Technical Memorandum

February 10, 2021

To:	Mr. Joshua Devore	**Project:**	Amici Cellars Proposed Use Modification Project
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CC:	----------------	**File No.:**	C8359LTR003.DOCX

Subject: **Amici Cellars Use Modification Project; Transportation Demand Management (TDM)/Vehicle Limitation Plan**

The following technical memorandum provides supplemental transportation analyses for the proposed Amici Cellars Use Modification project. Specifically, project activities associated with trip generation, new reservation/reporting plan, and overall transportation demand management (TDM) measures have been evaluated and expanded. Amici Cellars proposes to limit the number of *vehicles* to/from the Winery on a daily basis as part of a TDM/Vehicle Limitation Plan. Restrictions in the number of vehicles allowed to access the Winery would be incorporated into their operational plans and would be in effect during both the harvest and non-harvest seasons. The approach to limiting the number of daily vehicles to the Winery differs from recent methodologies used to reduce vehicle trips for winery activities in the Napa Valley (although vehicle limits have been used in the past). Most, if not all recent winery use permit applications for Napa County typically include limiting the number of *visitors* associated with winery tours-tastings and marketing as a means to indirectly reduce vehicle trips. The Amici Cellars plan to directly limit the number of daily vehicles to/from the site is conceived to be a more effective approach for achieving meaningful reductions in greenhouse gas emissions and vehicle miles traveled (VMT) in the northern Napa Valley.

Three components of the proposed Amici Cellars use modification have been analyzed to provide additional transportation information related to the plan for limiting vehicle traffic as follows:

- Daily and Peak Hour Trip Generation: A comparison of proposed project trip generation has been conducted using Napa County Winery Traffic Information/Trip Generation sheets based on number of visitors (traditional) versus limiting number of vehicles (new);

- Reservation/Reporting Plan: An extended reservation and reporting plan has been outlined for Winery operations to account for the recording of vehicle trips to/from the winery, the number of visitors, and measures to prevent "incidental" or extra vehicle trips that might increase daily trip generation;

- Transportation Demand Management: TDM measures to reduce overall visitation and employment trips have been recommended as part of the overall use permit application. These include measures associated with employees, visitors, and marketing events.

In addition, there is a residence that shares the driveway with the winery, located on the adjacent parcel. GHD understands that the residence is also owned by the winery but does not and is not anticipated to generate significant vehicle trips (as it does not serve as a primary residence). For trip generation purposes it would be more appropriate to categorize the house as a recreational home given its usage. Nevertheless, the analysis below analyzes traffic on the driveway including the residence as if it were a single family residence, and uses a full allocation of ten (10) daily driveway trips for the residence. This analysis therefore is highly conservative as it substantially overstates actual existing or proposed conditions based on current usage of the residence.

The following sections describe overall project trip generation, reservation/reporting plan, and transportation demand management measures proposed as part of use modification TDM/Vehicle Limitation Plan.

1.   Project Trip Generation Comparison

A comparison of daily and peak hour trip generation for the proposed project has been conducted using traditional Napa County ratios and the Amici Cellars TDM/Vehicle Limitation Plan. In both cases, the trip generation methodology is the same with the one exception of how the visitor trips are generated. The County methodology assumes an auto occupancy (2.6 weekdays, 2.8 weekends) based on the total number of visitors then multiplies the number of resulting vehicles by two daily trips. These ratios have been in use for an extended period of time for Napa County winery trip generation analyses. However, GHD is not aware of more recent analysis that remain consistent with modern practices involving the more prevalent use of professional drivers (particularly chauffeured larger-capacity SUVs) and ride-share services (UBER, Lyft). Under the Amici Cellars TDM/Vehicle Limitation Plan, the total number of visitors is not a factor in vehicle traffic (although there will still be a maximum cap for tours and tastings). Rather, the number of vehicles associated with visitation is strictly limited to a specific daily total based on the harvest and non-harvest seasons. The following sections describe both existing and proposed trip generation using both traditional Napa County methodology and proposed Amici Cellars Winery vehicle limitation methodology.

1.1   Existing Use Permit Conditions: Napa County Methodology

The proposed Amici Cellars use permit application (minor-use modification) project is currently filed under the Napa County compliance program for wineries. Therefore, "existing" conditions represent the current activity baseline at the winery. The following project components that include employment, visitation, production, and residential uses represent "Existing Conditions" and are listed below:

Existing Project Winery Components:

- Production   Gallons   20,000
- Employees   Weekday   4 FT/2 PT (non-harvest)

                          Weekend   1 FT/1 PT (non-harvest)

                          Weekday   4 FT/4 PT (harvest)

                          Weekend   4 FT/4 PT (harvest)

- Visitors   Weekday   25 (non-harvest)

                          Weekend   25 (harvest)

As shown above, the Winery is currently producing 20,000 gallons of wine per year. During non-harvest periods the Winery employs 4 full-time and 2 part-time workers during the weekday and 1 full-time and 1 part-time worker on the weekends. With harvest season, employment increases to 4 full-time and 5 part-time workers during both the weekday and weekend periods – however, because the residence already assumes commuting trips on the driveway, and one of those part time workers would be the residence owner, only 4 part time workers are used for calculation purposes to avoid double counting. Winery visitation is limited to 25 guests per day during both the weekday and weekend periods for harvest and non-harvest seasons. In addition to current winery uses, there is an existing residence on the adjacent property that shares a driveway with the winery. As noted above, GHD understands that the residence is not used as a primary residence and as such the analysis below overstates the actual number of trips in connection with the residence. As per ITE and Napa County direction, 10 daily trips and 1 peak hour trip (weekday has been assumed for the adjacent residence

Existing daily and peak hour trip generation for Amici Cellar's driveway (existing project winery and residence) has been based on Napa County Planning, Building, and Environmental Services (PBES) "Existing Conditions Winery Traffic Information/Trip Generation ratios.[1] Existing driveway trip generation has been shown in Table 1.

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[1] County of Napa, Planning, Building, and Environmental Services (PBES), Existing Conditions Winery Traffic Information/Trip Generation, Updated January 2020.

Table 1: Existing Driveway Conditions; Napa County Methodology
Daily and Peak Hour Project Maximum Trip Generation (No TDM)

Land Use	Units		Daily		Weekday PM Peak			Weekend MD Peak		
	Wkdy.	Wknd.	Wkdy. Trips	Wknd. Trips	Trips	In	Out	Trips	In	Out
Existing Winery Uses (Amici Cellars)					Non-Harvest Season					
F-T Winery Employees	4	1	12	3	4	0	4	1	1	0
P-T Winery Employees	2	1	4	2	1	0	1	1	0	1
Visitors	25	25	19	18	7	2	5	10	5	5
Production	20K		1	1	1	0	1	1	1	0
Residence	1		10	10	1	1	0	1	0	1
Non-Harvest Project Trips			**46**	**34**	**14**	3	11	**14**	7	7
Existing Winery Uses (Amici Cellars)					Harvest Season					
F-T Winery Employees	4	4	12	12	4	0	4	4	2	2
P-T Winery Employees	4	4	8	8	4	0	4	4	2	2
Visitors	25	25	19	18	8	3	5	11	6	5
Production	20K		3	3	1	0	1	1	1	0
Residence	1		10	10	1	1	0	1	0	1
Harvest Project Trips			**52**	**51**	**18**	4	14	**21**	11	10

(1) Daily and peak hour trip generation based on Napa County PBES, Existing (Permitted) Project Conditions, Existing Conditions Winery

Traffic Information/Trip Generation, Update January 2020 (see Appendices for trip genertion calculation sheets)

F-T = Full-Time, P-T = Part-Time, Wkdy = Weekday, Wknd = Weekend

As shown in Table 1, under permitted conditions the Amici Cellars Winery plus residence is calculated to generate 46 daily trips during the weekdays and 34 daily trips on a weekend (Saturday) during the non-harvest season. This activity equates to 14 weekday PM peak hour trips and 14 weekend midday peak hour trips. During the harvest season, the Winery plus residence is calculated to generate 50 daily trips during the weekdays and 49 daily trips on a weekend. There are calculated 16 weekday PM peak hour trips and 19 weekend midday peak hour trips.

1.2 Proposed Use Permit Conditions: Napa County Methodology

Under proposed Amici Cellars use permit modifications, full-time and part-time employment would decrease by 1-2 employees based on classification. In addition, wine production would increase slightly by 10,000 gallons from 20,000 to 30,000 gallons. For Napa County methodology, winery visitation has been kept consistent with permitted levels at 25 guests per day during both the weekday and weekend periods. Discussions with the project applicant indicate that the winery plans to keep visitation "capped" at 25 guests per day with proposed use modifications. The following project components that include employment, visitation, production, and residential uses represent "Proposed Use Permit Conditions" are listed as follows:

Proposed Use Modification Project Winery Components:

- Production Gallons 30,000
- Employees Weekday 4 FT/1 PT (non-harvest)
  - Weekend 2 FT/1 PT (non-harvest)
  - Weekday 4 FT/3 PT (harvest)
  - Weekend 4 FT/3 PT (harvest)
- Visitors Weekday 25 (non-harvest)
  - Weekend 25 (harvest)

As noted above, one part-time employee is subtracted for harvest calculation purposes to avoid double counting with the residence. Daily and peak hour trip generation associated with proposed project use permit modifications has been shown in Table 2.

Table 2:   Proposed Use Modification: Napa County Methodology Daily and Peak Hour Driveway Trip Generation (No TDM)

Land Use	Units		Daily		Weekday PM Peak			Weekend MD Peak		
	Wkdy.	Wknd.	Wkdy. Trips	Wknd. Trips	Trips	In	Out	Trips	In	Out
Standard Assumption Uses (Amici Cellars)			Non-Harvest Season							
F-T Winery Employees	4	2	12	6	4	0	4	2	1	1
P-T Winery Employees	1	1	2	2	1	0	1	1	0	1
Visitors	25	25	19	18	7	2	5	10	5	5
Production	30K		1	1	1	0	1	1	1	0
Residence	1		10	10	1	1	0	1	0	1
Non-Harvest Project Trips			**44**	**37**	**14**	3	11	**15**	7	8
Standard Assumption Uses (Amici Cellars)			Harvest Season							
F-T Winery Employees	4	4	12	12	4	0	4	4	2	2
P-T Winery Employees	3	3	6	6	2	0	2	2	1	1
Visitors	25	25	19	18	8	3	5	10	5	5
Production	30K		4	4	1	0	1	3	1	2
Residence	1		10	10	1	1	0	1	0	1
Harvest Project Trips			**51**	**50**	**16**	**4**	**12**	**20**	**9**	**11**

(1) Daily and peak hour trip generation based on Napa County PBES, Proposed Project Conditions, Proposed Conditions Winery

Traffic Information/Trip Generation, Update January 2020 (see Appendices for trip genertion calculation sheets)

F-T = Full-Time, P-T = Part-Time, Wkdy = Weekday, Wknd = Weekend

As shown in Table 2, daily and peak hour trip generation would be unchanged or slightly reduced from existing levels during the non-harvest season. The proposed project driveway would be expected to generate 44 weekday daily trips and 37 weekend daily trips using standard business-as-usual assumptions. Peak hour trip generation would equal 14 PM peak hour trips and 15 weekend (Saturday) midday peak hour trips.

During the harvest season, overall driveway trip generation would increase slightly from existing levels. There would be 51 weekday daily trips and 50 weekend daily trips. Peak hour trip generation would total 16 PM peak hour trips and 20 weekend (Saturday) midday peak hour trips.

1.3   Proposed Use Permit Conditions: Proposed Amici Cellars TDM/Vehicle Limitation Plan

The proposed Amici Cellars TDM/Vehicle Limitation would limit the number of daily vehicles to/from the winery. As noted, the winery would strive to maintain a daily visitation limit of 25 guests. However, the number of visitors would be independent of the number of vehicles. Focusing on daily vehicle traffic associated with visitor tours/tastings, Amici Cellars would allow just seven (7) visitor vehicles to/from the winery during non-harvest operations and four (4) visitor vehicles during harvest operations. Dependent on the season, vehicles associated with visitor activities would equate to 14 daily trips or 8 daily trips. It is noted that for most winery operations in the Napa Valley, vehicle traffic associated with visitor tours/tastings tends to peak during the harvest months of August, September, and October. Therefore, the Amici Cellars TDM/Vehicle Limitation Plan would help to reduce vehicle trips during the busy harvest/crush season when traffic flows typically increase in the Napa Valley due to operations and events associated with these yearly activities.

All other proposed use modification components associated with production, employment, grape on-haul, and residential uses would remain unchanged from levels shown in Table 2. Daily and peak hour trip generation for the proposed project driveway with TDM/Vehicle Limitation Plan is shown in Table 3. As calculated, the proposed project driveway would be expected to generate 40 daily trips or less with 39 trips during the weekday periods and 33 trips during the weekend periods of non-harvest operations. The project would generate 10 peak hour trips during both the Friday PM peak hour and Saturday midday peak hour. During harvest season, the proposed project would generate 40 daily trips on both the weekday and weekend periods. Peak hour trip generation would equate to 10 Friday PM peak hour trips and 12 Saturday midday peak hour trips.

The proposed Amici Cellars TDM/Vehicle Limitation Plan would reduce both daily and peak hour trip generation associated with visitor activities at the Winery. Compared to traditional Napa County trip generation methodology for calculating visitor vehicle trips, limiting the actual number of vehicles associated with visitor traffic to/from the Winery would create meaningful reductions in daily traffic volumes. Under Napa County methodology, the proposed use modification project driveway would be expected to generate between 50-51 daily trips during the harvest season. Under the project's TDM/Vehicle Limitation Plan, there would be less than 40 daily trips during the same periods. Similar findings result during peak hour conditions. With Napa County methodology the proposed project would generate 16 Friday PM peak hour and 20 Saturday midday peak hour trips. During the same time periods, the proposed project driveway would generate 10 trips and 12 trips employing the TDM/Vehicle Limitation Plan.

Table 3:   Proposed Use Modification; Amici Cellars TDM/Vehicle Limitation Plan Daily and Peak Hour Driveway Trip Generation

Land Use	Units		Daily		Weekday PM Peak			Weekend MD Peak		
	Wkdy.	Wknd.	Wkdy. Trips	Wknd. Trips	Trips	In	Out	Trips	In	Out
Proposed Winery Uses (Amici Cellars)				Non-Harvest Season						
F-T Winery Employees	4	2	12	6	4	0	4	2	1	1
P-T Winery Employees	1	1	2	2	1	0	1	1	0	1
Vehicles	7	7	14	14	3	1	2	5	3	2
Production	30K		1	1	1	0	1	1	1	0
Residence	1		10	10	1	1	0	1	0	1
Non-Harvest Project Trips			**39**	**33**	**10**	2	8	**10**	5	5
Proposed Winery Uses (Amici Cellars)				Harvest Season						
F-T Winery Employees	4	4	12	12	4	0	4	4	2	2
P-T Winery Employees	3	3	6	6	2	0	2	2	1	1
Vehicles	4	4	8	8	2	1	1	4	2	2
Production	30K		4	4	1	0	1	1	1	0
Residence	1		10	10	1	1	0	1	0	1
Harvest Project Trips			**40**	**40**	**10**	**2**	**8**	**12**	**6**	**6**

(1) Daily and peak hour trip generation based on Napa County PBES, Proposed Project Conditions, Proposed Conditions Winery

Traffic Information/Trip Generation, Update January 2020 (see Appendices for trip genertion calculation sheets)

F-T = Full-Time, P-T = Part-Time, Wkdy = Weekday, Wknd = Weekend

2.   Reservation/Reporting Plan

The proposed reservation/reporting plan would serve to document all daily vehicle trips to/from the Winery and provide a consistent methodology for both Winery information and Napa County requirements. While limiting vehicle trips is not a new concept, the intent is to allow only a specific number of visitor groups by vehicle during the weekday and weekend hours of operation. As noted, rather than estimate vehicle trips based on the total number of visitors and indirectly limiting trips; a direct limitation via a specific number of groups (or reservations) would be allowed at the winery each day with each group expressly limited to one (1) vehicle. This vehicle could represent an automobile, hire car, shuttle, limousine, or minibus (but would not include full-size buses except for specific marketing events). To the extent any group still required more than one vehicle; that would be reflected in the reservation and counted as two (or more as appropriate) groups, reducing the remaining number of groups for the day. All visitation would be by appointment and coordinated with existing appointments (or declined) if the total number of groups/vehicles for that day have been reached. Ultimately, the number of visitors allowed to visit the facility would be dependent on the Winery's ability to adequately serve and accommodate guests based on staff and activities but would not impact vehicle traffic. Nevertheless, it is understood that there will still be a limit on the size of the groups based on the Winery's desired operations not to host very large groups, and an intended maximum of 25 guests.

2.1 Key components of the reservation/reporting plan (Tours and Tastings):

- Amici has added to its existing reservation system a required field indicating the number of vehicles for each appointment. This information will be recorded at the time the appointment is made. Each visitor group will be encouraged to limit to one vehicle in order to limit number of vehicles (as well as having benefit of limiting number of drivers potentially drinking).
- If any group requests more than one vehicle, the winery will offer to coordinate transportation with a local driver. The Winery has relationships with concierges and drivers and will facilitate guests to book with one vehicle to greatest extent possible. Most of the visitors to the Winery today utilize driving services.
- The Winery will book no more than seven vehicles on typical days and further limit booking to only four vehicles during harvest (Sept & Oct). This would limit the daily vehicle trip generation associated with visitors to 14 daily vehicle trips or less (8 daily vehicle trips during harvest/crush).
- The visitor groups would generally be booked by the winery's ability to serve and provide tours (available staff and schedule dependent) and would generally not exceed eight (8) guests in size. Daily guest counts ultimately would be limited by the vehicles used to transport them to/from the site; but would also be designed to still not exceed 25 persons.
- Upon request, a report of daily visitor vehicles could be generated from the winery's guest reservations system and provided to the County confidentially. Such reporting would provide by date the number of visitor vehicles and average vehicles per day, as well as weekly totals and averages and annual totals.
- The winery will also monitor and observe the total driveway usage in real time, and designate a responsible employee for noting any traffic issues. Should observations suggest that the driveway is exceeding the estimated trip levels, a simple average daily traffic count device could be installed on the Amici Cellars driveway to count vehicle trips in/out of the site. The daily counts (which would also include employee and other winery traffic) would be correlated with the booking system for monitoring the total driveway volume.

2.2 Key components of the reservation/reporting plan (Events)

- Event reservations will also be done on a per-vehicle group basis. Events will be limited to a set number of groups. Each group will be booked based on one vehicle.
- Eight (8) events of up to twelve (12) visitor groups each (one vehicle per group); one (1) event per year of up to sixteen (16) visitor groups (one vehicle per group); two (2) events of two (2) buses. As the largest events use only two (2) buses, maximum event trip generation would be limited to 32 vehicle trips based on the one (1) event per year with 16 visitor groups.
- Standard tours and tastings would be suspended on special event days.
- Transportation options will be provided as for tasting guests when necessary.
- Largest event by visitors uses buses (2) for all guests.
- Winery employees carpool for events further reducing trips.
- Records of Event bookings with vehicle totals will be maintained and available for review upon request.

- Event deliveries such as furniture rental are scheduled for days before and after event to limit trips on day of event.

3. Transportation Demand Management Plan

The following sections outline recommended and Winery-specific TDM measures to reduce single-occupancy vehicle trips to/from the Winery associated with Tours and Tastings, Events, Employment, and Residential Uses. Project-specific TDM measures focus primarily on employment and off-site associations with the Winery:

3.1 TDM Measures:

- On-site Winery employment would consist of 4 full-time/2 part-time (non-harvest) and 4 full-time/ part-time (harvest) during weekdays. On a weekend there would be 2 full-time/1 part-time (non-harvest) and up to 4 full-time/ part-time (harvest). One of the winery owners is considered in this count of "part-time" employees but is also one of the owners of the residence, and so there are no double-counting of trips between the residence and the winery, calculations shown in Tables 2 and 3 are based on 3 part-time employees rather than 4.
- Assuming harvest conditions, there would be a maximum of 18 daily trips attributed to Winery employment.
- Winery employees that do not need to be on-site (management, sales) generally work from home/remotely, and are on site only when needed.
- Employees that live near each other frequently carpool.
- Employees generally do not leave for lunch.
- During harvest, winery frequently provides lunch on site and employees do not leave the site for lunch. As such the 18 daily trips calculation for employees overstates typical harvest conditions.
- Much like the "car free" tourism program of the Napa Valley Destination Council and NVTA that provide information to guest/visitors to plan their trips without relying on car; when guests make an appointment for wine tasting project employees could inform them of this program. Currently, Amici Cellars coordinates with drivers/concierges so that most guests are transported to the Winery without using their own vehicles (this is also consistent with other local wineries located off Old Lawley Toll Road).

The Winery's primary TDM goal of limitation by vehicle rather than guest will substantially reduce vehicle miles traveled (VMT) over current methodology used to estimate visitors per vehicle (2.6/2.8 persons per vehicle) equivalent.
:

Existing Conditions Winery Traffic Information / Trip Generation

Determine Winery Daily Trips. Complete Sections A through I below to determine your winery project's estimated baseline daily, peak hour trips, and annual trips.

Section A. Maximum Daily Weekday Traffic (Friday, non-harvest season)

1.   Total number of FT employees[1]: 4 ___ x 3.05 one-way trips per employee   = 12 ___ daily trips
2.   Total number of PT employees[1]: 2 ___ x 1.90 one-way trips per employee   = 4 ___ daily trips
3.   Maximum weekday visitors[2]: 25 ___ /2.6 visitors per vehicle x 2 one-way trips   = 19 ___ daily trips
4.   Gallons of production: 20,000 ___ /1,000 x 0.009 daily truck trips[3] x 2 one-way trips   = 1 ___ daily trips
5.   Residence = + 10   **TOTAL**   = 46 ___ **daily trips**

Section B. Maximum Daily Weekday Traffic (Friday, harvest season)

6.   Total number of FT employees[1]: 4 ___ x 3.05 one-way trips per employee   = 12 ___ daily trips
7.   Total number of PT employees[1]: 4 ___ x 1.90 one-way trips per employee   = 8 ___ daily trips
8.   Maximum weekday visitors[2]: 25 ___ /2.6 visitors per vehicle x 2 one-way trips   = 19 ___ daily trips
9.   Gallons of production: 20,000 ___ /1,000 x 0.009 daily truck trips x 2 one-way trips   = 1 ___ daily trips
10. Avg. annual tons of grape on-haul: 150 ___ / 144 truck trips x 2 one-way trips   = 2 ___ daily trips
11. Residence = + 10   **TOTAL**   = 52 ___ **daily trips**

Section C. Maximum Daily Weekend Traffic (Saturday, non-harvest season)

12. Total number of FT Sat. employees[1]: 1 ___ x 3.05 one-way trips per employee   = 3 ___ daily trips
13. Total number of PT Sat. employees[1]: 1 ___ x 1.90 one-way trips per employee   = 2 ___ daily trips
14. Maximum Saturday visitors[2]: 25 ___ /2.8 visitors per vehicle x 2 one-way trips   = 18 ___ daily trips
15. Gallons of production: 20,000 ___ /1,000 x 0.009 daily truck trips[3] x 2 one-way trips   = 1 ___ daily trips
16. Residence = + 10   **TOTAL**   = 34 ___ **daily trips**

Section D. Maximum Daily Weekend Traffic (Saturday, harvest season)

17. Total number of FT Sat. employees[1]: 4 ___ x 3.05 one-way trips per employee   = 12 ___ daily trips
18. Total number of PT Sat. employees[1]: 4 ___ x 1.90 one-way trips per employee   = 8 ___ daily trips
19. Maximum Saturday visitors[2]: 25 ___ /2.8 visitors per vehicle x 2 one-way trips   = 18 ___ daily trips
20. Gallons of production: 20000 ___ /1,000 x 0.009 daily truck trips x 2 one-way trips   = 1 ___ daily trips
21. Avg. annual tons of grape on-haul: 150 ___ / 144 truck trips x 2 one-way trips   = 2 ___ daily trips
22. Residence = + 10   **TOTAL**   = 51 ___ **daily trips**

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[1] Full-Time and part-time employees that staff the largest of any event that is proposed to occur two or more times in a month, on average.

[2] The number of weekday visitors shall include guests of the largest of any event that is proposed to occur two or more times in a month, on average.

[3] Assumes 1.47 materials and supplies trips + 0.8 case goods trips per 1,000 gallons of production / 250 days per year

Existing Conditions Winery Traffic Information / Trip Generation (continued)

Section E. PM Peak Hour Trip Generation (Friday, non-harvest season)

(Sum of daily trips from Sec. A, lines 3 and 4) x 0.38 + (No. of FTE) + (line 2 / 2)

+ Residence = +1

= __14__ PM peak trips

Section F. PM Peak Hour Trip Generation (Friday, harvest season)

(Sum of daily trips, Sec. B, lines 8, 9, 10) x 0.38 + (No. of FTE) + (line 7 / 2)

+ Residence = +1

= __18__ PM peak trips

Section G. PM Peak Hour Trip Generation (Saturday, non-harvest season)

(Sum of daily trips from Sec. C, line 14 and 15) x 0.57 + (No. of FTE) + (line 13 / 2)

+ Residence = +1

= __14__ PM peak trips

Section H. PM Peak Hour Trip Generation (Saturday, harvest season)

(Sum of daily trips Sec. D, lines 19, 20, and 21) x 0.57 + (No. of FTE) + (line 18 / 2)

+ Residence = +1

= __21__ PM peak trips

Section I. Maximum Annual Trips

(Sec. A, line 5 x 206) + (Sec. B, line 11 x 55) + (Sec. C, line 16 x 82) + (Sec. D, line 22 x 22)

= __16,246__ Annual trips

Proposed Project Winery Traffic Information / Trip Generation

Determine Winery Daily Trips. Complete Sections J through R below to determine your winery project's estimated future daily, peak hour trips, and annual trips.

Section J. Maximum Daily Weekday Traffic (Friday, non-harvest season)

1.	Total number of FT employees[1]: 4 ___ x 3.05 one-way trips per employee	= 12 ___ daily trips
2.	Total number of PT employees[1]: 1 ___ x 1.90 one-way trips per employee	= 2 ___ daily trips
3.	Maximum weekday visitors[2]: 25 ___ /2.6 visitors per vehicle x 2 one-way trips	= 19 ___ daily trips
4.	Gallons of production: 30000 ___/1,000 x 0.009 daily truck trips[3] x 2 one-way trips	= 1 ___ daily trips
5.	Residence = +10	**TOTAL** = 44 ___ **daily trips**

Section K. Maximum Daily Weekday Traffic (Friday, harvest season)

6.	Total number of FT employees[1]: 4 ___ x 3.05 one-way trips per employee	= 12 ___ daily trips
7.	Total number of PT employees[1]: 3 ___ x 1.90 one-way trips per employee	= 6 ___ daily trips
8.	Maximum weekday visitors[2]: 25 ___ /2.6 visitors per vehicle x 2 one-way trips	= 19 ___ daily trips
9.	Gallons of production: 30000 ___/1,000 x 0.009 daily truck trips x 2 one-way trips	= 1 ___ daily trips
10.	Avg. annual tons of grape on-haul: 225 ___ / 144 truck trips x 2 one-way trips	= 3 ___ daily trips
11.	Residence = +10	**TOTAL** = 51 ___ **daily trips**

Section L. Maximum Daily Weekend Traffic (Saturday, non-harvest season)

12.	Total number of FT Sat. employees[1]: 2 ___ x 3.05 one-way trips per employee	= 6 ___ daily trips
13.	Total number of PT Sat. employees[1]: 1 ___ x 1.90 one-way trips per employee	= 2 ___ daily trips
14.	Maximum Saturday visitors[2]: 25 ___ /2.8 visitors per vehicle x 2 one-way trips	= 18 ___ daily trips
15.	Gallons of production: 30000 ___/1,000 x 0.009 daily truck trips[3] x 2 one-way trips	= 1 ___ daily trips
16.	Residence = +10	**TOTAL** = 37 ___ **daily trips**

Section M. Maximum Daily Weekend Traffic (Saturday, harvest season)

17.	Total number of FT Sat. employees[1]: 4 ___ x 3.05 one-way trips per employee	= 12 ___ daily trips
18.	Total number of PT Sat. employees[1]: 3 ___ x 1.90 one-way trips per employee	= 6 ___ daily trips
19.	Maximum Saturday visitors[2]: 25 ___ /2.8 visitors per vehicle x 2 one-way trips	= 18 ___ daily trips
20.	Gallons of production: 30000 ___/1,000 x 0.009 daily truck trips x 2 one-way trips	= 1 ___ daily trips
21.	Avg. annual tons of grape on-haul: 225 ___ / 144 truck trips x 2 one-way trips	= 3 ___ daily trips
22.	Residence = +10	**TOTAL** = 50 ___ **daily trips**

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[1] Full-Time and part-time employees that staff the largest of any event that is proposed to occur two or more times in a month, on average.

[2] The number of weekday visitors shall include guests of the largest of any event that is proposed to occur two or more times in a month, on average.

[3] Assumes 1.47 materials and supplies trips + 0.8 case goods trips per 1,000 gallons of production / 250 days per year

Proposed Project Winery Traffic Information / Trip Generation (continued)

Determine Winery Peak Hour Trips. If the number of daily trips on either Section K, line 11, or Section M, line 21, is greater than 20, or Public Works Director determines that other circumstances such as access safety or other potential network impacts warrant further analysis, then the potential transportation impacts of your project must be evaluated in a traffic impact study (TIS) prepared in accordance with Napa County Public Works TIS Guidelines. Follow the direction outlined in Traffic Impact Study Analysis, below. If the number of daily trips on either Section K, line 11, or Section M, line 22, is equal to or less than 20, complete Sections N through R below to determine your project's estimated peak hour trips and annual trips. In lieu of completing Sections N through R, you may opt to prepare a project-specific traffic impact analysis if you anticipate the number of peak hour trips from your proposal is different from that estimated here.

Section N. PM Peak Hour Trip Generation (Friday, non-harvest season)
(Sum of daily trips from Sec. J, lines 3 and 4) x 0.38 + (No. of FTE) + (line 2 / 2)

Residence = +1

= __14__ PM peak trips

Section O. PM Peak Hour Trip Generation (Friday, harvest season)
(Sum of daily trips from Sec. K, lines 8, 9, 10) x 0.38 + (No. of FTE) + (line 7 / 2)

Residence = +1

= __16__ PM peak trips

Section P. PM Peak Hour Trip Generation (Saturday, non-harvest season)
(Sum of daily trips from Sec. L, line 14 and 15) x 0.57 + (No. of FTE) + (line 13/ 2)

Residence = +1

= __15__ PM peak trips

Section Q. PM Peak Hour Trip Generation (Saturday, harvest season)
(Sum of daily trips, Sec. M, lines 19, 20, and 21) x 0.57 + (No. of FTE) + (line 18 / 2)

Residence = +1

= __20__ PM peak trips

Section R. Maximum Annual Trips
(Sec. J, line 5 x 206) + (Sec. K, line 11 x 55) + (Sec. L, line 16 x 82) + (Sec. M, line 22 x 22)

= __16,003__ Annual trips

Traffic Impact Study Analysis. If the number of daily trips on either Section K, line 11, or Section M, line 22, is greater than 20, then the potential transportation impacts of your project must be evaluated in a traffic impact study (TIS) prepared in accordance with Napa County Public Works TIS Guidelines. Existing trip counts on the transportation network should be collected during the harvest season (August 16 – October 31). If collected outside of the harvest season, during the months of November through February, counts shall be adjusted upward by 15 percent to estimate harvest season network volumes. If collected during the weeks between March 1 and August 15, counts shall be adjusted upward by seven percent.

AMICI DRIVEWAY TRAFFIC INFORMATION/TRIP GENERATION PROPOSED (Visitor Limits 3 vehicles harvest, 6 non-harvest)

Section J. Maximum Daily Weekday Traffic (Friday, non-harvest season)

								Vehicle Limit
1	FT employee	4 x	3.05				12.20	
2	PT employees	1 x	1.9				1.90	
3	Maximum weekday visitors	na /	2.6 x	2			14.00	7 vehicles
4	Gallons of production	30000 /	1000 x	0.009 x		2	0.54	
	Residence						10.00	
5		TOTAL					38.64	

Section K. Maximum Daily Weekday Traffic (Friday, harvest season)

6	FT employee	4 x	3.05				12.20	
7	PT employees	3 x	1.9				5.70	
8	Maximum weekday visitors	na /	2.6 x	2			8.00	4 vehicles
9	Gallons of production	30000 /	1000 x	0.009 x		2	0.54	
10	Avg. annual tons of grape on-haul	225 /	144 x	2			3.13	
	Residence						10.00	
11		TOTAL					39.57	

Section L. Maximum Daily Weekend Traffic (Saturday, non-harvest season)

12	FT Sat. employees	2 x	3.05				6.10	
13	PT Sat. employees	1 x	1.9				1.90	
14	Maximum Saturday Visitors	na /	2.8 x	2			14.00	7 vehicles
15	Gallons	30000 /	1000 x	0.009 x		2	0.54	
	Residence						10.00	
16		TOTAL					32.54	

Section M. Maximum Daily Weekend Traffic (Saturday, harvest season)

17	FT Sat. Employees	4 x	3.05				12.20	
18	PT Sat. employees	3 x	1.9				5.70	
19	Maximum Saturday Visitors	na /	2.8 x	2			8.00	4 vehicles
20	Gallons of production	30000 /	1000 x	0.009 x		2	0.54	
21	Avg. annual tons of grape on-haul	225 /	144 x	2			3.13	
	Residence						10.00	
22		TOTAL					39.57	

Section N. PM Peak Hour Trip Generation (Friday, non-harvest season)
(sum of daily trips from Sec. J, lines 3 and 4) x 0.38 + (No. of FTE) + (No. of PTE/2) **10.03** PM Peak trips

Section O. PM Peak Hour Trip Generation (Friday, harvest season)
(sum of daily trips from Sec. K, lines 8, 9, 10) x 0.38 + (No. of FTE) + (No. of PTE/2) **9.93** PM Peak trips

Section P. PM Peak Hour Trip Generation (Saturday, non-harvest season)
(daily trips from Sec. L, line 14) x 0.57 + (No. of FTE) + (No. of PTE/2) **10.48** PM Peak trips

Section Q. PM Peak Hour Trip Generation (Saturday, harvest season)
(daily trips from Sec. M, lines 18, 19, 20) x 0.57 + (No. of FTE) + (No. of PTE/2) **12.15** PM Peak trips

Section R. Estimated Annual Trips
(Sec. J, line 5 x 206)+(Sec. K, line 11 x 55)+(Sec. L, line 15 x 82)+(Sec. M, line 21 x22) **13674.63** Annual trips