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Applicant Response to Public Comments After April 20, 2016

PART 1

Frogs Leap Winery - P14-00054
Planning Commission Meeting of August 17, 2016

EXHIBIT A

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December 23, 2015

Via E-Mail and U.S. Mail

Members of the Planning Commission
Napa County
1195 Third Street, Suite 210
Napa, CA 94559

Attn: John McDowell, Deputy Planning Director
John.McDowell@countyofnapa.org

Re: Frog's Leap Winery, Use Permit Major Modification # P14-00054

Dear Commissioners:

On behalf of Nancy Hammonds and Charlotte Blank, we submit these comments on the Initial Study/proposed Negative Declaration ("IS") for the proposed Frog's Leap Winery Use Permit ("Project"). The Project would entail a substantial increase in visitor-serving commercial uses at the winery. Frog's Leap's current use permit limits tastings to 350 visitors per week (with a maximum of 50 visitors per day) and marketing events to three events per month with an average of 25 visitors per event, or 900 visitors per year. As the IS recognizes, Frog's Leap's current uses already exceed this permitted level. IS at 1. But the applicant is requesting approval of even greater visitor-serving uses, increasing weekly tastings limits by more than threefold to 1,100 visitors per week, and allowing for an additional 5,740 visitors each year for marketing events, as well as an undefined number of visitors for the annual Auction Napa Valley event.

As should be expected from such a large increase in visitors to the winery, substantial evidence shows that the Project could have numerous potentially significant impacts on the environment. Accordingly, and as a matter of law, the Planning Commission would violate the California Environmental Quality Act, Pub. Res. Code § 21000 et seq. ("CEQA"), if it adopts the proposed Negative Declaration and approves the Project without first requiring the preparation of an environmental impact report ("EIR"). As discussed below, the IS neither accurately identifies nor analyzes the project-specific and cumulative environmental impacts that will accompany the Project. The

document therefore lacks the necessary evidence to support its conclusion that the Project will not have adverse transportation, public safety, noise, and water supply impacts.

In addition to these CEQA deficiencies, the Project likely violates the Winery Definition Ordinance ("WDO") and is inconsistent with significant provisions of the Napa County General Plan designed to preserve the rural and agricultural character of Napa. Thus, approval of the Project would not just violate CEQA, but would also violate California Planning and Zoning Law, Gov't Code § 65000 et seq.

As you know, the County has been processing and approving an exceptionally high number of use permits for new or expanded wineries throughout Napa Valley. Like this Project, a great number of these permits propose significant expansions of tourist-serving commercial uses. At the same time, many wineries have been hosting largescale tourism events in violation of their use permits. Such violations have gone largely unenforced by the County. The result has been a substantial increase in tourism across Napa that not only undermines the agriculture-centered land use goals embodied by the WDO, the General Plan, and Measure P, but also creates significant cumulative environmental impacts that the County must analyze and mitigate. Without further information and analysis of the Project's likely impacts, the Commission cannot legally approve the Project. Consequently, the Commission should deny the application before it.

I. The Project Violates CEQA, and the Project's Potentially Significant Impacts Prohibit the County from Approving the Project Without First Preparing an EIR.

A. Legal Standard

It is well settled that CEQA establishes a "low threshold" for initial preparation of an EIR, especially in the face of conflicting assertions concerning the possible effects of a proposed project. *Pocket Protectors v. City of Sacramento*, 124 Cal. App. 4th 903, 928 (2005). CEQA provides that a lead agency may issue a negative declaration and avoid preparing an EIR only if "[t]here is no substantial evidence, in light of the whole record before the lead agency, that the Project may have a significant effect on the environment." CEQA § 21080(c)(1). A lead agency may adopt a negative declaration only when all potentially significant impacts of a project will be avoided or reduced to insignificance. Pub. Res. Code § 21080(c)(2); Guidelines § 15070(b).[1] A negative

[1] The CEQA Guidelines, 14 Cal. Code Regs. § 15000 *et seq.*, are referred to as "Guidelines."

declaration will also be set aside if its conclusions are not based on substantial evidence in the record. *Sundstrom v. County of Mendocino*, 202 Cal. App. 3d 296, 311 (1988).

An initial study must provide the factual and analytic basis for an agency's determination that no significant impact will result from the project. Guidelines § 15063(d)(3). An agency must prepare an EIR whenever it is presented with a "fair argument" that a project may have a significant effect on the environment, even if there is also substantial evidence to indicate that the impact is not significant. *No Oil, Inc. v. City of Los Angeles*, 13 Cal. 3d 68, 75 (1974); Guidelines § 15064(f)(1). Where there are conflicting opinions regarding the significance of an impact, the agency must treat the impact as significant and prepare an EIR. Guidelines § 15064(f)(1); *Stanislaus Audubon Soc'y v. County of Stanislaus*, 33 Cal. App. 4th 144, 150-51 (1995).

Further, where the agency fails to study an entire area of environmental impacts, deficiencies in the record "enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences." *Sundstrom v. County of Mendocino*, 202 Cal. App. 3d 296, 311 (1988). In marginal cases, where it is not clear whether there is substantial evidence that a project may have a significant impact and there is a disagreement among experts over the significance of the effect on the environment, the agency "shall treat the effect as significant" and prepare an EIR. Guidelines § 15064(g); *City of Carmel-by-the-Sea v. Board of Supervisors*, 183 Cal. App. 3d 229, 245 (1986).

Given this standard, an EIR is required for this Project.[2] The County cannot approve this use permit until it prepares a legally-adequate EIR, as CEQA requires.

B. The IS's Transportation Analysis Is Inadequate, and There Is a Fair Argument that the Project May Have Significant Transportation Impacts.

With winery expansions and increasing tourism in recent years, County residents have noticed significantly worsening traffic conditions in Napa Valley, especially on Silverado Trail and SR 29. The primary entrance to the Project site is located on the two-lane Conn Creek Road (SR 128), which serves an arterial connector between SR 29 and Silverado Trail. Ms. Hammonds, who owns property on Conn Creek Road, has observed increasing traffic volumes on the road as more vehicles use it to bypass heavy traffic on

[2] Although it is our legal opinion that the County must prepare an EIR for this Project, if the County decides to rely on the IS, but modifies the Project or adopts mitigation measures, it must, at the very least, recirculate the IS for further public review and comment. Guidelines § 15073.5.

Silverado Trail or SR 29. But despite observations of negative traffic conditions immediately surrounding the Project site, the IS relies on a legally inadequate transportation analysis to conclude that the substantial proposed expansion would not result in any traffic impacts.

First, the IS does not establish a proper baseline to evaluate the Project's impacts during the highest volume traffic season. The applicant's December 14, 2015 Focused Traffic Analysis ("Traffic Report"), on which the IS relies, did not evaluate existing traffic conditions near the Project site during the harvest and crush season, when traffic volumes in the County reach their highest. Traffic Report at 4. Instead, the applicant relied on seasonal Caltrans to data for a single segment of SR 128 in front of the Project site to project that traffic volumes on SR 128 and Silverado Trail would increase by 9% during this season.

This attempt to extrapolate baseline conditions during harvest from limited data is flawed. The seasonal increase on SR 128 provides no information about how traffic volumes change on the more heavily-used Silverado Trail and SR 29 during harvest season. The IS and Traffic Report cannot simply assume that the percentage traffic increase on these main County thoroughfares will be the same as the increase in traffic for smaller arterials like SR 128. Moreover, a simple percentage increase does not account for the change in traffic character during harvest, when an increased number of large agricultural equipment and trucks hauling grapes are on the roadways. These slow-moving vehicles make frequent stops and can further exacerbate traffic conditions during the County's peak traffic season.

Without a study of traffic conditions during harvest season, the IS completely fails to evaluate Project impacts against the heaviest traffic periods in the County. This failure to establish a proper baseline is fatal to any purported analysis of transportation impacts. "Without a determination and description of the existing physical conditions . . . at the start of the environmental review process, [the IS] cannot provide a meaningful assessment of the environmental impacts of the proposed project." *Save Our Peninsula Committee v. Monterey County Board of Supervisors*, 87 Cal. App. 4th 99, 119 (2001).

Second, the IS does not establish proper thresholds of significance for determining whether traffic from the Project will result in significant impacts to the intersections it analyzes. The document merely recites the CEQA Appendix G checklist, which, among other things, requires the County to determine whether additional traffic is "substantial in relation to the existing traffic load or capacity of the street system." IS at 25. But the IS never offers a specific numerical threshold to determine whether the new traffic from the site will be "substantial." CEQA recognizes that "the significance of an activity may vary

with the setting." Guidelines § 15064(b). Without establishing how many new daily trips would constitute a significant traffic impact, it is impossible for the public and County decision makers to know whether the Project's traffic impact will be significant.

Third, the IS's traffic analysis contains an improperly narrow study area, again rendering it incapable of evaluating all of the Project's potential traffic impacts. The IS only considers potential impacts at three intersections on Conn Creek Road (SR 128)—Silverado Trail, the Frog's Leap driveway, and Rutherford Road. By focusing only on these three intersections, the IS ignores the Project's contribution to traffic congestion at other nearby intersections, most notably the intersection of SR 29 and Rutherford Road (SR 128). As noted above, cars frequently travel over the SR 128 sections of Conn Creek Road and Rutherford Road to connect between Silverado Trail and SR 29. Yet the IS never considers impacts to the SR 29/Rutherford Road intersection. This oversight is especially glaring considering that applicant's own Traffic Report acknowledges that the majority of weekend and weekday trips from the winery currently travel south on Conn Creek Road toward Rutherford Road and SR 29. Traffic Report at 12. This data suggests that Project traffic is more likely to impact the Rutherford Road/SR 29 intersection than the Conn Creek Road/Silverado Trail intersection, which the IS purports to evaluate.

Significantly, a volunteer fire station is located at the Rutherford Road/SR 29 intersection. *Id.* at 3. Thus, the Project's increase in traffic at this intersection could also impair emergency response times in the area. For this reason as well, it is critical that the County's environmental analysis consider the Project's impacts to additional intersections in the immediate vicinity of the Project.

Fourth, the IS and the Traffic Report neglect to account for the traffic impacts from increased marketing events even though the applicant is proposing to host up to 500 people for a single event. IS at 25. Even this number excludes additional staff and traffic from catering and valet services that will be used for marketing events. *See id.* at 17, 26. The Traffic Report dismisses traffic increases from these events by claiming that they are "usually" held outside of peak traffic hours. Traffic Report at 21. Yet nothing prohibits the applicant from holding marketing events during Saturday afternoons or other peak traffic periods. Without such a use restriction that is a legally-binding, the traffic analysis cannot assume that marketing events will occur outside of peak hours.

Indeed, the applicant also proposes to use the site as a venue for the annual Auction Napa Valley. IS at 2. But the applicant's Traffic Report and the IS completely ignore increased traffic from this multi-day event. The County must also evaluate the potential impacts that event traffic will have on the transportation system surrounding the Project site.

Fifth, even with this faulty analysis, the IS acknowledges that traffic conditions near the Project site are already poor. The intersection of Silverado Trail and Conn Creek Road currently operates at LOS E—the second worst traffic rating—and is projected to worsen to LOS F by 2030. IS at 25-26. The Project's contribution to these substandard and worsening traffic conditions is likely a significant cumulative transportation impact that must be evaluated in an EIR and properly mitigated. *Kings County Farm Bureau v. City of Hanford*, 221 Cal. App. 3d 692, 721 (1990) .

Finally, the County's own assessment of the Project's traffic impacts indicates that there will be a significant impact at the intersection of Conn Creek Road and the winery's main entrance. To mitigate that impact, the County's Road and Street Standards require the installation of a left-turn pocket on the northbound section of Conn Creek Road at this intersection. Memorandum from Paul Wilkinson to Shaveta Sharma, dated January 20, 2015. As alternative mitigation, the applicant has proposed to expand the shoulder across from the winery entrance. IS at 26. Yet even though Project traffic would violate the County's Road and Street Standards without a new left turn lane or other adequate mitigation, the IS fails to acknowledge this significant traffic impact.

Courts have found that this approach violates CEQA. An agency may not include mitigation measures as part of the project when determining whether it may have a significant effect on the environment. *Lotus v. Department of Transportation*, 223 Cal. App. 4th 645, 665 (2014) . Instead, the agency must first determine whether the project will have a significant effect on the environment and then identify and adopt feasible mitigation measures that will reduce the impacts of the project below a level of significance. CEQA requires this approach for two reasons. First, acknowledging potentially significant impacts obligates an agency to adopt definite and enforceable mitigation through a mitigation monitoring and reporting program. Guidelines § 15097. Second, agencies must consider secondary impacts associated with adopted mitigation measures. *Id.* § 15126.4(a)(1)(D). This latter requirement is especially important here, since construction on the eastern shoulder of Conn Creek Road could impact large heritage oak trees that grow along the road.

But based on the record before the Commission, it is impossible to know what mitigation the County will require for this intersection. The IS does not commit to any particular mitigation, observing that the department of public works *may* grant an exception to the left turn lane requirement. IS at 26. Section 3(G) of the County's Road and Street Standards grants the Director of Public Works the discretion to approve the proposed exception, but staff has indicated that this determination will not be made until *after* the Commission's hearing on the Project. Thus, the public and the Commission are left in the dark about the mitigation that will be required for this impact. Without this

information, the IS is incapable of assessing whether the mitigation will be adequate to reduce the Project's intersection impact, much less what secondary impacts that the required mitigation might create.

C. The IS's Analysis of Traffic Hazards Is Inadequate, and There Is a Fair Argument that the Project May Have Significant Safety-Related Impacts.

CEQA requires that agencies evaluate a project's potential to create traffic-related hazards. Guidelines, Appendix G § XVI(d); *see City of Maywood v. Los Angeles Unified School Dist.*, 208 Cal. App. 4th 362, 393 (2012). Despite this requirement, the IS's discussion of such hazards is entirely cursory. It focuses only on installation of a new turn lane or shoulder widening next to the Frog's Leap Winery entrance. It never considers whether adding the Project's traffic to the narrow, two lane Conn Creek Road itself will create a significant cumulative safety impact.

The added traffic from wine tasting and marketing events is especially worrisome given the frequency of drunk driving incidents in wine country.[3] In fact, in the past weekend alone, there were two serious drunk driving incidents on the segment of Conn Creek Road between Silverado Trail and Rutherford Road. One incident involved a drunk driver hitting a telephone pole and fence and then crossing over Conn Creek Road and crashing into a vineyard. The other incident involved a drunk driver veering off the road and crashing into a rock wall on the Caymus Vineyards property. With increased traffic from the Project and other nearby winery expansions, these dangerous incidents will become even more frequent. The IS must evaluate this serious public safety concern. It cannot simply ignore it.

D. The IS's Noise Analysis Is Inadequate, and There Is a Fair Argument That Noise Impacts Would Be Significant.

A particularly glaring inadequacy of the IS is its analysis of the Project's noise impacts. Although construction and operation of the Project is all but certain to result in a significant increase in noise levels, the IS makes no attempt to quantify these impacts. Instead it provides a generic overview, simply stating the obvious: that noise could create additional impacts and that these impacts would be less than significant. IS at 20-21. To conclude as the IS does that an impact is less than significant, the analysis must be

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[3] *See* NBC Bay Area, *Drunk Driving In Wine Country* (available at http://www.nbcbayarea.com/investigations/WINE-COUNTRY-DUI-INVESTIGATION-151467295.html)

supported with substantial evidence. Substantial evidence consists of "facts, a reasonable presumption predicated on fact, or expert opinion supported by fact," not "argument, speculation, unsubstantiated opinion or narrative." Pub. Res. Code § 21080(e)(1)-(2). Once again, the IS fails on many levels.

First, the IS provides no information about the Project's environmental setting, other than to state that the nearest residences are located about 600 feet away. IS at 21. This contravenes CEQA's requirements for environmental documents, which "must include a description of the physical environmental conditions in the vicinity of the project." Guidelines § 15125(a). Moreover, the significance of an impact may vary with the setting. While increased noise levels may not be significant in an urban area, they may be extraordinarily burdensome in a rural area. Here, without any information on the area's acoustical setting, including existing ambient noise levels, the impact analysis in the IS quickly becomes meaningless.

Nor does the IS identify the standard or threshold of significance for determining a significant noise impact.[4] Instead, it appears to assume that because the County's Noise Ordinance regulates noise events between 10 p.m. and 7 a.m., there will be no significant impact. IS at 21. Thus, the IS entirely fails to consider that Project-related construction and event noise might impact nearby properties during other hours. The failure to establish an adequate noise threshold of significance is critical. Without a threshold, there is no means by which to determine whether impacts would or would not be significant. Since the requirement to provide mitigation is triggered by the identification of a significant impact, the IS's failure to identify all of the Project's significant impacts also results in a failure to mitigate these impacts.

Given the failure to describe the existing noise environment and to establish thresholds of significance, it comes as no surprise that the IS fails to identify the noise levels that would accompany construction of the Project. In fact, the document, never even attempts to predict noise levels during each phase of construction on nearby receivers. As the attached table shows, construction-related equipment and operations can be extraordinarily loud. A typical noise level for a jackhammer, for example, is upwards of 96 decibels, while loaders, backhoes and bulldozers can generate noise upwards of 85 decibels. *See* OSHA Construction-Related Noise levels, attached as Exhibit 1. The

[4] The IS does refer to the Napa County Noise Ordinance, explaining that it sets a maximum permissible sound level for rural residences as 45 dB between the hours of 10 p.m. and 7 a.m. (at 21), but the IS fails to demonstrate that the Project will even meet these evening noise standards.

County must analyze how construction of the Project will impact noise levels in the vicinity.

Operational noise from the winery can also be quite intrusive. Noise from the winery's marketing events, in particular, such as vehicular traffic, truck traffic, buses and amplified sound could be particularly burdensome to the Project's neighbors, yet the IS provides no analysis of these impacts. Instead, the IS suggests that impacts will be less than significant because marketing events already occur at Frog's Leap Winery, and the County does not have a record of noise complaints associated with these events. First, it is improper to rely solely on noise complaints to evaluate the Project's potential noise impacts. Receptors who are impacted by existing event noise levels might never file an official complaint. Moreover, the IS must actually analyze the noise caused by the substantial increase in the size of marketing events that the applicant is requesting—from a current average of 75 people per event to events that will host up to 500 people. IS at 1-2. Before it can lawfully conclude that the Project's noise impacts are insignificant, the IS must analyze and, if necessary, mitigate the noise associated with these increased marketing events.

E. The IS's Water Supply Analysis Is Inadequate.

The IS admits that California is in the middle of an extreme, multiyear drought, which lead Governor Brown to declare a drought emergency in January 2014 and the State Water Resources Control Board to impose mandatory water restrictions on California's municipalities in 2015. IS at 15. But the IS makes no attempt to determine how these drought conditions have impacted groundwater supply near the Project site. Instead, the IS mechanically relies on a pre-drought groundwater assessment that the County completed in February 2011. Thus, the IS fails to establish baseline water conditions near the Project site, as CEQA requires.

With this study, the County has established a 1 acre-foot-per-year (afy) water use allocation for each acre of agricultural production in Napa Valley. The IS makes no attempt to show that this 1 afy per acre threshold is appropriate to evaluate groundwater impacts near the Project site. In fact, in light of California's extreme drought and the IS's further acknowledgment that "Groundwater availability, recharge, storage and yield is not consistent across the County," the IS lacks evidence to support its use of this threshold to evaluate impacts at the Project site. *See Center for Biological Diversity v. California Dept. of Fish and Wildlife* 195 Cal. Rptr. 3d 247 (2015) (substantial evidence must show that general impact thresholds are appropriate when applied to a specific project). Without a local assessment of groundwater conditions in the Project area, it is impossible for the public and County decisionmakers to know whether the Project's proposed

increase in water usage, or even the winery's existing water usage, is sustainable. This incomplete analysis further defeats CEQA's core informational requirements. *Laurel Heights Improvement Ass'n v. Regents of University of California* 6 Cal. 4th 1112, 1123 (1993).

II. The Project is Inconsistent with the Winery Definition Ordinance and the County General Plan.

A. The Project Is Inconsistent with the Winery Definition Ordinance.

The Winery Definition Ordinance ("WDO") contains several statements of legislative intent directly relevant to this Project. These include a declaration that the ordinance must be interpreted to achieve the goal of protecting agriculture and open space use as the primary land use in the Agricultural Preserve, and to "prohibit" the use of agricultural land for non-agricultural purposes "except to the extent expressly permitted" by the General Plan and County ordinances. *See* WDO, § 6.

Significantly, the WDO restricts the scope and maximum square footage of "accessory uses" such as "marketing of wine" and "tours and tastings." All such accessory uses, "in their totality[,] must remain clearly incidental, related and subordinate to the primary operation of the winery as a production facility." *See*, e.g., Napa County Code ("NCC") § 18.08.370; 18.16.030(G)(5); 18.08.020. In addition, the WDO places an absolute numerical cap of the square footage of structures that may be "used for accessory uses." *See* NCC § 18.104.200 ("The maximum square footage of structures used for accessory uses that are related to a winery shall not exceed forty percent of the area of the production facility.").

The Project documents provide incomplete descriptions of the square footage that Frog's Leap will utilize for accessory uses if the Project is approved. The application asserts that with the Project, the square footage assigned to accessory uses will be roughly 30 percent of the square footage used for production (11,850 and 39,306 square feet, respectively). Application at 12. But neither the application nor the IS provides a detailed description of which areas of the site are currently used for accessory uses compared to commercial uses. For example, the applicant is proposing to add an 845 square foot porch to the Project site, which already has an "existing porch with the admin building [that] would remain available for tasting . . . ." *Id.* at 6. Drawings of the site also show a small "orchard" located in the middle of the winery compound that contains interior paths and a fountain. All of these areas would be available for tasting and marketing uses, but it is impossible to determine whether they have been included in the

accessory use calculation.[5] Without further information about the nature and location of accessary uses on the Project site, it is impossible for the Commission to find that the proposed expansion in accessary uses complies with the WDO.

Moreover, even if the Project sufficiently reduces accessory areas to comply with the letter of the WDO, the Project contravenes the intent expressed in the WDO by elevating nonagricultural uses over agricultural uses. The accessory, tourism-focused uses of the Project are not "clearly incidental, related and subordinate" to the Project's primary operation as a winery. Rather, the largescale expansion of these nonagricultural uses is the Project's core purpose. Therefore, the Project cannot be approved unless it is modified to substantially reduce the amount of accessory uses at the Project site.

B. The Project is Inconsistent with the County's General Plan.

Contrary to the IS's conclusions, the Project is not consistent with the Napa County General Plan. In particular, the Project is inconsistent with the Plan's Agricultural Preservation and Land Use requirements including: Goals AG/LU-1, AG/LU-3, AG/LU-4, the Agricultural Resources ("AR") designation on the General Plan's Land Use Map, and Economic Development Policy E-1. The purpose of these goals and policies, and of the AR designation, is to preserve and promote the existing agricultural land uses on agriculturally designated lands and to support the economic viability of agriculture, including the necessary industries that support agriculture.

Although the IS provides almost no analysis, it appears that its finding that the Project is consistent with the General Plan is predicated on its determination that the Project's accessory uses comply with the WDO and "would allow for the continuation of agriculture as a dominant land use within the County." *Id.* at 15. As demonstrated above, however, the Project's visitor-serving uses do not comply with the WDO and do not qualify as permissible accessory uses. These uses are not necessary to support the economic vitality of agriculture and will, if anything, undermine the continued economic vitality of agriculture by allowing and encouraging excessive reliance on tourism.

Perhaps even more importantly, these uses are clearly inconsistent with the intent of the General Plan's Agricultural Resources designation. As County voters reaffirmed in approving Measure P in 2008, "agriculture is and should continue to be the predominant

[5] Notably, the Planning Commission calculated accessory use square footage in two actions concerning the B Cellars and Titus Vineyards projects, by counting outdoor terraced spaces as part of the percentage of the project used for accessory uses. The County should treat the present Project in the same manner.

land use, where uses incompatible with agriculture should be precluded . . . ." In short, the proposed vast expansion of marketing events and daily tasting are commercial uses, not agricultural ones. Accordingly, they are inconsistent with the General Plan and may not lawfully be approved.

III. Conclusion

For all of these reasons, the Commission should deny the proposed Project.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Ellison Folk

cc: Nancy Hammonds

Attachment

734923.3

EXHIBIT A

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March 24, 2016

Mr. Edward Schexnayder
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396 Hayes Street
San Francisco, California 94102

Subject: ***Review of Focused Traffic Analysis***
Proposed Frog's Leap Winery Use Permit Modifications
Napa County, California

Dear Mr. Schexnayder:

As requested, MRO Engineers, Inc., (MRO) has reviewed the focused traffic analysis completed with respect to the proposed Use Permit modifications at Frog's Leap Winery on Conn Creek Road (State Route 128) in Napa County, California. That analysis was prepared by Omni-Means, and was documented in a revised letter report dated December 15, 2014. The traffic impact analysis report was used by Napa County staff in the preparation of the Initial Study/Negative Declaration (IS/ND) for the proposed project.

This letter report documents the results of our review.

Background

According to the Napa County IS/ND (p. 2):

> *The project as it exists is compliant with respect to all structures on the property. However, the visitation, marketing, and number of employees is in excess of the last [Use Permit] Modification which permitted up to 50 visitors per day, 36 annual events, and four full time employees.*

The proposed project is intended to remedy these violations of the winery's existing Use Permit, as well as to make certain modifications to the on-site facilities.

The project also includes a request for an exemption from the requirement to construct a left-turn lane on northbound Conn Creek Road at the winery's vehicular access driveway. In lieu of that left-turn lane, the winery would construct a six-foot widening of the shoulder on the northbound side of the road to accommodate drivers desiring to bypass vehicles waiting to make a left-turn into the winery site. That issue is addressed in the following memoranda prepared by Napa County staff in connection with the proposed project:

- Memorandum from Paul Wilkinson, Associate Engineer, Department of Public Works (DPW), to Shaveta Sharma, Planning, Building and Environmental Services (PBES) Department, January 20, 2015. This memo states that the left-turn lane will be required, and that the requested exemption is not justified.
- Memorandum from Nate Galambos, PBES, to Shaveta Sharma, PBES, May 15, 2015. This memo also states that the project shall construct the left-turn lane.
- Memorandum from Rick Marshall, Deputy Director of Public Works, to PBES Staff, October 12, 2015. While acknowledging that the project will meet the County's requirements for

installation of a left-turn lane, this memo approves the requested exemption from that requirement. It further states that the proposed six-foot wide shoulder along the east side of the road, ". . . will provide an area where northbound traffic on Conn Creek Road could carefully bypass a waiting left-turning vehicle, if necessary."

Focused Traffic Analysis Review

Our review evaluated the adequacy of the focused traffic analysis and the need to mitigate potential safety hazards associated with the proposed project. The results of our review are summarized below.

1. ***Left-Turn Lane Exemption*** – As described above, the proposed project meets the requirements for a northbound left-turn lane on Conn Creek Road at the winery's driveway, in accordance with the Napa County Roads and Streets Standards. As documented on pages 18 and 23 of the Omni-Means study, this is true for Existing Plus Project and Near-Term Plus Project conditions. Although Napa County staff initially recognized that the left-turn lane would be required, they apparently altered this assessment and stated that the proposed six-foot shoulder:

   > *. . . will provide an area where northbound traffic on Conn Creek Road could carefully bypass a waiting left-turning vehicle, if necessary.*

   Passing on the Right is an Illegal Maneuver

   Unfortunately, the bypass maneuver that staff describes is illegal under the California Vehicle Code. Specifically, Section 21755(a) states:

   > *The driver of a vehicle may overtake and pass another vehicle upon the right only under conditions permitting that movement in safety. In no event shall that movement be made by driving off the paved or main-traveled portion of the roadway.*

   This is further clarified on page 38 of the *California Driver Handbook* (California Department of Motor Vehicles, 2016):

   > *Never drive off the paved or main-traveled portion of the road or on the shoulder to pass. The edge of the main-traveled portion of the road may have a painted white line on the road's surface.*

   Attachment A presents a pair of Google Earth images illustrating that Conn Creek Road at the project driveway has painted white lines designating the edge of the main-traveled portion of the roadway. These lines are typically referred to as "edge lines" or "fog lines."

   In short, provision of a six-foot paved shoulder, as proposed, would inappropriately encourage drivers to perform an illegal maneuver to bypass traffic waiting to turn left into the Frog's Leap Winery driveway.

   Passing on the Right is Unsafe

   Even if passing on the right were legal, it is unsafe. Because no sidewalks or bike lanes exist along Conn Creek Road, pedestrians and bicyclists are forced to travel on the shoulder or along the right-most edge of the road. (Note that paved bike lanes do exist on Conn Creek Road south of Rutherford Road. Bicyclists traveling northbound on that segment of Conn Creek Road might

be inclined to continue to the north and pass by Frog's Leap Winery, despite the lack of bike lanes there.) Motorists who drive on the shoulder pose a danger to such individuals.

Further, vineyard workers and agricultural equipment sometimes occupy the shoulder, and law enforcement officers or other emergency vehicles might be parked on the shoulder in the course of their duties. They would also be endangered by vehicles traveling on the shoulder.

This safety issue is exacerbated by the fact that many drivers on Conn Creek Road and other roads within Napa County have consumed alcohol, often in the course of a wine-tasting excursion. Table 1 summarizes the most-recent available information from the California Department of Motor Vehicles (DMV) regarding the arrest rate for driving under the influence (DUI) in Napa County and statewide. As shown, Napa County consistently exceeds the statewide arrest rate, by as much as 50 percent.

Table 1
DUI Arrest Rates

Year	Arrest Rate Per 100 Licensed Drivers[1]	
	Statewide	Napa County
2013[2]	0.7	0.9 (+29%)
2012	0.7	1.0 (+43%)
2011	0.8	1.1 (+38%)
2010	0.8	1.2 (+50%)

[1] Source: California Department of Motor Vehicles, *Annual Report of the California DUI Management Information System*, 2012 – 2015.
[2] The most-recent available data, from the 2015 DMV report.

Insufficient Width Exists to Construct the Six-Foot Shoulder Widening

Attachment B contains the August 2015 drawing prepared by Applied Civil Engineering to illustrate the proposed shoulder widening. Also presented there is a blow-up of the area in the immediate vicinity of the Frog's Leap Winery driveway.

Although it is difficult to determine specific dimensions from the reduced-scale drawing, the drawing suggests that approximately three feet would remain between the new edge of Conn Creek Road and the existing 56-inch oak tree following completion of the proposed six-foot shoulder widening project. This would mean that the tree sits nine feet from the current edge of the road. However, we note that the symbol representing the oak tree is only about three feet (36 inches) in diameter on the drawing, rather than the 56 inches identified on the drawing, a difference of almost two feet.

The Google Earth images in Attachment A suggest that the tree is substantially less than nine feet from the edge of Conn Creek Road. In fact, a field measurement revealed that it is located about seven feet from the pavement edge. Consequently, the six-foot widening would leave the

new edge of the roadway only one foot from the tree. Without question, the road would cover the root zone of the tree, which could lead to significant impacts to the heritage oak tree.

In addition, the new pavement would be subject to root damage over time, at least as long as the tree is alive. The new pavement would be lifted by root growth, causing it to be uneven and potentially unsafe for motorists and bicyclists.

A Six-Foot Shoulder Would Not Safely Accommodate Most Vehicle Models

The proposed six-foot (i.e., 72 inch) paved shoulder would be narrower than many vehicles that are common on Napa County's roadways. A quick search of the consumerreports.org website revealed a database of exterior dimensions for 351 individual car and pick-up truck models. Attachment C contains a summary table, which shows that the vehicle widths range from 62 inches to 87 inches. A total of 151 models (43 percent) are 72 inches wide or less. The remaining 200 models (57 percent) are over 72 inches wide and are, therefore, wider than the proposed shoulder.

The table in Attachment C also lists a few typical models in each width category. Among the popular models that exceed the 72-inch width of the proposed shoulder are the following:

- Ford Fusion,
- Hyundai Sonata,
- Chevrolet Impala,
- Chevrolet Malibu,
- Toyota RAV4,
- Jeep Cherokee,
- Honda Accord,
- Ford Mustang,
- Ford Taurus,
- Toyota Highlander,
- Ford Edge,
- Jeep Grand Cherokee,
- Kia Sedona,
- Toyota Sienna,
- Ford Explorer, and
- Honda Pilot.

When the vehicles performing the illegal bypass maneuver are wider than the pavement that has been provided for that purpose, the obvious result will be collisions. In this case, those collisions will take the form of sideswipe collisions between the passing vehicle and either the vehicle waiting to turn left or the oak tree.

Conclusion

The intersection of Conn Creek Road/Frog's Leap Winery driveway meets the Napa County warrants for installation of a northbound left-turn lane under Existing Plus Project and Near-Term Plus Project conditions, even after consideration of a number of measures aimed at reducing traffic demand at that location. Despite this, the proposed left-turn lane exemption would allow construction of a six-foot paved shoulder in place of the needed left-turn lane. As described here, construction of the shoulder will have the effect of:

- Encouraging drivers to make illegal passing maneuvers;
- Encouraging drivers to make unsafe passing maneuvers, which could endanger pedestrians, bicyclists, vineyard workers, and law enforcement officers; and
- Creating a high likelihood that sideswipe collisions will occur between those passing drivers and either left-turning vehicles or the existing 56-inch diameter oak tree, which will be inches from the edge of the pavement.

We believe that construction of the six-foot-wide shoulder constitutes a significant impact, as it would "substantially increase hazards due to a design feature" of the project. (See "Napa County Significance Criteria," Omni-Means, pp. 10 – 11.)

2. ***Peak-Hour Trip Generation Estimates*** – The trip generation estimates for the proposed project are documented in Table 2 (p. 13) of the Omni-Means report. The weekday and Saturday daily trip generation estimates are based on factors presented on the Napa County "Winery Traffic Information/Trip Generation Sheet." The peak-hour traffic estimates, on the other hand, do not conform to Napa County requirements. As a result, those estimates substantially understate the volume of weekday and Saturday peak-hour traffic associated with the proposed project.

   According to Omni-Means Table 2, the proposed project would generate 30 weekday PM peak-hour trips (6 inbound, 24 outbound). The number of visitor-related trips was estimated using a factor of 0.056 trips per visitor. In contrast, application of the adopted Napa County factor (i.e., 38 percent of the weekday daily trips), reveals that the project would generate 77 trips in this time period, which is over 150 percent more than the Omni-Means estimate.

   In the Saturday peak hour, Omni-Means Table 2 indicates that the project would generate 86 trips (40 inbound, 46 outbound), based on a factor of 0.286 trips per visitor. Again, application of the adopted Napa County factor for this time period would indicate total trip generation of 145 trips, almost 70 percent more than the Omni-Means estimate.

   The project's peak-hour trip generation estimates should be revised to conform to Napa County's adopted standards, and the modified project traffic values should be assigned to the study area road system. Intersection level of service calculations based on the higher trip generation numbers will undoubtedly reveal that the proposed project will result in greater intersection delay values than were reported in the IS/ND, and the project's incremental impact will also be greater.

   We note, for example, that the intersection of Silverado Trail/Conn Creek Road is shown to operate at LOS E with a delay value of 47.9 seconds/vehicle under Existing Plus Project conditions in the weekend midday time period. (Omni-Means, Table 3, p. 17) It would not be

unreasonable to expect that this intersection might fall to LOS F (with a delay value of greater than 50.0 seconds/vehicle) when the corrected trip generation estimates are considered.

The modified traffic analysis using corrected trip generation estimates must be incorporated into revised environmental documentation, which should then be circulated for public review.

3. ***Project Traffic Assignment*** – Traffic assignment is the process by which the estimated project trips are added to the road system in the designated study area. The assignment of the project's peak-hour trips is illustrated on Figure 4 (p. 14) in the Omni-Means report. Examination of the traffic assignment at the Conn Creek Road/Frog's Leap Winery Driveway intersection shows that only a small percentage of the project trips are represented here. In the weekday PM peak hour, a total of 5 trips are shown entering and exiting the site (1 inbound, 4 outbound), compared to the total estimate of 30 trips listed in Omni-Means Table 2. Thus, only 17 percent of the total project trips were assigned to the Conn Creek Road driveway. In the weekend peak-hour period, a total of 37 trips are assigned to the driveway (17 inbound, 20 outbound); this represents only 43 percent of the total estimated value of 86 trips shown in Omni-Means Table 2.

   Presumably, the trips that are not shown at the Conn Creek Road driveway are assumed to enter and exit the site at the Rutherford Road driveway. In fact, according to the Napa County "Initial Study Checklist" (p. 2), the project will incorporate, ". . . use of the driveway along Rutherford Road for employee access." Based on the volumes presented in the Omni-Means report, this would be 25 trips in the weekday PM peak hour and 49 trips in the weekend peak hour. However, none of these trips are assigned to either of the other two study intersections – Silverado Trail/Conn Creek Road and Rutherford Road/Conn Creek Road. Only the relatively small proportion of the total project trips that are assumed to use the Conn Creek Road driveway are assigned through these other two intersections.

   It is simply not credible to assume that none of the employees (or other users of the Rutherford Road driveway) would pass through either of the other two intersections. Instead, it appears that the trips that are oriented to/from the Rutherford Road driveway have simply been ignored. In any event, the intersection traffic volumes for all of the "plus project" scenarios are erroneous, as they do not accurately account for all of the project's traffic.

   Further, because the traffic volumes are wrong, the intersection level of service results are also inaccurate. Consequently, the Omni-Means traffic study fails to provide a valid representation of the proposed project's impacts on the study area road system. The project traffic assignment must be corrected and revised level of service analyses conducted.

   When all of the project traffic has been accurately accounted for, the "plus project" level of service calculations will reveal higher delay values and perhaps even worse levels of service. As noted above, the intersection of Silverado Trail/Conn Creek Road is shown to operate just within the LOS E/F boundary under Existing Plus Project conditions in the weekend midday time period. (Omni-Means, Table 3, p. 17) Correctly accounting for the project traffic might well reveal that this intersection will operate at LOS F under these conditions when the proposed project is implemented.

   The results of this corrected work must be incorporated into revised environmental documentation that will then need to be circulated for further public review.

4. ***Study Area*** – The Omni-Means traffic study focuses on trips entering and exiting the project site at the winery's driveway on Conn Creek Road. As noted above, employees will enter and exit the site via the Rutherford Road driveway. Further, according to the Omni-Means report, the number of vehicles entering and exiting the site at the Rutherford Road driveway will substantially exceed the number using the Conn Creek Road driveway. However, no analysis is provided to establish whether the proposed project will adversely impact operations at the Rutherford Road driveway intersection, or whether turn lanes are needed. The study area should be expanded to include this intersection.

   Furthermore, it is likely that a substantial proportion of the visitors and employees will travel to and from the site on State Route 29 (St. Helena Highway). According to the Omni-Means traffic study (p. 12), 63 percent of project traffic will be oriented to/from the south. It is reasonable to expect that the bulk of these vehicles will travel by way of Rutherford Road and State Route 29 (St. Helena Highway). Consequently, the traffic analysis is incomplete without analyzing the intersection of Rutherford Road/State Route 29 (St. Helena Highway).

   When considering the intersection of Rutherford Road/State Route 29 (St. Helena Highway), it is important to note that Caltrans has designated it as a location needing safety improvements. Specifically, the *California State Route 128 Transportation Concept Report* (Caltrans District 4, April 2013) says:

   > *. . . the intersection of SR 29/128 and Rutherford Road/SR 128 is targeted for traffic and pedestrian safety improvements. Napa County studied and rejected a roundabout intersection at this location because of the proximity of a rail crossing. Other traffic control alternatives are being studied, but no decision has been made as of the time this document is being published.*

   These previously-acknowledged deficiencies must be fully considered in the analysis of this intersection.

5. ***Intersection Level of Service Calculations*** – The intersection level of service calculations documented in the focused traffic analysis suffer from a number of issues, including the use of outdated methodologies and inappropriate and inaccurate assumptions.

   A. ***Outdated Level of Service Methodology*** – The *Highway Capacity Manual* (HCM) is a publication of the Transportation Research Board (TRB), one of the entities within the National Academy of Sciences. The current, year 2010 edition of the HCM (HCM 2010) follows previous editions completed in 1965, 1985, 1997, and 2000. It was released on April 11, 2011, about 3½ years prior to completion of the Frog's Leap focused traffic study (December 15, 2014).

      Despite this, the intersection level of service calculations presented in the Omni-Means traffic study reflect application of the superseded year 2000 version of the HCM. In fact, the calculation sheets presented in the traffic study appendix have dates ranging from December 5, 2013 to December 3, 2014, which confirms that the calculations could have been performed using the 2010 version of the HCM.

      To ensure the accuracy of the traffic analysis, the intersection level of service calculations must be performed using the current, year 2010 version of the *Highway Capacity Manual.*

B. ***Truck Percentage*** – Certain operations at Frog's Leap Winery generate substantial volumes of truck traffic. This is particularly true during the harvest/crush periods. Trucks have an inordinate adverse effect on traffic operations and safety, due to their size and operating characteristics, particularly with regard to slower acceleration, longer braking distances, and the need for greater separation between vehicles.

The intersection level of service calculations apparently employed an across-the-board assumption of two percent trucks on the study area roads. While this value happens to be the default assumption for "heavy vehicles" in the *Synchro 6* software used in the analysis, it might significantly understate the actual level of trucks in the prevailing traffic stream.

The *California State Route 128 Transportation Concept Report* includes information concerning the volume of truck traffic on Conn Creek Road. With regard to "Segment D" of SR 128 (which includes the section of Conn Creek Road at Frog's Leap Winery), page 15 of that document states:

> *Over 28 percent of the vehicles on this segment are trucks. Because of the many wineries in the area, the truck percentages are higher in the part of the segment that spans the valley between SR 29 and the Silverado Trail* [i.e., Rutherford Road and Conn Creek Road in the vicinity of Frog's Leap Winery].

Revision of the level of service calculations to incorporate an accurate truck percentage is necessary to ensure that the analysis results appropriately reflect the characteristics of the prevailing traffic in the study area. Because the actual truck percentage on Conn Creek Road (SR 128) is higher than the assumed two percent value, the intersection delay values are likely to be higher than those reported in the IS/ND.

Moreover, the traffic study ignores the safety and operational effects of trucks on Conn Creek Road and other nearby roads. As noted above, Caltrans data indicate that over 28 percent of the traffic on State Route 128 consists of heavy trucks. During the crush period, this percentage is certain to be higher. Despite, this, the traffic study includes no discussion or analysis of auto-truck conflicts and the potential safety issues associated with mixing automobile traffic including tourists) with a considerable amount of heavy-vehicle traffic.

C. ***Peak Hour Factor*** – One of the key parameters incorporated into the intersection level of service calculation procedure is the peak hour factor (PHF), which has two functions. First, it serves as an indicator of the uniformity of traffic flow throughout the peak hour period. The closer the PHF is to 1.00, the more uniform the flow. (Specifically, if the traffic volume is identical in each of the four 15-minute periods within the peak hour, the PHF will equal 1.00. Lower PHF values indicate that traffic volumes are more highly variable over the course of the hour.)

Second, and more important, application of the PHF in the level of service calculation provides an adjustment intended to represent operating conditions in the peak 15-minute period within the peak hour, thereby providing a conservative assessment of intersection operations. (Because of the way the PHF is applied, lower factors result in higher 15-minute traffic flow rates, which results in more conservative estimates of intersection delays.)

The Omni-Means intersection level of service calculations consistently used a peak hour factor of 0.92, which is the default value within the *Synchro 6* software package. Given the

availability of actual field data in this case, use of this default PHF value is inappropriate and could significantly understate the impacts of the project on peak level traffic delays.

6. ***Incomplete Cumulative Conditions Analysis Documentation*** – The analysis of intersection and roadway segment operations for the cumulative conditions time frame (year 2030) is documented on pages 21 and 22 of the Omni-Means report. Among the findings reported there is the fact that Silverado Trail/Conn Creek Road would be operating at LOS F (i.e., the worst possible level of service) during both the weekday and weekend peak hours under both Cumulative No Project and Cumulative Plus Project conditions. However, no detail is provided with respect to the projected vehicular delay values that would relate to the LOS F finding.

   Referring to the Omni-Means appendices, the level of service calculation sheets for this intersection can be found for both time periods under Cumulative No Project conditions. No calculation sheets are provided for Cumulative Plus Project conditions, so no detailed intersection delay values are available for this scenario. To remedy this, we have developed intersection level of service analyses for these scenarios using the *Synchro 6* software, as was used in the Omni-Means analysis. First, we performed Cumulative No Project calculations to ensure that our analyses were consistent with the Omni-Means work. Then we added the project traffic, as illustrated on Omni-Means Figure 4 (p. 14). As described above, we question the accuracy of the project traffic assignment shown on this figure, but we used those values to ensure consistency with the Omni-Means analysis. Table 2 summarizes the cumulative conditions analysis results for both "no project" and "plus project" scenarios at Silverado Trail/Conn Creek Road.

Table 2
Cumulative Conditions Level of Service Summary[1]
Silverado Trail/Conn Creek Road

		Cumulative No Project		Cumulative Plus Project	
		Delay[2]	LOS[3]	Delay	LOS
Weekday PM Peak Hour	Eastbound Silverado Trail[4]	Err[5]	F	Err	F
	Westbound Silverado Trail[4]	885.9	F	913.4	F
Weekend Midday Peak Hour	Eastbound Silverado Trail[4]	981.8	F	Err	F
	Westbound Silverado Trail[4]	252.9	F	278.6	F

Notes:
1 Reference: Transportation Research Board, *Highway Capacity Manual*, 2000.
2 Average control delay (seconds per vehicle).
3 Level of service.
4 In the Omni-Means *Synchro 6* analysis, Silverado Trail was assumed to run east-west, and Conn Creek Road was assumed to run north-south.
5 The derived delay value exceeds the reporting capabilities of the *Synchro 6* software.

In the weekday PM peak hour, the delay values on the worst-case eastbound Silverado Trail approach are unknown, as they exceed the reporting capabilities of the analysis software. The average vehicular delay on the westbound Silverado Trail approach, however, will increase from 885.9 seconds/vehicle to 913.4 seconds/vehicle. In other words, the average driver will see his average delay increase from 14.8 minutes to 15.2 minutes.

In the weekend midday peak hour, while the "no project" delay on the eastbound Silverado Trail approach will be 981.8 seconds/vehicle (i.e., 16.4 minutes/vehicle), the "plus project" value is unknown, as it is too great to be reliably reported. On the westbound approach, the project will cause the average delay value to increase from 252.9 seconds/vehicle (4.2 minutes/vehicle) to 278.6 seconds/vehicle (4.6 minutes/vehicle).

Clearly, the project will have a substantial adverse impact on traffic operations at this intersection under cumulative conditions. Despite this, the report presents no conclusion with regard to the project's cumulative conditions impacts; it simply states that the level of service would be unchanged, creating the inaccurate impression that the project's impacts will be insignificant.

7. ***Intersection Level of Service Standard*** – The county's level of service standards for intersections are presented on page 10 of the Omni-Means letter report:

    - *The County shall seek to maintain a Level of Service D or better at all intersections, except where the level of service already exceeds this standard (i.e. Level of Service E or F) and where increased intersection capacity is not feasible without substantial additional right-of-way.*
    - *No single level of service standard is appropriate for un-signalized intersections, which shall be evaluated on a case-by-case basis to determine if signal warrants are met.*

    These standards lack clarity. On the one hand, all intersections are to operate at LOS D or better but, on the other hand, no single level of service standard applies to unsignalized intersections. This is critical, because all three of the intersections evaluated for this study are unsignalized. While the second point calls for case-by-case analysis of whether signal warrants are met, it is unclear whether that is the primary (or, perhaps, sole) criterion establishing a significant impact at these locations.

    This is a particular issue with regard to the study intersection of Silverado Trail/Conn Creek Road. Under Near-Term No Project conditions, that intersection is projected to operate at LOS F with an average delay value of 110.2 seconds/vehicle during the weekend midday peak hour. (Omni-Means, Table 3, p. 17) The intersection is also expected to be at LOS F under Near-Term Plus Project conditions (average delay = 127.6 seconds/vehicle), and the project will cause an incremental delay impact of 17.4 seconds/vehicle, a 16 percent increase in delay. Despite this, because of the fuzzy level of service standard for unsignalized intersections, no significant impact was found in the analysis.

    In short, the significance criteria employed in this analysis are so unclear and incomplete that they are virtually meaningless for application to the intersections that operate the worst and are, therefore, most likely to need mitigation. The analysis should be revised to clearly state

appropriate intersection significance criteria so that the project's impacts can be measured against those thresholds.

We also note that Conn Creek Road (i.e., State Route 128) is under Caltrans' jurisdiction. The standard of significance that typically applies to Caltrans facilities is presented in the *Guide for the Preparation of Traffic Impact Studies* (Caltrans, December 2002.) The specific operational standard that applies to those facilities is presented on page 1 of that document:

> *Caltrans endeavors to maintain a target LOS* [Level of Service] *at the transition between LOS "C" and LOS "D" . . . on State highway facilities. . . . If an existing State highway facility is operating at less than the appropriate target LOS, the existing MOE* [Measure of Effectiveness] *should be maintained.*

In other words, Caltrans considers LOS C to be acceptable, and LOS D is not. It is, therefore, appropriate to employ the stated operational standard established by Caltrans, the agency that owns and controls Conn Creek Road (State Route 128).

CONCLUSION

Our review of the focused traffic analysis prepared in connection with the proposed Frog's Leap Winery Use Permit Modification project in Napa County, California revealed several issues affecting the validity of the conclusions presented in that document. These issues must be addressed prior to approval of the proposed project.

We hope this information is useful. If you have questions concerning anything presented here, please feel free to contact me at (916) 783-3838.

Sincerely,

MRO ENGINEERS, INC.

Neal K. Liddicoat, P.E.
Traffic Engineering Manager

MRO ENGINEERS

ATTACHMENT A

Google Earth Images
Conn Creek Road at Frog's Leap Winery Driveway

Google earth

feet 10
meters 4

Google earth

feet 10

meters 4

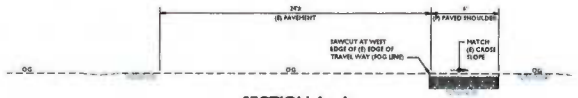
ATTACHMENT B

Applied Civil Engineering, *State Route 128 Shoulder Improvements Exhibit*, August 2015.

FROG'S LEAP WINERY

STATE ROUTE 128 SHOULDER IMPROVEMENTS EXHIBIT

LOCATION MAP
SCALE 1" = 2,000'



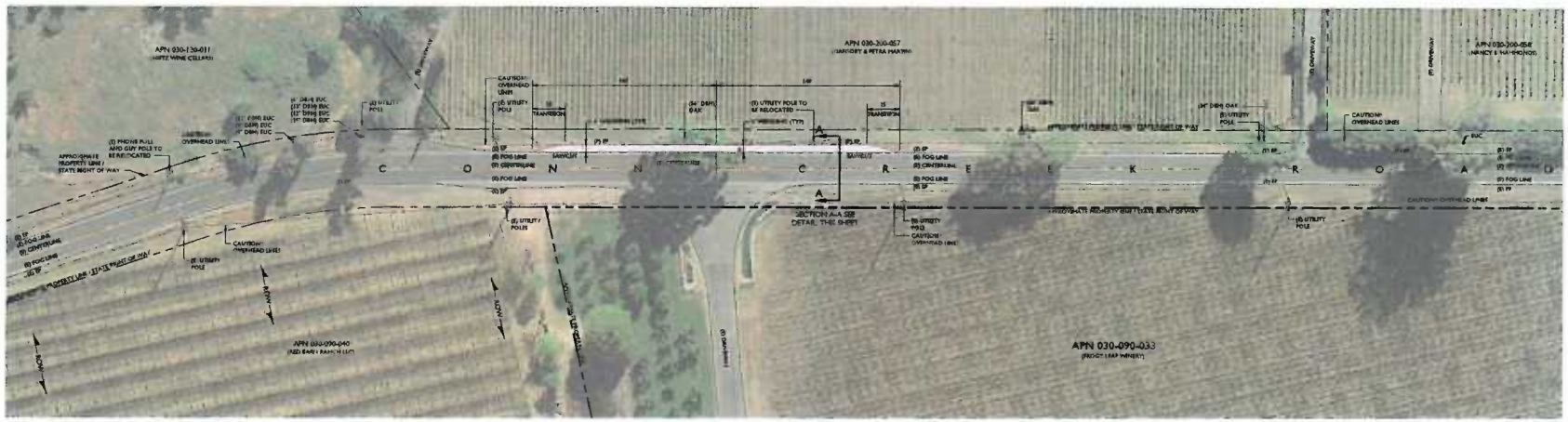
SECTION A - A
SCALE 1" = 5'

PROJECT INFORMATION

PROPERTY OWNER & APPLICANT:
FROG'S LEAP WINERY
8815 CONN CREEK ROAD
ST. HELENA, CA 94574
SITE ADDRESS:
8815 CONN CREEK ROAD
ST. HELENA, CA 94574
ASSESSOR'S PARCEL NUMBER:
030-090-033
PARCEL SIZE:
38.92± ACRES
ZONING:
AGRICULTURAL PRESERVE (AP)

NOTES:

1. FADED BACKGROUND REPRESENTS EXISTING TOPOGRAPHIC FEATURES. TOPOGRAPHIC INFORMATION WAS OBTAINED FROM THE "MAP OF TOPOGRAPHY OF THE LANDS OF FROG'S LEAP WINERY" PREPARED BY ALBION SURVEYS INC., DATED NOVEMBER 2004. APPLIED CIVIL ENGINEERING INCORPORATED ASSUMES NO LIABILITY REGARDING THE ACCURACY OR COMPLETENESS OF THE TOPOGRAPHIC INFORMATION.
2. BACKGROUND PHOTOGRAPH WAS OBTAINED FROM THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE (PHOTO DATE APRIL 9, 2011).
3. ACCORDING TO FEMA FIRM COMMUNITY PANEL 06055C0385E THE SUBJECT PARCEL IS DETERMINED TO BE WITHIN THE 100 YEAR AND THE 500 YEAR FLOOD BOUNDARY. SEE FEMA FIRM COMMUNITY PANEL 06055C0385E FOR MORE INFORMATION.
4. TREE INFORMATION USED PROVIDED BY POUND MANAGEMENT.



STATE ROUTE 128 SHOULDER IMPROVEMENTS EXHIBIT
SCALE 1" = 40'

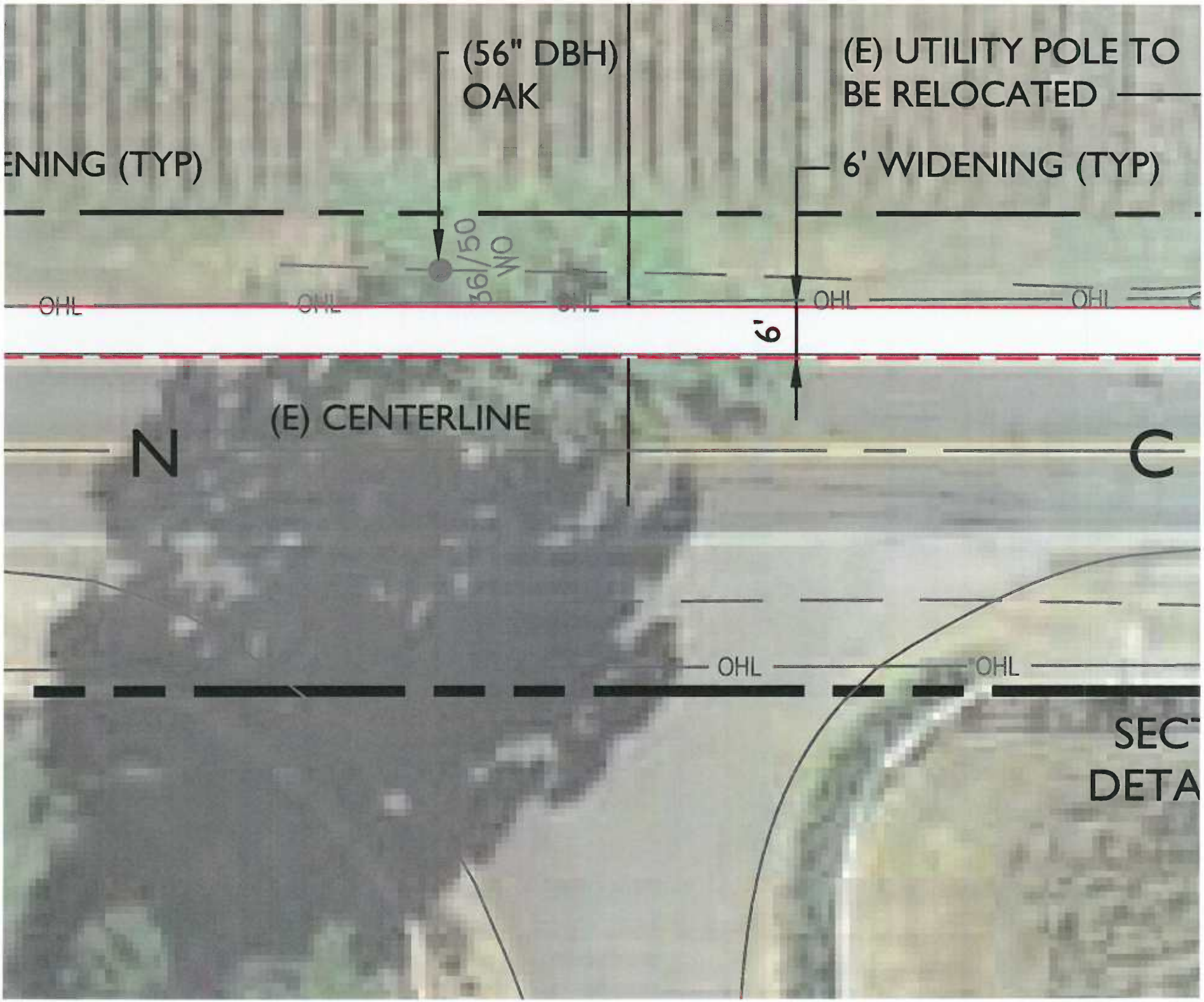
APPLIED CIVIL ENGINEERING INCORPORATED
2074 West Lincoln Avenue
Napa, California 94558
(707) 224-4668 / (707) 230-2395 Fax
www.appliedcivil.com

DESIGNED BY: MRM
DRAWN BY: ST DRAFTING
CHECKED BY: MRM

FROG'S LEAP WINERY
STATE ROUTE 128 SHOULDER IMPROVEMENTS EXHIBIT

FROG'S LEAP WINERY
8815 CONN CREEK ROAD
ST. HELENA, CA 94574
NAPA COUNTY APN 030-090-033

DATE: AUGUST 2015
JOB NUMBER: 13-133
FILE: 13-133EXH_DWG
ORIGINAL SIZE: 24" X 36"
SCALE: AS NOTED
SHEET NUMBER: C1
OF 1


(56" DBH)
OAK
(E) UTILITY POLE TO
BE RELOCATED
ENING (TYP)
6' WIDENING (TYP)
36/50
WO
OHL
OHL
OHL
OHL
OHL
6'
(E) CENTERLINE
N
C
OHL
OHL
SEC
DETA

MRO ENGINEERS

ATTACHMENT C

Vehicle Width Summary Table

757887.1

Table C-1 Vehicle Width Summary		
Vehicle Width (Inches)	No. of Models	Typical Models
62	1	Mitsubishi i-MiEV
63	1	Chevrolet Spar
64	3	Fiat 500 (3 versions)
65	1	Smart for Two
66	1	Mitsubishi Mirage
67	8	Hyundai Accent, Nissan Versa, Toyota Prius C, Honda Fit
68	12	Ford Fiesta, Kia Rio, Mini Cooper, Mazda MX-5 Miata, Chevrolet Sonic
69	12	Nissan Sentra, Subaru Impreza, Jeep Patriot & Compass, Toyota Prius, Mitsubishi Lancer
70	27	Buick Encore, Hyundai Elantra, Toyota Corolla, Volkswagen Jetta, Audi A3
71	40	Mazda 3, Porsche Boxster, Mercedes-Benz C-Class, Honda Civic, Volkswagen Beetle & Golf
72	45	Ford Focus & Escape, Nissan Altima, Subaru Legacy & Outback, Toyota Camry, Mazda 6
Proposed 72-Inch Shoulder		
73	49	Ford Fusion, Hyundai Sonata, Chevrolet Malibu, Audi A5, Toyota RAV4, Honda Accord
74	33	Kia Sorento, Chrysler 200, Lexus LS, Toyota Tacoma, BMW X3, Jeep Wrangler, Volvo S90
75	23	Chevrolet Camaro, Ford Mustang, Chrysler 300, Nissan Murano, BMW 7-Series, Audi A7
76	23	Ford Taurus & Edge, Toyota Highlander, Mazda CX-9, BMW X5, Lincoln MKS
77	11	Nissan Pathfinder, Acura MDX, Jeep Grand Cherokee, Audi A8
78	14	Kia Sedona, Chevrolet Traverse, Toyota Sienna, Nissan Quest
79	16	Ford Explorer, Honda Pilot & Odyssey, Ram 1500, Dodge Grand Caravan, Buick Enclave
80	16	Ford F-150 & Flex, Chevrolet Silverado, Toyota Sequoia & Tundra, Lincoln Navigator
81	9	GMC Yukon, Cadillac Escalade, Chevrolet Suburban
82	3	Land Rover Discovery Sport, Tesla Model X, Jaguar F-Pace
84	2	Mercedes-Benz GL, Volvo XC90
87	1	Acura NSX
Source: consumerreports.org, "Dimensions: Exterior & Cargo."		