-	-
P.H.F.	-	-	0.912	-	-	-	0.812	-	-	-	-
Percentage		30.6%	69.4%			32.5%	67.5%				
ADT/AADT		ADT 4,866		AADT 4,866							

Counts Unlimited, Inc.

County of Napa
 Silverado Trail
 B/ Exit Driveway - Entry Driveway
 48 Hour Directional Volume Count

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

CNP001
 Site Code: 223-231029B

Start Time	11/3/23 Fri	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		5	41			7	37				
12:15		5	42			6	45				
12:30		2	36			4	43				
12:45		3	40	15	159	1	39	18	164	33	323
01:00		2	45			6	51				
01:15		6	53			2	49				
01:30		3	38			0	57				
01:45		0	32	11	168	2	45	10	202	21	370
02:00		5	47			1	47				
02:15		1	52			2	47				
02:30		0	56			4	55				
02:45		0	45	6	200	2	54	9	203	15	403
03:00		5	66			3	47				
03:15		0	70			2	72				
03:30		2	53			5	71				
03:45		4	43	11	232	0	82	10	272	21	504
04:00		2	47			2	83				
04:15		3	43			2	77				
04:30		8	47			1	84				
04:45		3	41	16	178	4	51	9	295	25	473
05:00		12	49			4	70				
05:15		4	41			5	61				
05:30		14	55			5	66				
05:45		10	42	40	187	3	46	17	243	57	430
06:00		10	37			11	45				
06:15		20	35			4	40				
06:30		32	36			7	27				
06:45		45	28	107	136	16	33	38	145	145	281
07:00		32	23			24	30				
07:15		33	23			25	31				
07:30		32	18			22	20				
07:45		38	16	135	80	17	19	88	100	223	180
08:00		50	14			21	13				
08:15		41	18			37	16				
08:30		36	5			32	17				
08:45		37	9	164	46	28	10	118	56	282	102
09:00		45	10			35	6				
09:15		40	11			43	11				
09:30		46	15			30	16				
09:45		42	11	173	47	55	11	163	44	336	91
10:00		52	8			47	10				
10:15		41	8			42	16				
10:30		38	12			57	16				
10:45		27	10	158	38	58	7	204	49	362	87
11:00		39	5			52	13				
11:15		43	6			35	3				
11:30		40	16			44	10				
11:45		33	7	155	34	51	10	182	36	337	70
Total		991	1505	991	1505	866	1809	866	1809	1857	3314
Combined Total		2496		2496		2675		2675		5171	
AM Peak	-	09:30	-	-	-	10:15	-	-	-	-	-
Vol.	-	181	-	-	-	209	-	-	-	-	-
P.H.F.	-	0.870	-	-	-	0.901	-	-	-	-	-
PM Peak	-	-	02:30	-	-	-	03:45	-	-	-	-
Vol.	-	-	237	-	-	-	326	-	-	-	-
P.H.F.	-	-	0.846	-	-	-	0.970	-	-	-	-
Percentage		39.7%	60.3%			32.4%	67.6%				

Counts Unlimited, Inc.

County of Napa
 Silverado Trail
 B/ Exit Driveway - Entry Driveway
 48 Hour Directional Volume Count

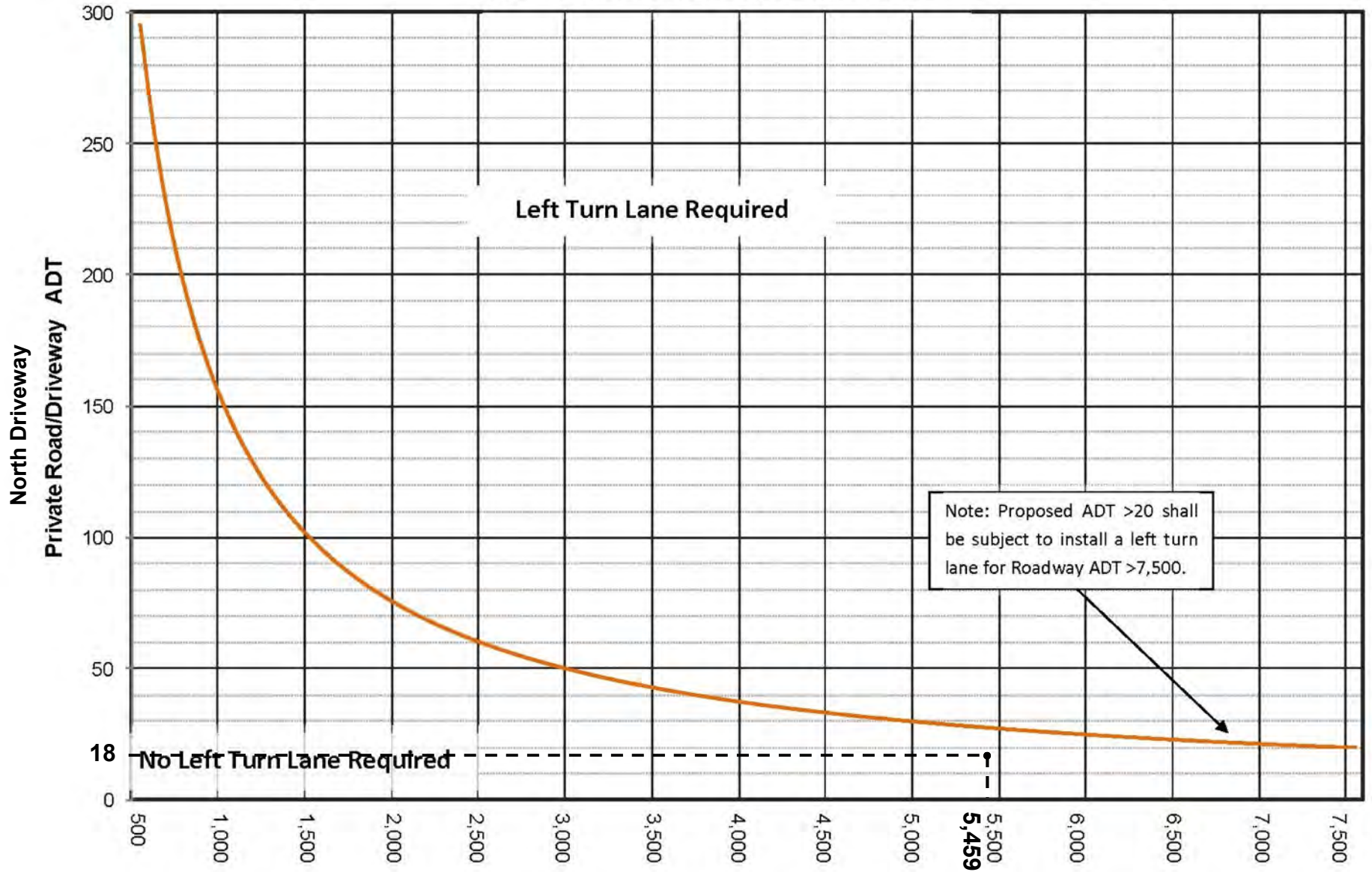
PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

CNP001
 Site Code: 223-231029B

Start Time	11/4/23 Sat	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		6	34			4	46				
12:15		6	37			6	44				
12:30		5	55			3	65				
12:45		6	53	23	179	1	49	14	204	37	383
01:00		3	59			5	40				
01:15		0	38			2	44				
01:30		3	53			7	42				
01:45		5	36	11	186	0	47	14	173	25	359
02:00		1	46			2	54				
02:15		3	47			1	42				
02:30		1	54			3	38				
02:45		1	35	6	182	2	36	8	170	14	352
03:00		1	41			2	59				
03:15		1	40			3	50				
03:30		1	40			2	49				
03:45		2	29	5	150	0	44	7	202	12	352
04:00		3	45			0	36				
04:15		1	36			2	45				
04:30		0	45			2	47				
04:45		3	57	7	183	2	43	6	171	13	354
05:00		2	42			3	42				
05:15		2	50			1	48				
05:30		1	36			4	39				
05:45		3	30	8	158	1	41	9	170	17	328
06:00		10	46			10	27				
06:15		9	28			3	19				
06:30		14	29			3	33				
06:45		16	26	49	129	12	23	28	102	77	231
07:00		7	22			14	16				
07:15		11	22			9	20				
07:30		12	21			6	13				
07:45		24	15	54	80	9	18	38	67	92	147
08:00		26	15			11	14				
08:15		12	7			17	10				
08:30		22	15			18	19				
08:45		15	12	75	49	16	9	62	52	137	101
09:00		37	7			24	2				
09:15		24	7			36	12				
09:30		29	4			25	14				
09:45		36	11	126	29	34	9	119	37	245	66
10:00		28	18			36	10				
10:15		41	13			37	10				
10:30		32	7			40	14				
10:45		36	7	137	45	43	11	156	45	293	90
11:00		37	13			43	6				
11:15		35	5			44	10				
11:30		39	8			39	4				
11:45		40	7	151	33	42	9	168	29	319	62
Total		652	1403	652	1403	629	1422	629	1422	1281	2825
Combined Total		2055		2055		2051		2051		4106	
AM Peak	-	11:00	-	-	-	10:30	-	-	-	-	-
Vol.	-	151	-	-	-	170	-	-	-	-	-
P.H.F.	-	0.944	-	-	-	0.966	-	-	-	-	-
PM Peak	-	-	00:30	-	-	-	12:00	-	-	-	-
Vol.	-	-	205	-	-	-	204	-	-	-	-
P.H.F.	-	-	0.869	-	-	-	0.785	-	-	-	-
Percentage		31.7%	68.3%			30.7%	69.3%				
ADT/AADT		ADT 4,638		AADT 4,638							

Parable Winery North Driveway

LEFT TURN LANE WARRANT GRAPH



Parable Winery Project:
Existing + Project Conditions

Roadway ADT
Silverado Trail



A Tradition of Stewardship
A Commitment to Service

WINERY TRIP GENERATION WORKSHEET

Planning, Building & Environmental Services

1195 Third Street, Suite 210

Napa, CA 94559-3082

(707) 253-4417

PROJECT DESCRIPTION

Winery Name: _____	Date Prepared: _____
---------------------------	-----------------------------

Existing Entitled Winery		Harvest	Non-Harvest
Number of Full Time Employees*	Weekday		
	Weekend		
Number of Part Time Employees*	Weekday		
	Weekend		
Maximum Daily Visitation	Weekday		
	Weekend		
Annual Gallons of Production			
Annual Tons of Grape Haul			N/A
Number of Visitors at the Largest Event that occurs two or more times per month, on average	Weekday		
	Weekend		

Proposed Winery		Harvest	Non-Harvest
Number of Full Time Employees*	Weekday		
	Weekend		
Number of Part Time Employees*	Weekday		
	Weekend		
Maximum Daily Visitation * Limited to 3 Vehicles	Weekday		
	Weekend		
Annual Gallons of Production			
Annual Tons of Grape Haul			N/A
Number of Visitors at the Largest Event that occurs two or more times per month, on average	Weekday		
	Weekend		

*Number of full time and part time employees should represent the max number of employees that will be working on any given day (including all vendors and contractors employed for the largest event that occurs two or more times per month on average).

TRIP GENERATION

Existing Winery				Harvest	Non-Harvest
<u>Maximum Daily Weekday Traffic (Friday)</u>					
	<u>Harvest</u>	<u>Non-Harvest</u>			
FT Employees			3.05 one way trips/employee	FT Employee Daily Trips	
PT Employees			1.9 one way trips/employee	PT Employee Daily Trips	
Max Visitors			2.6 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	
Max Event			2.6 visitors/vehicle for 2 one way trips	Max Event Daily Trips	
Gallons of Production			0.000018 truck trips	Production Daily Trips	
Tons of Grape Haul#			0.013889 truck trips	Grape Haul Daily Trips	
			Total Weekday Daily Trips		
			Total Weekday Peak Hour Trips*		
<u>Maximum Daily Weekend Traffic (Saturday)</u>					
	<u>Harvest</u>	<u>Non-Harvest</u>			
FT Employees			3.05 one way trips/employee	FT Employee Daily Trips	
PT Employees			1.9 one way trips/employee	PT Employee Daily Trips	
Max Visitors			2.8 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	
Max Event			2.8 visitors/vehicle for 2 one way trips	Max Event Daily Trips	
Gallons of Production			0.000018 truck trips	Production Daily Trips	
Tons of Grape Haul#			0.013889 truck trips	Grape Haul Daily Trips	
			Total Weekend Daily Trips		
			Total Weekend Peak Hour Trips*		
<u>Maximum Annual Traffic</u>					
					Total Annual Trips**

Proposed Winery				Harvest	Non-Harvest
<u>Maximum Daily Weekday Traffic (Friday)</u>					
	<u>Harvest</u>	<u>Non-Harvest</u>			
FT Employees			3.05 one way trips/employee	FT Employee Daily Trips	
PT Employees			1.9 one way trips/employee	PT Employee Daily Trips	
Max Visitors			2.6 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	
Max Event	* Limited to 3 Vehicles		2.6 visitors/vehicle for 2 one way trips	Max Event Daily Trips	
Gallons of Production			0.000018 truck trips	Production Daily Trips	
Tons of Grape Haul#			0.013889 truck trips	Grape Haul Daily Trips	
			Total Weekday Daily Trips		
			Total Weekday Peak Hour Trips*		
<u>Maximum Daily Weekend Traffic (Saturday)</u>					
	<u>Harvest</u>	<u>Non-Harvest</u>			
FT Employees			3.05 one way trips/employee	FT Employee Daily Trips	
PT Employees			1.9 one way trips/employee	PT Employee Daily Trips	
Max Visitors			2.8 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	
Max Event	* Limited to 3 Vehicles		2.8 visitors/vehicle for 2 one way trips	Max Event Daily Trips	
Gallons of Production			0.000018 truck trips	Production Daily Trips	
Tons of Grape Haul#			0.013889 truck trips	Grape Haul Daily Trips	
			Total Weekend Daily Trips		
			Total Weekend Peak Hour Trips*		
<u>Maximum Annual Traffic</u>					
					Total Annual Trips**

Net New Trips		Harvest	Non-Harvest
<u>Maximum Weekday Traffic (Friday)</u>			
If total net new daily trips is greater than 40, a TIS is required		Net New Weekday Daily Trips	
		Net New Weekday Peak Hour Trips*	
<u>Maximum Weekend Traffic (Saturday)</u>			
If total net new daily trips is greater than 40, a TIS is required		Net New Weekend Daily Trips	
		Net New Weekend Peak Hour Trips*	
<u>Maximum Annual Traffic</u>			
		Net New Annual Trips**	

#Trips associated with Grape Haul represent harvest season only.

*Weekday peak hour trips are calculated as 38% of daily trips associated with visitors and production plus one trip per employee. Weekend peak hour trips are calculated as 57% of daily trips associated with visitors and production plus one trip per employee.

**Annual trips represent a conservative calculation that assumes 11 weeks of harvest, all weekdays are Fridays, all weekends are Saturdays, and assumes that the largest event that occurs two or more times per month on average occurs every day.



A Tradition of Stewardship
A Commitment to Service

WINERY TRIP GENERATION WORKSHEET

Planning, Building & Environmental Services

1195 Third Street, Suite 210

Napa, CA 94559-3082

(707) 253-4417

PROJECT DESCRIPTION

Winery Name: _____	Date Prepared: _____
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Existing Entitled Winery		Harvest	Non-Harvest
Number of Full Time Employees*	Weekday	_____	_____
	Weekend	_____	_____
Number of Part Time Employees*	Weekday	_____	_____
	Weekend	_____	_____
Maximum Daily Visitation	Weekday	_____	_____
	Weekend	_____	_____
Annual Gallons of Production		_____	_____
Annual Tons of Grape Haul		_____	N/A
Number of Visitors at the Largest Event that occurs two or more times per month, on average	Weekday	_____	_____
	Weekend	_____	_____

Proposed Winery		Harvest	Non-Harvest
Number of Full Time Employees*	Weekday	_____	_____
	Weekend	_____	_____
Number of Part Time Employees*	Weekday	_____	_____
	Weekend	_____	_____
Maximum Daily Visitation	Weekday	_____	_____
	Weekend	_____	_____
Annual Gallons of Production		_____	_____
Annual Tons of Grape Haul		_____	N/A
Number of Visitors at the Largest Event that occurs two or more times per month, on average	Weekday	_____	_____
	Weekend	_____	_____

*Number of full time and part time employees should represent the max number of employees that will be working on any given day (including all vendors and contractors employed for the largest event that occurs two or more times per month on average).

TRIP GENERATION

Existing Winery				Harvest	Non-Harvest
<u>Maximum Daily Weekday Traffic (Friday)</u>					
	<u>Harvest</u>	<u>Non-Harvest</u>			
FT Employees			3.05 one way trips/employee	FT Employee Daily Trips	
PT Employees			1.9 one way trips/employee	PT Employee Daily Trips	
Max Visitors			2.6 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	
Max Event			2.6 visitors/vehicle for 2 one way trips	Max Event Daily Trips	
Gallons of Production			0.000018 truck trips	Production Daily Trips	
Tons of Grape Haul#			0.013889 truck trips	Grape Haul Daily Trips	
			Total Weekday Daily Trips		
			Total Weekday Peak Hour Trips*		
<u>Maximum Daily Weekend Traffic (Saturday)</u>					
	<u>Harvest</u>	<u>Non-Harvest</u>			
FT Employees			3.05 one way trips/employee	FT Employee Daily Trips	
PT Employees			1.9 one way trips/employee	PT Employee Daily Trips	
Max Visitors			2.8 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	
Max Event			2.8 visitors/vehicle for 2 one way trips	Max Event Daily Trips	
Gallons of Production			0.000018 truck trips	Production Daily Trips	
Tons of Grape Haul#			0.013889 truck trips	Grape Haul Daily Trips	
			Total Weekend Daily Trips		
			Total Weekend Peak Hour Trips*		
<u>Maximum Annual Traffic</u>					
			Total Annual Trips**		

Proposed Winery				Harvest	Non-Harvest
<u>Maximum Daily Weekday Traffic (Friday)</u>					
	<u>Harvest</u>	<u>Non-Harvest</u>			
FT Employees			3.05 one way trips/employee	FT Employee Daily Trips	
PT Employees			1.9 one way trips/employee	PT Employee Daily Trips	
Max Visitors			2.6 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	
Max Event			2.6 visitors/vehicle for 2 one way trips	Max Event Daily Trips	
Gallons of Production			0.000018 truck trips	Production Daily Trips	
Tons of Grape Haul#			0.013889 truck trips	Grape Haul Daily Trips	
			Total Weekday Daily Trips		
			Total Weekday Peak Hour Trips*		
<u>Maximum Daily Weekend Traffic (Saturday)</u>					
	<u>Harvest</u>	<u>Non-Harvest</u>			
FT Employees			3.05 one way trips/employee	FT Employee Daily Trips	
PT Employees			1.9 one way trips/employee	PT Employee Daily Trips	
Max Visitors			2.8 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	
Max Event			2.8 visitors/vehicle for 2 one way trips	Max Event Daily Trips	
Gallons of Production			0.000018 truck trips	Production Daily Trips	
Tons of Grape Haul#			0.013889 truck trips	Grape Haul Daily Trips	
			Total Weekend Daily Trips		
			Total Weekend Peak Hour Trips*		
<u>Maximum Annual Traffic</u>					
			Total Annual Trips**		

Net New Trips		Harvest	Non-Harvest
<u>Maximum Weekday Traffic (Friday)</u>			
If total net new daily trips is greater than 40, a TIS is required		Net New Weekday Daily Trips	
		Net New Weekday Peak Hour Trips*	
<u>Maximum Weekend Traffic (Saturday)</u>			
If total net new daily trips is greater than 40, a TIS is required		Net New Weekend Daily Trips	
		Net New Weekend Peak Hour Trips*	
<u>Maximum Annual Traffic</u>			
		Net New Annual Trips**	

#Trips associated with Grape Haul represent harvest season only.

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