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Traffic Study



September 10, 2015

Mr. Dan Pina
Flynnville Wine Company
c/o PD Properties
955 Vintage Avenue
St. Helena, CA 94574

RE: Updated Trip Generation Analysis for the Proposed Flynnville Winery Project

Dear Mr. Pina:

This letter report provides an updated trip generation analysis for the proposed Flynnville Winery project off of State Route 29 at Maple Lane. This study reflects our discussions with your planning consultant (Mr. Jeff Redding, AICP), our preliminary review of the new project description, and correspondence from Mr. Rick Marshall (Napa County Deputy Director of Public Works). The following sections outline the previous and new project characteristics, calculate the new daily and peak hour trip generation, and assign the new project trips to SR-29. Finally, new proposed project trip generation was compared to “existing,” “near-term,” and “cumulative” average daily traffic (ADT) volumes along SR-29 adjacent to the proposed project site.

Previous Project Site Analysis (2013)

A focused traffic analysis for proposed winery uses was conducted for the project site in September, 2013 (*Omni-Means, Ltd., Focused Traffic Analysis for the Proposed Flynnville Winery Project—Located at SR-29/Maple Lane in Napa County, 2013*). This traffic analysis evaluated existing traffic operations at the proposed project driveway intersections off SR-29 at Maple Lane and Drew Drive. In addition, the analysis covered project trip generation, vehicle sight distance/speeds, and the effects of proposed project traffic on existing, near-term, and cumulative roadway and intersection operation.

With regard to previously proposed winery uses, the winery was evaluated with an annual production of 300,000 gallons. It was estimated that there would be an average of 300 visitors on a weekday and 500 visitors on a weekend (by appointment only). Employment would equate to 30 weekday employees and 20 weekend employees. During the crush/harvest season, employment would remain constant at 30 employees. During the non-harvest season, the winery would generate 5 weekly truck trips or approximately 1 per day. During the harvest season, the project would have generated 30 daily truck trips. Overall, the proposed project was estimated to generate 328 weekday daily trips (120 PM peak hour) and 418 weekend daily trips (109 mid-day peak hour).

New Proposed Project Characteristics (2015)

Based on the most recent use permit application filed for the proposed Flynnville Winery project overall production, visitation, and employment would be significantly reduced from previously proposed levels.ⁱ As proposed, the following production, employment, and visitation levels would be expected:

- Production: 60,000 gallons per year
- Visitation: 25 (average/maximum weekday), 25 (average/maximum weekend)
- Employment:ⁱⁱ 24 Full-Time (weekday), 24 Full-Time (weekend)

As shown above, all proposed winery production, visitation, and employment levels would be reduced from previous 2013 levels. In addition, the winery proposes to have 25 visitors per day and this would be considered both an average and maximum level (it is the winery's intent not to exceed 25 visitors per day).

In addition to "normal" weekday and weekend activities associated with proposed winery uses, there would also be marketing events planned throughout the year and these would include the following:

- Six (6) events per year up to 25 persons;
- Six (6) events per year up to 50 persons;
- Three (3) events per year up to 100 persons.

The application indicates that all marketing events would be conducted during off-peak commute hours.

New Project Trip Generation

Based on the proposed new project description, the expected weekday and weekend peak hour and daily traffic volumes have been calculated and are shown in Table 1 (attached). Employee peaking factors and auto occupancy rates for visitors are based on recent winery research conducted by the Napa County Conservation, Development, and Planning Department.ⁱⁱⁱ Based on a 60,000 gallon winery with 24 full-time employees and 25 daily visitors, the proposed project would be expected to generate 93 weekday daily trips with 32 weekday PM peak hour trips (4 in, 28 out). During a typical weekend (Saturday), the project would be expected to generate 91 daily trips with 29 mid-day (afternoon) peak hour trips (14 in, 15 out).

Based on standard auto occupancy rates used by the County, the largest marketing event for the project with an attendance of 100 persons would generate 91 (46 in, 45 out) event trips. These events are typically of sufficient duration in length that the inbound and outbound trips occur in separate hours, thus the number for trips on the street network at one time are half of the total volume. These events would be held outside of typical peak traffic periods (during the middle of the day or later than 6:00 p.m.).



**TABLE 1
DAILY, PEAK HOUR, AND LARGE EVENT TRIP GENERATION:
PROPOSED FLYNNVILLE WINERY PROJECT**

<u>Weekday Daily Traffic:</u>		
25 visitors/2.6 persons per vehicle x 2 one-way trips	=	19 daily trips
24 full time employees x 3.05 one-way trips	=	73 daily trips
0 part-time employees x 1.90 one-way trips	=	0 daily trips
60,000 gallons/1,000 x .009 daily trucks x 2 o-w trips	=	<u>1 daily trips</u>
Total Weekday Daily Trips	=	93 daily trips
 <u>Weekday PM Peak Hour Traffic:</u>		
(19 daily visitor trips + 1 daily truck trip) x 0.38 peak	=	8 peak hour trips
24 full time employees x 1 trip/employee	=	<u>24 peak hour trips</u>
Total Weekday PM Peak Hour Trips	=	32 trips (4 in, 28 out)
 <u>Weekend (Saturday) Daily Traffic:</u>		
25 visitors/2.8 persons per vehicle x 2 one-way trips	=	18 daily trips
24 full time employees x 3.05 one-way trips	=	73 daily trips
0 part-time employees x 1.90 one-way trips	=	<u>0 daily trips</u>
Total Weekend (Saturday) Daily Trips	=	91 daily trips
 <u>Weekend (Saturday) Peak Hour Traffic:</u>		
18 daily visitor trips x 0.25 peak	=	5 peak hour trips
24 full time employees x 1 trip/employee	=	24 peak hour trips
0 part-time employees/2	=	<u>0 peak hour trips</u>
Total Weekend (Saturday) Peak Hour Trips	=	29 trips (14 in, 15 out)
 <u>Largest Marketing Event – Additional Traffic`</u>		
6 event staff x 2 one-way trips per person	=	12 event trips
100 visitors / 2.8 visitors per vehicle x 2 o-w trips	=	71 event trips
4 trucks x 2 one-way trips	=	<u>8 event trips</u>
Total Largest Event Marketing Trips:	=	91 event trips

Source: Production, employee, and visitor data provided by Mr. Tom Faherty (project representative) and Mr. Jeffery Redding (Planning Consultant, August, 2015. Daily and peak hour calculations based on County of Napa, Conservation, Development, and Planning Department, "Use Permit Application Package," Napa County Winery Traffic Generation Characteristics, 2015.



New Project Trip Assignment on State Route 29 (St. Helena Highway)

New daily and peak hour project trips from the revised Flynnville Winery project were assigned to SR-29 based on existing traffic data and previous transportation analyses.^{iv} Proposed project trips were distributed at Maple Lane onto SR-29 with 70% to/from the south and 30% to/from the north (based on the existing intersection traffic flow at the Maple Lane-Drew Lane intersections at SR-29).

a. Existing Plus Project Conditions

The project would be expected to add approximately 65 daily trips south of the site and 28 daily trips north of the site on SR-29. This would represent an increase of less than one percent (0.0049% or 0.5%) of the daily volumes on SR-29 adjacent to the site. The combined existing plus project volume of 13,265 daily trips would remain within the carrying capacity of a two lane rural highway with conditions equivalent to LOS 'C'.

b. Near-Term Plus Project Conditions

Under near-term (no project) conditions, daily traffic volumes on SR-29 would increase to 13,426 ADT maintaining LOS C conditions. Similar to existing plus project conditions, the project would be expected to add approximately 65 daily trips south of the site and 28 daily trips north of the site on SR-29 resulting in 13,491 ADT. This would represent an increase of less than one percent (0.0048% or 0.5%) of the daily volumes on SR-29 adjacent to the site.

c. Year 2030 Cumulative Plus Project Conditions

Under year 2030 cumulative (no project) conditions, daily traffic volumes on SR-29 would increase to 27,150 ADT in the project site vicinity representing LOS F operating conditions. The addition of project-related traffic to cumulative SR-29 volumes would not change these operating conditions. The proposed project would represent less than one percent (0.23%) of the cumulative daily volumes on SR-29 adjacent to the site.

Summary

The proposed Flynnville Winery project's reduced 2015 activity levels for wine production, employment, and visitation would be significantly lower than levels proposed in the Year 2013. As a result, daily trip generation from the proposed project would represent less than one (1) percent of overall ADT on SR-29/128 in the project vicinity under existing, near-term, and/or year 2030 cumulative conditions.

We trust this updated trip generation analysis for the proposed Flynnville Winery project will provide further information related to the project's Use Permit Application with Napa County. Please contact us should you have any comments or questions.



Sincerely,

Omni-Means, Ltd.



Peter J. Galloway
Transportation Planner/Project Manager

Cc: George W. Nickelson, PE (Omni-Means)

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ⁱ Flynnville Winery, *Final Use Permit Application, Napa County, July 25, 2015.*

ⁱⁱ Jason R. Hade, *Planner III, County of Napa, Flynnville Wine Company—Use Permit No. P15-00225, Planning Division, H. Traffic Analysis—Please use 24 employees for traffic analysis, Letter to Mr. Tom Faherty, Valley Architects, August 6, 2015.*

ⁱⁱⁱ County of Napa, *Conservation, Development, and Planning Department, “Use Permit Application Package,” Napa County Winery Traffic Generation Characteristics, 2015.*

^{iv} Omni-Means, Ltd., *Focused Traffic Analysis for the Proposed Flynnville Winery Project—Located at SR-29/Maple Lane in Napa County, 2013*

