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Agenda Date: 8/19/2015
Agenda Placement: 9B

Napa County Planning Commission
Board Agenda Letter

TO:	Napa County Planning Commission
FROM:	Charlene Gallina for David Morrison - Director Planning, Building and Environmental Services
REPORT BY:	Wyntress Balcher, Planner II - 707 299-1351
SUBJECT:	Girard Winery Use Permit #P14-00053

RECOMMENDATION

GIRARD WINERY USE PERMIT #P14-00053-UP

CEQA Status: Consideration and possible adoption of a Revised Negative Declaration. According to the proposed Revised Negative Declaration, the proposed project would not have any potentially significant environmental impacts.The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Request: Approval of a Use Permit to establish a new winery with an annual production capacity of 200,000 gallons as follows: 1) Construction of new winery building, totaling 32,771 sq. ft. in area to include: 28,955 sq. ft. production area (crush area, fermentation and barrel storage, restrooms); ±3,816 sq. ft. of accessory use area (offices, tasting rooms, retail storage, catered food prep area, and visitor restrooms), maximum building height 33.5 ft. with 15 ft. tall decorative cupolas to 45 ft. In addition a ±2,560 sq. ft. covered veranda; and a ±2,871 sq. ft. covered work area; 2) Hosted daily tours and tastings for wine trade personnel and consumers by appointment only for a maximum of 75 persons per weekday (Monday-Friday); maximum of 90 persons per weekend day (Saturday-Sunday); 3) Hours of operation: 8:00 AM to 6:00 PM (production hours, except during harvest) and 10:00 AM to 6:00 PM (visitation hours), 7-days a week; 4) Employment of: 11 employees (8 full time; 3 part-time) non harvest; 19 additional employees (12 full time and 7 part time) during harvest, for a total maximum of 30; 5) Employee hours: production, 7:00 AM to 3:00 PM; hospitality/ tasting room, 9:30 AM to 6:30 PM; 6) Construction of twenty-two (22) parking spaces; 7) Installation of landscaping, entry gate and a winery sign; 8) Establish a Marketing Program as follows: a. Four (4) events per year with a maximum of 75 guests; b. Four (4) events per year with a maximum of 200 guests; c. One (1) Harvest event per year with a maximum of 500 guests; d. All food to be catered utilizing a ±184 sq. ft. small prep/staging area; 9) On-premises consumption of the wines produced on-site, consistent with Business and Professions Code §§23356, 23390, and 23396.5 (also known as AB 2004 (Evans 2008 or the Picnic Bill) within the tasting rooms (±2,320 sq. ft.), covered porch (±2,560 sq. ft.), and within a 4,000 sq. ft. portion of the front entry landscaped winery garden; 10) Construct a new 24-ft. wide winery access driveway from Dunaweal Lane to the winery; 11) Construction of additional piping and service connections to the existing Clos

Pegase water system on the site, and update the existing Clos Pegase Transient Non-Community Water System contract to include Girard Winery; 12) Installation of on-site sanitary disposal improvements and installation of connections into the existing on-site winery wastewater processing ponds serving Clos Pegase Winery (APN: 020-150-012); and, 13) Installation of ±45,000 gallon water storage tank (±30 ft. diameter; ±12 ft. height). The project is located on a 26.53 acre parcel on the east side of Dunaweal Lane, approximately 1000 feet south of its intersection with Silverado Trail, within the AP (Agricultural Preserve) Zoning District; 1077 Dunaweal Lane; Calistoga, CA 94515, APN: 020-150-017.

Staff Recommendation: Adopt the Revised Negative Declaration and approve the Use Permit as conditioned.

Staff Contact: Wyntress Balcher, Planner II, (707) 299-1351 or wyntress.balcher@countyofnapa.org

Applicant Contact: Pat Roney, 205 Concourse Blvd, Santa Rosa, CA 95403, (877) 289-9463

Representative Contacts: Heather McCollister; 1512 D Street, Napa, CA 94559; bhmccolli@sbcglobal.net and Scott Greenwood-Meinert, 1455 First Street, Napa, CA 94559 (707) 252-7122; scottgm@dpf-law.com

EXECUTIVE SUMMARY

Proposed Actions:

That the Planning Commission:

1. Adopt the Revised Negative Declaration for the Girard Winery based on revised Findings 1-6 of Exhibit A; and

2. Approve Use Permit (P14-00053) based on revised Findings 7-11 of Exhibit A, and subject to the recommended revised Conditions of Approval (Exhibit B).

Discussion:

On December 17, 2014, the Planning Commission held a public hearing to consider Use Permit application #P14-00053 to establish a new 200,000 gallon/year winery which includes the construction of a new winery building totaling 32,771 sq. ft. in area and associated support systems. The item was continued to January 21, 2015, based upon a neighbor's request to allow additional time to review the staff report, associated environmental analysis, and the technical studies.

The Planning Commission resumed the public hearing on January 21, 2015, received testimony and evidence from a neighbor, interested parties and the applicant's representative. Representatives for the neighbor, Ms. Tofanelli, also submitted a letter (Shute, Mihaly & Weinberger, dated January 20, 2015) to the Commission citing various points they considered were inadequately addressed in the CEQA document prepared for the project, specifically: hydrology; water quality; transportation/parking; noise; air quality; visual resources; inconsistency with the WDO and General Plan; weddings and the shared resources. As a result, the item was continued to February 21st to allow time to respond to the issues raised by the Commission and interested parties. Because the issues required the preparation of additional analysis the project be removed from the calendar for re-noticing at a later date.

A comprehensive hydrological study was performed by O'Connor Environmental, Inc. (OEI), a private consulting firm with expertise in hydrology, and additional analysis was prepared by the traffic engineer.As a result, staff has revised the initial study to incorporate this additional information and to address the issues previously raised by the Commission and public. Furthermore, staff revised the proposed findings and conditions of approval, accordingly.

Given this new information, staff continues to support approval of this project for the following reasons: 1) the proposal includes substantial greenhouse gas offset features; 2) the proposal will be incorporated into an existing water/wastewater recycling system, lessening project demand on groundwater resources; 3) County policy concern new winery development, although currently under review, has not changed and no direction to suspend processing of pending applications has occurred; 4) Girard is currently producing wine from Napa Valley fruit in Sonoma County and approval of this facility will return its production to Napa County; 5) the project will be subject to the County's expanded housing impact fees; 6) visitation is within the scope of what has been approved at other similar facilities, and marketing is on the low end; 7) the amount of visitation space is relatively modest in comparison to the amount of production space; and, 8) the project requires no reductions or alternatives to winery zoning standards.

FISCAL IMPACT

Is there a Fiscal Impact? No

ENVIRONMENTAL IMPACT

A Revised Negative Declaration has been prepared and made available for public review and comment. During the initial environmental document prepared for this project consisted of a proposed Mitigated Negative Declaration, with mitigation proposed to address potential traffic impacts. No other potentially significant impacts were identified in the original document. Comments on the previously prepared Mitigated Negative Declaration were made by the law firm of Shute, Mihaly, & Weinberger, LLP on behalf of Ms. Tofanelli asserting that the Project could have a number of potentially significant impacts on the environment. In response, a revised proposed Negative Declaration has been prepared. The revised document, attached, provides responses and augmented analysis on areas of potential impact raised by the neighbor. As a result of augmented traffic analysis, the project was found not to have a potential to significantly impacts traffic conditions, and thus, the originally proposed traffic mitigation measure has been removed.

BACKGROUND AND DISCUSSION

DISCUSSION POINTS:

Clos Pegase Winery Wastewater System on Subject Property - The Commission requested that staff address the project's General Plan and Winery Definition Ordinance (WDO) consistency as it relates to the existing Clos Pegase Winery wastewater system. If approved, the Girard Winery will be located on a property that already contains the Clos Pegase Winery wastewater system. The Commission questioned whether the General Plan and/or WDO allow for components of more than one winery to be located on the same parcel.

The existing system on the subject property was entitled prior to the adoption of the Winery Definition Ordinance (WDO) as part of a wine production expansion at Clos Pegase approved on May 27, 1987 (U-45-8687). There are several pre-WDO wineries throughout Napa County with similar existing circumstances wherein sewage treatment facilities are located on a different parcel than the main winery facility. There are at least three cases as well where wineries and commercial business share a treatment plant (Mustards, Rutherford, Culinary Institute). However, staff were not able to identify a circumstance where a new winery was permitted on a parcel that already contained the sewage treatment facilities of a different winery. In addition, research into potentially applicable General Plan and WDO policies and requirements provides little in the way of guidance. In as much as there is no expressed

prohibition in the General Plan or WDO for what is proposed, there too is no clear regulation enabling such. As such, staff believe the Planning Commission has broad discretion on considering this proposal which can range from approving the project as proposed to finding that a new winery is not possible on this site as long as the sewage treatment system for Clos Pegase is on the subject parcel.

Clos Pegase Winery is capable of accommodating a new system on its parent parcel. It is unclear what would be gained by approving Girard Winery (in some form) and requiring a new system at Clos Pegase solely on the basis that the Commission determines that sewage for two wineries cannot be share on one of the winery's parcels. Combining treatment facilities for two wineries utilizes less land than having two separate systems. Additionally, the combined process wastewater systems provide for reuse of wastewater for vineyard irrigation on both parcels. On the other hand, the WDO states: "Wineries are permitted to be located or operated on parcels zoned AP or AW only if the single parcel (emphasis added) which it is located meets the following minimum parcel size:..." (Section 18.104.240). Clos Pegase would not be subject to this single parcel requirement because it was approved prior to the adoption of the WDO. This provision can be interpreted in several ways, but from staff's perspective, it appears the intent was to enable a one winery per legal lot of 10 acres or greater. It seems unlikely that the County intended to allow multiple wineries on one legal lot just as the ordinance more clearly does not allow one winery to span multiple parcels. Although above ground winery sewage facilities count toward the limit on Winery Development Area, sewage treatment facilities arguably are more similar to a utility improvement like water supply or power than they are similar production and accessory space. Parking for a winery is not permitted on a adjoining property, but it is routine that a winery's access road crosses several separate properties before reaching a public road. In absence of a definitive policy, and based on past practices both before and after the adoption of the WDO, staff believe the intent of the "single parcel" WDO language would not preclude the Commission from allowing a new winery on the subject property.

Hydrology - As noted in the above, the applicant retained OEI to conduct a Phase II Water Availability Analysis. The report evaluated: the hydrogeology of the area; long-term groundwater elevation trends; water quality; groundwater recharge; and water balance based on prior basin-level work performed by Luhdorff and Scalmanini (2013). The report (attached) concluded that the total water demand of 8.22 acre-feet/year (af/yr) for the proposed Girard Winery and the existing Clos Pegase Winery properties. represent 24% of the parcel-based mean annual groundwater recharge and approximately .03% of the total recharge to the tuffaceous aquifer up-gradient of the both the Clos Pegase Winery and Girard Winery property.

Given that the mean annual recharge is significantly higher than the proposed demand, it is highly unlikely that the proposed pumping would result in long-term declines in groundwater elevations or depletion of groundwater resources. The expected magnitudes of drawdown associated with the proposed pumping are reasonably small and the spheres of influence associated with pumping at the required rates and durations needed to meet demands do not extend far enough away from the project wells to intersect neighboring wells or the Napa River. The project wells draw water from the tuffaceous rocks of the Sonoma Volcanic rather than from the alluvial aquifer. Further, the report finds that the vertical separation between groundwater elevations in the Sonoma Volcanics and riverbed elevations, the lack of response of the alluvial aquifer to pumping the underlying volcanic aquifer, and the limited extent of the cone of depressions associated with the proposed pumping relative to the separation between the project well and the Napa River all suggest that it is highly unlikely that the proposed pumping could influence baseflow conditions in the Napa River.

The OEI Report was peer reviewed by the Department of Public Works and Public Works staff concurred with the OEI Report findings and conclusions. Substantial evidence in the record indicates that the groundwater table in the area of the project shows a long term stable trend; impacts on neighboring wells or the Napa River are not anticipated and the project is unlikely to cause directional flow changes which would draw chemicals from Calistoga into the area. Public Works staff recommended that the Commission include conditions of approval to require: 1) the permittee to monitor and maintain records of water volumes pumped from the two wells, 2) make the data available to the County upon request, 3) proactively notify the County if water use from the wells exceed 10

acre-ft. (af) in a given year, and 4) include either or both wells into the County's Groundwater Monitoring program if the County requests that they do so. Staff has modified the proposed conditions of approval to include this recommendation.

The Initial Study for the project was revised to incorporate the information from the OEI Report. In addition, Luhdorff and Scalmanini Consulting Engineers (LSCE) prepared the 2014 Annual Groundwater Monitoring Report, presented to the Napa County Board of Supervisors on March 3, 2015. This report states that based on the network of monitored groundwater level in the area, the groundwater levels in the area south of Calistoga are stable, even in context of the current drought. The LSCE Study also concluded that, on a regional scale, there appear to be no current groundwater quality issues except north of Calistoga (mostly naturally occurring boron and trace metals), several miles from the subject parcel, and in the Carneros region (mostly salinity). This information was also incorporated into the revised Initial Study.

The Phase II study and the results of the LSCE 2014 Annual Groundwater Monitoring Report confirm that the project would have a less than significant impact on the groundwater supplies, groundwater recharge, water quality, and would not result in the lowering of the local groundwater table level. In addition, the associated water reuse system consisting of the processed winery wastewater from Clos Pegase and proposed Girard Winery, collected rainwater, and captured vineyard runoff waters would lessen groundwater demand from vineyard and landscape irrigation over baseline conditions, in the amount of ± 13.8975 acre-feet/year.

Transportation - Shute, Mihaly, & Weinberger stated that the Transportation Analysis in the original Initial Study/Mitigated Negative Declaration was inadequate for the following reasons: 1) only two intersections were evaluated; 2) proper thresholds of significance for determining impacts on the intersections were not included; 3) mitigation measures were inadequate; 4) trip generation methodology was flawed; 5) traffic from winery events was not evaluated sufficiently; and 6) the study failed to examine the cumulative impacts. The traffic engineer provided supplemental information to address the comments made, and the additional information was incorporated into the revised proposed Negative Declaration (both attached), which are summarized as follows:

1) Issue: Intersection Evaluation

Response: The traffic study area was selected to include the two locations where the project would generate the highest number of vehicle turning movements, which in turn would reflect the locations with the greatest potential transportation impacts. Beyond these two intersections, the added trips would be almost entirely comprised of traffic through movements, which would result in not change to the level of service or volume-to capacity ration of State Highway 29. The Department of Public Works confirmed that the study area is appropriate for the project and consistent with other project reviewed conducted by the County.

2) Issue: Thresholds of Significance

Response: The study was revised to include a 1% threshold, consistent with our general plan EIR, past practice, and in wide use in other communities. A Transportation Demand Management program (TDM) is proposed as part of the project, which will reduce the number of peak hour trips. The trip generations were based upon the County's standard trip generation calculations. The production employees are proposed to cease work at 3:00 PM and the hospitality employees to cease work at 6:30 PM. There are no administrative employees proposed at this facility. With the removal of the eleven employees from the PM peak period (4:00 PM – 6:00 PM), the resultant number would be 16 trips. The traffic consultant states that the added volume of the project is so small as to result in no change to the operation of State Highway 29. Further, a review of the traffic volumes on State Route 29 and added by the project indicates that the number of project-generated trips is 1% or less of existing volumes.

3) Issue: Traffic Mitigation Measure

Response: As a result of incorporating a threshold of significance, as requested by the commenter, the updated traffic analysis, in concert with previously introduced project commitments, resulted in the project being found not to contribute significantly to potential traffic congestion. Therefore, the level of significance within the update proposed Negative Declaration was change to less-than-significant, and mitigation is no longer necessary.

4) Issue: Trip Generation Methodology; Winery Event Traffic

Response: The traffic consultant states that the anticipated trip generation for a proposed project is typically estimated using standard rates published by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, 2012. However, the publication contains no such information for a winery and the County of Napa's Winery Traffic Information/Trip Generation Sheet was used to determine the anticipated traffic that would be generated by the project.

5) Issue: Winery Event Traffic

Response: The American Association of State Highway and Transportation Officials (AASHTO) recommend that designs be based on volumes during the 30th highest hour, to avoid facilities with excessive capacities. The proposed events occur on an infrequent basis (9 times per year), so traffic associated with them falls below the "30th highest hour" level. The trip generation sheet shows a maximum of 142 daily trips during harvest, of which 14 are trucks; 80 are for employees. Further, crush occurs over a six to eight week period, not one or two weeks and each individual winery receives grapes at various times depending on the varietals and the microclimate where they are grown.

6) Issue: Parking-Related Impacts

Response: The initial study was revised to indicate that there would be no potential impact to the parking in the area. General Plan Policy CIR-23 states that new uses shall provide adequate parking to meet their anticipated parking demand and shall not provide excess parking that could stimulate unnecessary vehicle trips or commercial activity exceeding the site's capacity. The project proposes the construction of 22 parking places (15 visitors, 7 employees) and one loading zone. Based upon estimates of 2.6 visitors/vehicle on weekday (20± vehicles) and 2.8 visitors/vehicle on weekends (22± vehicles) the parking demand per day would be satisfied by the 22 parking spaces. The parking demand generated from nine marketing events (179± vehicles at largest event) will exceed the number of parking spaces available in the parking lot. Additional parking in the paved area at the rear of the winery can be utilized during events (approximately 20,000 sq. ft. at 180 sq.ft/car =±111 cars). No parking will be permitted within the right-of-way of Dunaweal Lane or on the entrance driveway, which is too narrow to accommodate parking. Public Works reviewed the addition analysis information and indicated that more information regarding the shuttle service was needed to determine whether there will be any secondary traffic or parking impacts at the location where visitors will gather to catch the shuttles. The applicant was contacted regarding shuttles, who advised that they do not plan to set up shuttles from an off-site parking lot for the annual harvest event. They may possibly send limousines to pick up guests at local hotels. The open area behind the winery building will provide overflow parking for the event. The parking lot across the street (Clos Pegase Winery) will be available, but no shuttles are proposed.

7) Issue: Cumulative Impacts

Response: The traffic analysis was updated to address the future projected traffic volumes, using the joint Napa County/Solano County 2010-2030 Travel Demand Forecasting Model. The data used included directional segment volumes along State Highway 29 and Silverado Trail for the PM peak hour. Using the 2030 and 2010 model volumes, a growth factor of 1.45 was determined for State Highway 29. This growth factor was applied to turning movements to and from Dunaweal Lane and the remainder of the future increase was added to the volumes for the through movements. The report notes that the projected 78 vehicle trips added to Dunaweal Lane during the

PM peak hour would adequately represent increases associated with three new wineries or expansions to existing along Dunaweal Lane.

Weddings at Neighboring Winery - Shute, Mihaly & Weinberger asserted that the adjacent winery, Clos Pegase, is owned by the project applicant and routinely holds weddings despite the fact that such events are explicitly prohibited. Weddings are not allowed within the Agricultural Preserve zoning district and the applicant has not included weddings as part of this project. A Notice of Violation for weddings at Clos Pegase has been filed, and the property owner complied with the notice and has discontinued weddings.

Parking - Shute, Mihaly & Weinberger identifies a parking problem because the original Initial Study/Mitigated Negative Declaration does not consider whether the amount of parking is adequate to accommodate the maximum number of daily visitors, staff, and trucks serving the winery. County Code does not establish minimum parking spaces for wineries. Because visitation is by-appointment only, operations of the winery and the hospitality activities can be coordinated to reduce potential parking concerns to a level of insignificance.

Noise - Shute, Mihaly & Weinberger asserts that noise analysis is inadequate and that the Initial Study fails to provide information on the environmental setting, other than to state that the nearest residence is located about 400 feet to the south. The "settings section" of the Initial Study identifies the existing operating winery located to the west of the project, the City of Calistoga Dunaweal Wastewater Treatment Plant, located to the southwest of the project site, and residential development on large parcels. Combined with agricultural activities which occur in the area, the ambient noise level would be expected to be higher than the normal conversation noise level of 60 dB. Policy CC-35 of the General Plan states that the noises associated with agriculture, including agricultural processing, are considered an acceptable and necessary part of the community character of Napa County, and are not considered to be undesirable provided that normal and reasonable measures are taken to avoid significantly impacting adjacent uses.

The standard conditions of approval address noise construction and winery equipment to be muffled, construction to comply with the County noise regulations, and prohibits amplified noise. Marketing events are not proposed outdoors and there is not a significantly large gathering area designated for outdoor gatherings. Events are proposed to cease at 6:00 PM, although the standard conditions of approval require evening events to cease at 8:00 PM, including clean up. The Initial Study was revised to include the project proposal to have tastings predominantly within the winery itself and to host the events inside the winery. The noted project proposal and standard conditions of approval for this project reduce potential noise impacts to a level of insignificance.

Air Quality - Shute, Mihaly & Weinberger asserted that the Initial Study - Air Quality analysis failed to analyze the threat to neighboring farms from the dust from project construction. The potential impacts resulting from the creation of dust during construction are not considered significant inasmuch as the standard conditions placed on the project include relevant best management practices identified by the Bay Area Air Quality Management District and the County's standard condition of approval on dust control measures as a matter of standard operating procedures.

Aesthetics - Shute, Mihaly & Weinberger asserted that the Initial Study - Visual Resources analysis is inadequate because project construction and operation will require the installation of additional lighting that will dramatically alter the visual character of the site and further erode dark skies in the area. Nighttime lighting is addressed by implementation of the standard conditions placed on the project which require fixtures to direct the lighting downward, use of motion detection sensors, use of timers, and low level lighting, reducing the potential impact from lighting to a less than significant level.

The level of degradation of the scenic views by the winery building is also claimed to be inadequately analyzed in addition to failure to establish a threshold to determine the level of significance. Furthermore, a letter was received stating that the project violated the County’s Viewshed Ordinance. Napa County Code Section 18.106.030, provides

that “The ordinance codified in this section (The Viewshed Ordinance) shall apply to all new structures located on slopes of fifteen percent or more or located on a minor or major ridgeline”. Since the project is located on slopes less than fifteen percent and is not located on a minor or major ridgeline, the County’s Viewshed Ordinance provisions does not apply.

Elevation drawings were provided as part of the application, providing information regarding the proposed structure, its architectural details and materials. The Winery Definition Ordinance states that the one of the basis for requiring new wineries to have larger minimum parcel size (10 acres) is that the increased parcel size will reduce densities and thereby lessen local visual impacts. In addition, the Winery Definition Ordinance included a minimum setback for wineries located on parcel contiguous to any public road or private road used by the public in the amount of 300 feet. As proposed, the winery will be located 600 feet from the centerline of Dunaweal Lane, in the center of the ±26.53 acre parcel. As stated in the Initial Study, the 35-ft tall building (plus two 45ft cupolas) would not obstruct the hills and mountain vistas, but will settle with the hills as backdrops. The original simulated photos did not copy well and new simulated images of the proposed winery are included with this staff report. Policy AG/LU-10 of the General Plan states that “New wineries and other agricultural processing facilities, as well as, expansions of existing wineries and facilities in agricultural areas should be designed to convey their permanence and attractiveness.” The proposed winery structure is consistent with this policy, proposing stone, wood and concrete textures in neutral earth tones, architectural details and landscaped entry garden.

Code Compliance History - There are no open or pending code violations for the subject site. However, due to same ownership, Clos Pegase Winery has been associated with the proposed winery. There is an active code case regarding activities at Clos Pegase winery. The code complaint indicated that weddings were held at the winery and were not allowed. Attached is the Notice of Violation. In response to this Notice of Violation, the owner has agreed to no longer hold any weddings at the winery. The code case is still active and until the investigation is complete, no other information is available.

Accessory Ratio Compliance - Staff was requested by the Planning Commission to conduct an accessory / production ratio evaluation that includes outdoor visitation areas as well as enclosed visitation areas. The project includes an entry garden and covered veranda at the entrance to the hospitality area of the winery. Graphics (attached) include elevations of the proposed seating on the covered veranda. The proposed plans indicate that the production uses (barrel storage and tank area) are 28,955 sq. ft. with a 2,781 sq. ft. covered work area. The hospitality area (tasting room and office) is 3,816 sq. ft., plus the 2,628 sq. ft. covered veranda. The ±4,000 sq. ft. of paths in the 13,360 sq. ft. landscaped garden would also be available to the public. Although the uses of these outdoor areas vary greatly in purpose and intensity, even with inclusion of all outdoor spaces, the overall accessory / production ratio would be 33%, which is substantially below the 40% maximum permitted by regulations.

DECISION MAKING OPTIONS:

As noted in the Executive Summary Section above, Staff is recommending approval of the project with conditions of approvals as described in Option 1 below. Decision making options also include a reduced development alternative and denial of the project.

Option 1 – Approve Applicant’s Proposal

Disposition – This option would result in the development of a new 200,000 gallons per year winery approximately 32,771 sq.ft. in size, including a covered veranda (2,560 sq.ft.) and a covered work area (2,871 sq.ft.), a visitation and marketing program, employees, and other attributes associated with development of a winery.

Action Required – Follow proposed action listed in the Executive Summary. If conditions of approval are to be amended, specify conditions to be amended at time motion is made. This option has been analyzed for its

environmental impacts, which were found to be less than significant.

Option 2 – Reduced Project Alternative

Disposition – This option would result in a decrease in the overall winery size which could include (but not limited to): decrease in the production, visitation and marketing program, and/or size of proposed facility. It should be noted that the Applicant has further demonstrated through additional analysis with respect to water and traffic that the subject parcel could accommodate the proposal, subject to project conditions. However, there is an ongoing policy discussion that is before the Agricultural Protection Advisory Committee and Planning Commission, which will be elevated to the Board of Supervisors before the end of the year, concerning the appropriate scope for additional winery development.

Action Required- Follow proposed actions listed in the Executive Summary and amend scope and project specific conditions of approval to place limits on use. If major revisions of conditions of approval are required, the item will need to be continued to a future date.

Option 3 – Deny Proposed Modification

Disposition – In the event the Commission determines that the project does not, or cannot meet the required findings for grant of a use permit modification, Commissioners should articulate what aspect or aspects of the project are in conflict with required findings. State law requires the Commission to adopt findings, based on the General Plan and County Code, setting forth why the proposed use permit modification is not being approved. Based on the administrative record as of the issuance of this staff report, there does not appear to be any evidence supporting denial of the project.

Action Required – Commission would take tentative motion to deny project and remand the matter to staff for preparation of required finding to return to the Commission on specified date.

Option 4 –Continuance Option

The Commission may continue an item to a future hearing date at its own discretion.

SUPPORTING DOCUMENTS

A . Exhibit A Draft Findings

B . Exhibit B Draft Conditions of Approval

C . Previous Staff Report - December 2014

D . Previous Staff Report - January 2015

E . Previous Staff Report February 2015

F . Clos Pegase Enforcement status

G . Revised Initial Study/Proposed Negative Declaration

H . CEQA-Hydrology

I . CEQA-Transportation

J . CEQA-Wastewater

K . CEQA - Biology

L . CEQA - Environmental Sensitivity Maps

M . Tribal Comments

N . Applicant Response to Neighbor Comment

O . Neighbor Comments

P . Public Comments Received

Q . Winery Comparison Chart

R . Graphics - includes simulation

S . Correspondence Received After Packet Mailout (Added after meeting)

T . Correspondence Received After Packet Mailout (Added after meeting)

U . Correspondence Received After Packet Mail Out (Added after meeting)

V . Correspondence Received After Packet Mail Out (Added after meeting)

Napa County Planning Commission: Approve

Reviewed By: Charlene Gallina

PLANNING COMMISSON HEARING – AUGUST 19, 2015
EXHIBIT A – REVISED FINDINGS

GIRARD WINERY
USE PERMIT #P14-00053-UP
1077 Dunaweal Lane, Calistoga, CA 94515
APN 020-150-017

ENVIRONMENTAL DETERMINATION:

The Planning Commission (Commission) has received and reviewed the revised proposed Negative Declaration pursuant to the provisions of the California Environmental Quality Act (CEQA) and of Napa County's Local Procedures for Implementing CEQA, and finds that:

1. The Planning Commission has read and considered the Revised Negative Declaration prior to taking action on said Revised Negative Declaration and the proposed project.

2. The Revised Negative Declaration is based on independent judgment exercised by the Planning Commission.

3. The Revised Negative Declaration was prepared and considered in accordance with the requirements of the California Environmental Quality Act (CEQA).

4. There is no substantial evidence in the record as a whole, that the project will have a significant effect on the environment.

5. There is no evidence, in considering the record as a whole that the proposed project will have a potential adverse effect on wildlife resources or habitat upon which the wildlife depends

6. The Secretary of the Commission is the custodian of the records of the proceedings on which this decision is based. The records are located at the Napa County Planning, Building, and Environmental Services Department, 1195 Third Street, Room 210, Napa, California.

USE PERMIT MODIFICATION REQUIRED FINGINGS:

The Commission has reviewed the use permit request in accordance with the requirements of the Napa County Code Section 18.124.070 and makes the following findings. That:

7. The Commission has the power to issue a use permit under the zoning regulations in effect as applied to the property.

   Analysis: The project is consistent with AP (Agricultural Preserve) zoning district regulations. A winery (as defined in Napa County Code Section 18.08.640) and uses in connection with a winery (see Napa County Code Section 18.16.030) are permitted in an AP zoned district with an approved use permit. The project complies with the requirements of the Winery Definition Ordinance (Ord. No. 947, 1990) and the remainder of the Napa County Zoning Ordinance (Title 18, Napa County Code) as applicable.

8. The procedural requirements for a use permit set forth in Chapter 18.124 of the Napa County Code (Use Permits) have been met.

Analysis: The use permit modification application has been filed, noticed and public hearing requirements have been met. A new hearing notice was posted on July 17, 2015, and copies of the notice were forwarded to property owners within 1,000 feet of the subject parcel and all other interested parties. The CEQA public comment period ran from July 18, 2015 to August 18, 2015.

9. The granting of the use permit, as conditioned, will not adversely affect the public health, safety or welfare of the County of Napa.

Analysis: Various County departments have reviewed the project and commented regarding water, waste water disposal, traffic and access, and fire protection. Conditions are recommended which will incorporate these comments into the project to assure the ongoing protection of the public health and safety.

10. The proposed use complies with applicable provisions of the Napa County Code and is consistent with the policies and standards of the Napa County General Plan.

Analysis: The proposed use complies with applicable provisions of the Napa County Code and is consistent with the policies and standards of the Napa County General Plan. The Winery Definition Ordinance (WDO) was established to protect agriculture and open space and to regulate winery development and expansion in a manner that avoids potential negative environmental effects. The project complies with the requirements of the Winery Definition Ordinance (Ord. No. 947, 1990) and the applicable provisions of the Napa County Zoning Ordinance (Title 18, Napa County Code).

This proposal is consistent with the *Napa County General Plan 2008*. The subject parcel is located on land designated Agricultural Resource (AR) on the County's adopted General Plan Land Use Map. This project is comprised of an agricultural processing facility (winery), along with wine storage, bottling, and other WDO-compliant accessory uses as outlined in and limited by the approved project scope. (See Exhibit 'B', Conditions of Approval.) These uses fall within the County's definition of agriculture and thereby preserve the use of agriculturally designated land for current and future agricultural purposes.

General Plan Agricultural Preservation and Land Use Goal AG/LU-1 guides the County to "preserve existing agricultural land uses and plan for agriculture and related activities as the primary land uses in Napa County." General Plan Agricultural Preservation and Land Use Goal AG/LU-3 states the County should, "support the economic viability of agriculture, including grape growing, winemaking, other types of agriculture, and supporting industries to ensure the preservation of agricultural lands."

As approved here, the use of the property for the "fermenting and processing of grape juice into wine" (NCC Section 18.08.640) supports the economic viability of agriculture within the county consistent with General Plan Agricultural Preservation and Land Use Policy AG/LU-4 ("The County will reserve agricultural lands for agricultural use including lands used for grazing and watershed/ open space…"). Policy AG/LU-8 also states, "The County's minimum agricultural parcel sizes shall ensure that agricultural areas can be maintained as economic units and General Plan Economic Development Policy E-1 (The

County's economic development will focus on ensuring the continued viability of agriculture…). Approval of this project furthers these key goals.

The General Plan includes two complimentary policies requiring that new wineries, "…be designed to convey their permanence and attractiveness." (General Plan Agricultural Preservation and Land Use Policy AG/LU-10 and General Plan Community Character Policy CC-2). The proposed winery, to the extent that it will be publicly visible, will convey permanence and attractiveness.

Agricultural Policy AG/LU-13 of the County General Plan recognizes wineries, and any use clearly accessory to a winery, as agriculture. The Land Use Standards of the General Plan Policy AG/LU-2 list the processing of agricultural products as one of the general uses recognized by the AR land use designations. The proposed project allows for the continuation of agriculture as a dominant land use within the county and is consistent with General Plan Agricultural Policy AG/LU-13.

The project is also consistent with General Plan Conservation Policy CON-53 and CON-55, which require that applicants, who are seeking discretionary land use approvals, prove the availability of adequate water supplies, which can be appropriated without significant negative impacts on shared groundwater resources. As analyzed below, the proposed winery will not interfere substantially with groundwater recharge based on the criteria established by Napa County Public Works Department.

Finally, the "Right to Farm" is recognized throughout the General Plan and is specifically called out in Policy AG/LU-15 and in the County Code. "Right to Farm" provisions ensure that agriculture remains the primary land use in Napa County and is not threatened by potentially competing uses or neighbor complaints. Napa County's adopted General Plan reinforces the County's long-standing commitment to agricultural preservation, urban centered growth, and resource conservation. On balance, this project is consistent with the General Plan's overall policy framework and with the Plan's specific goals and policies.

11. The proposed use would not require a new water system or improvements causing significant adverse effects, either individually or cumulatively, on the affected groundwater basin in Napa County, unless that use would satisfy any of the other criteria specified for approval or waiver of a groundwater permit under Napa County Code Section 13.15.070 or Section 13.15.080.

Analysis: The subject property is not located in a "groundwater deficient area" as identified in Section 13.15.010 of the Napa County Code. Minimum thresholds for water use have been established by the Department of Public Works using reports by the United States Geological Survey (USGS). These reports are the result of water resources investigations performed by the USGS in cooperation with the Napa County Flood Control and Water Conservation District. On June 28, 2011 the Board of Supervisors approved creation of a Groundwater Resources Advisory Committee (GRAC). The GRAC's purpose was to assist County staff and technical consultants with recommendations regarding groundwater, including data collection, monitoring, well pump test protocols, management objectives, and community support. The County completed a county-wide assessment of groundwater resources (Napa County Groundwater Conditions and Groundwater Monitoring Recommendations Report (Feb. 2011)) and developed a groundwater monitoring program (Napa County Groundwater

Monitoring Plan 2013 (Jan. 2013)). The County also completed a 2013 Updated Hydrogeologic Conceptualization and Characterization of Groundwater Conditions (Jan. 2013).

Groundwater Sustainability Objectives were recommended by the GRAC and adopted by the Board of Supervisors which acknowledged the important role of monitoring as a means to achieving groundwater sustainability and the principles underlying the sustainability objectives. In 2009 Napa County began a comprehensive study of its groundwater resources to meet identified action items in the County's 2008 General Plan update. The study, by Luhdorff and Scalmanini Consulting Engineers (LSCE), emphasized developing a sound understanding of groundwater conditions and implementing an expanded groundwater monitoring and data management program as a foundation for integrated water resources planning and dissemination of water resources information. The 2011 baseline study by LSCE, which included over 600 wells and data going back over 50 years, concluded that "the groundwater levels in Napa County are stable, except for portions of the MST district". Most wells elsewhere within the Napa Valley Floor with a sufficient record indicate that groundwater levels are more affected by climatic conditions, are within historical levels, and seem to recover from dry periods during subsequent wet or normal periods. The LSCE Study also concluded that, on a regional scale, there appear to be no current groundwater quality issues except north of Calistoga (mostly naturally occurring boron and trace metals) and in the Carneros region (mostly salinity). LSCE prepared the 2014 Annual Groundwater Monitoring Report, presented to the Napa County Board of Supervisors on March 3, 2015, which clearly states that, based on the network of monitored groundwater level in the area, the groundwater levels in the area south of Calistoga are stable, even in context of the current drought. The subject property is located within Napa Valley Floor, Calistoga area.

Minimum thresholds for water use have been established by the Napa County Department of Public Works, using reports by the United States Geological Survey (USGS), the GRAC recommendations, and the LSCE reports. These reports are the result of water resources investigations performed by the USGS in cooperation with the Napa County Flood Control and Water Conservation District and LSCE. LSCE concluded that the 1.0 acre-ft/acre criteria on the Valley Floor have proven to be both scientifically and operationally adequate. Any project which reduces water usage or any water usage which is at or below the established threshold is assumed not to have a significant effect on groundwater levels.

Vintage Wine Estates owns and operates the existing "Clos Pegase Water System", serving Clos Pegase Winery, across the street from the proposed Girard Winery parcel. The system currently serves Clos Pegase Winery and the residence located at 1060 Dunaweal Lane. The water system is currently regulated as a Transient Non-Community water system (Always Engineering, Inc. Water System Feasibility Report, 3/26/15), and the existing water system consists of: one active onsite well (Well #2), pressure tanks, sediment filer, softeners, located at 1077 Dunaweal Lane; and, a second active well (Well #1), 58,000 gallon storage tank, ultraviolet disinfection treatment and potable use located at 1060 Dunaweal Lane. Both wells are supplying the currently permitted transient community water system. Vintage Wine Estates is applying for a use permit to establish a new winery (the proposed Girard Winery) and the "Clos Pegase Water System" will be updated to include additional piping, a new 25,000 gallon storage tank,

and service connections for the proposed Girard Winery. The public water system documents must be updated as a result.

A Water Availability Analysis-Phase One Study was prepared by Always Engineering, Inc. (dated 2/18/14, revised 3/26/15, and supplemented 6/18/15) for the proposed Girard Winery on the 26.53 acre parcel (APN:020-150-012) and for the Clos Pegase Winery property, a 20.39 acre parcel (APN:020-150-017). Both parcels are located on the Valley Floor. As stated above, any project which reduces water usage or any water usage which is at or below the established threshold is assumed not to have a significant effect on groundwater levels, and since the project is located on the Valley Floor in an area that has an established acceptable water use criteria of 1.0 acre foot per acre per year, the Allowable Water Allotment for the Girard project property 26.53 af/yr and the Allowable Water Allotment for the Clos Pegase Winery is 20.39 af/yr. These allotments were determined by multiplying the acreage of each parcel by the one af/yr/acre fair share water use factor.

To meet the requirements of a Phase II Water Availability Analysis, O'Connor Environmental, Inc. (OEI) prepared the Girard Winery Water Availability Analysis" report, dated March 26, 2015. Analysis of the Clos Pegase Winery property was also included in the report. The report included an examination of the surficial geology of the project site, evaluated recent available long-term hydrographs for the Napa Valley Floor – Calistoga subarea, and conducted aquifer testing. Analysis of the resulting time/drawdown data provides a way of estimating aquifer properties, evaluating the extent of lateral drawdown away from the wells, and determining the relative sufficiency of the well for meeting expected water demands. The report concluded that the proposed Girard Winery combined with the existing Clos Pegase Winery would have an approximately 8.23 af/yr total annual water demand. This demand represents only 24% of the parcel-based mean annual groundwater recharge for both parcels, and only ~0.3% of the total recharge to the tuffaceous aquifer up-gradient of the project parcels. Given that mean annual recharge is significantly higher than the proposed demand, it is highly unlikely that the proposed pumping would result in long-term declines in groundwater elevations or depletion of groundwater resources.

The OEI report further concluded that the expected magnitudes of drawdown associated with the proposed pumping were reasonably small and the spheres of influence associated with pumping at the required rates and durations needed to meet the demands do not extend far enough away from the project wells to intersect neighboring wells or the Napa River. These findings coupled with the fact that the project wells draw water from the tuffaceous rocks of the Sonoma Volcanics rather than from the alluvial aquifer (the primary aquifer providing water to many of the wells in the area and the material responsible for baseflow discharge to the Napa River) indicated that the proposed pumping is highly unlikely to result in interference to neighboring wells or impacts to river baseflows.

As presented, the Revised Phase 1 Study (Always Engineering, dated 3/26/15; supplemented 6/18/2015) consolidated the all-total allowable water allotment (46.92 af/yr) and analyzed all of the demand of the water resources on the proposed Girard Winery parcel. The two wineries will have an interrelationship resulting from the consolidation of the transient non-community water system and from the shared used process wastewater system utilizing the irrigation pond located on the proposed Girard Winery parcel. The vineyards and landscaping will be irrigated from the recycled

processed wastewater, therefore, the primary demand for groundwater will come from the winery processing, domestic needs (employees, visitors, and the residence), which can be accommodated well within the allowable water allotment for either parcel: Clos Pegase Winery - 3.58 af/yr and the residence - 1.21 af/yr for a total of 4.79 af/yr plus Girard Winery 3.43 af/yr for an overall total of 8.22 af/yr. In summary, the existing yield will be sufficient to serve all uses on the property and the existing wastewater processing system ponds serve to eliminate vineyard and landscaping demands.

Based upon the total demand from the existing uses (4.79 af/yr) plus the new winery, 3.43 af/yr, the project would be well below the established threshold for groundwater use on the property (26.53 af/yr). The project will not interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater level.

PLANNING COMMISSION HEARING – AUGUST 19, 2015
EXHIBIT B – CONDITIONS OF APPROVAL

Girard Winery
Application Number(s) P14-00053
1077 Dunaweal Lane, Calistoga, CA 94515
(APN 020-150-017)

1. SCOPE

A. Approval of a Use Permit (P14-00053) to establish a new winery as follows:

1. An annual production capacity of 200,000 gallons;
2. Construction of new winery building, totaling 32,771 sq. ft. in area to include: 28,955 sq. ft. of production area (crush area, fermentation and barrel storage, restrooms); 3,816 sq. ft. of accessory use area (offices, tasting rooms, retail storage, catered food prep area, and visitor restrooms), with a maximum height of 35 ft. with 45 ft. tall cupolas; a 2,560 sq. ft. covered veranda; and a 2,871 sq. ft. covered work area;
3. Hosted daily tours and tastings for wine trade personnel and consumers by-appointment only for a maximum of 75 persons per weekday (Monday-Friday); maximum of 90 persons per weekend day (Saturday-Sunday);
4. Hours of operation: 8:00 AM to 6:00 PM (production hours, except during harvest) and 10:00 AM to 6:00 PM (visitation hours) seven days a week;
5. Employment of: 11 employees (8 full time; 3 part-time) during non-harvest; during harvest 19 additional employees (12 full time and 7 part time) for a total of 30 employees;
6. Employee hours: production, 7:00 AM to 3:00 PM; hospitality/ tasting room, 9:30 AM to 6:30 PM;
7. Construction of twenty-two (22) parking spaces;
8. Installation of landscaping, an entry gate and a winery sign;
9. A Marketing Program as follows:
    a. Four (4) events per year with a maximum of 75 guests;
    b. Four (4) events per year with a maximum of 200 guests; and,
    c. One (1) Harvest event per year with a maximum of 500 guests.
    d. All food to be catered utilizing a ±184 sq. ft. small prep/staging area;
10. On-premises consumption of wines produced on site within the tasting room, the covered veranda and within the 4,000 sq. ft. portion of the landscaped winery gardens in accordance with Business and Professions Code Sections 23358, 23390 and 23396.5 (AB 2004 -Evans Bill also known as the Picnic Bill);
11. Construction of a new 24’ wide winery access driveway from Dunaweal Lane to the winery;
12. Construction of additional piping and service connections to the existing water system and an update to the existing Transient Non-Community Water System contract to include the Girard Winery;
13. Installation of on-site sanitary disposal improvements and installation of connections into the existing on-site winery waste water ponds serving Clos Pegase Winery (APN: 020-150-012); and,

14. Installation of 45,000 gallon water storage tank (± 30ft diameter, 12 ft. height).

The winery shall be designed in substantial conformance with the submitted site plan, and other submittal materials and shall comply with all requirements of the Napa County Code (County Code). It is the responsibility of the applicant to communicate the requirements of these conditions and mitigations (if any) to all designers, contractors, employees, and guests of the winery to ensure compliance is achieved. Any expansion or changes in use shall be approved in accordance with County Code Section 18.124.130 and may be subject to the Use Permit modification process.

**Alternative locations for fire suppression tanks are permitted, subject to review and approval by the Director of Planning, Building, and Environmental Services, when such alternative locations do not change the overall concept, and do not conflict with any environmental mitigation measures or conditions of approval.

2. PROJECT SPECIFIC CONDITIONS

Should any of the Project Specific Conditions below conflict with any of the other, standard conditions included in this document (beginning in Section 3 and following), the Project Specific Conditions shall supersede and control.

A. On-Premises Consumption

In accordance with Business and Professions Code Sections 23358, 23390 and 23396.5 and the Planning, Building, and Environmental Services Director's July 17, 2008 memo, "Assembly Bill 2004 (Evans) and the Sale of Wine for Consumption On-Premises," on-premises consumption of wine purchased from the winery may occur solely within the hospitality area which includes the tasting rooms, the covered veranda and within the 4,000 sq. ft. portion of the landscaped winery garden area. Any and all visitation associated with on-premises consumption shall be subject to the maximum daily tours and tastings visitation limitation of 75 persons daily and 90 persons weekends, and/or applicable limitations of permittee's marketing plan.

B**.** Prior to commencing winery production or visitation the permittee shall implement the following transportation demand management programs (the Programs), subject to review and approval by the Director of Planning, Building and Environmental Services:

1. A program to inform employees of the traffic congestion issues south of the project site and to encourage employees to utilize alternative forms of transportation.
2. Inform/educate/encourage visitors to utilize Silverado Trial to access the property via measures such as signage, tasting room information handouts, education of tasting room staff, internet content, etc.
3. A schedule requiring commencement and conclusion of by-appointment visitation to occur outside of peak traffic periods. Peak traffic periods are defined as 4:00 PM and 6:00 p.m. weekdays, 2:00 PM and 4:00 PM on Saturdays, and 1:00 PM and 3:00 PM Sundays.

4. A schedule requiring employee work shifts to commence and conclude outside of peak traffic periods.
5. A schedule requiring marketing event set up, arrival and departure to occur outside peak traffic periods.

3. COMPLIANCE WITH OTHER DEPARTMENTS AND AGENCIES

Project conditions of approval include all of the following County Divisions, Departments and Agency requirements. The permittee shall comply with all applicable building codes, zoning standards, and requirements of County Divisions, Departments and Agencies at the time of submittal and may be subject to change. Without limiting the force of those other requirements which may be applicable, the following are incorporated by reference as enumerated herein:

A. Engineering Services Division as stated in their Memorandum dated July 11, 2014.
B. Environmental Health Division as stated in their Memorandum dated December 3, 2014.
C. Fire Department as stated in their Inter-Office Memo dated April 3, 2014.
D. Department of Public Works as stated in their Memorandums dated April 3, 2015 and June 3, 2015.

The determination as to whether or not the permittee has substantially complied with the requirements of other County Divisions, Departments and Agencies shall be determined by those Divisions, Departments or Agencies. The inability to substantially comply with the requirements of other County Divisions, Departments and Agencies may result in the need to modify the approved use permit.

4. VISITATION

Consistent with County Code Sections 18.16.030 and 18.20.030, marketing and tours and tastings may occur at a winery only where such activities are accessory and "clearly incidental, related, and subordinate to the primary operation of the winery as a production facility." A log book (or similar record) shall be maintained to document the number of visitors to the winery (for either tours and tastings or marketing events), and the date of the visits. This record of visitors shall be made available to the Planning, Building and Environmental Services Department upon request.

A. TOURS AND TASTING

Tours and tastings are limited to the following:

1. Frequency: Seven (7) days per week, Monday through Sunday.
2. Maximum number of persons per weekday (Monday-Friday): 75
3. Maximum number of persons on weekends (Saturday-Sunday): 90.
4. Maximum number of persons per week: 555 (70 weekdays; 90 weekends).
5. Hours of operation: 10:00 AM to 6:00 PM.
6. All food to be catered utilizing a ±184 sq. ft. small prep/staging area.

"Tours and tastings" means tours of the winery and/or tastings of wine, where such tours and tastings are limited to persons who have made unsolicited prior appointments for tours or tastings.

Tours and tastings may include food and wine pairings, where all such food service is provided without charge except to the extent of cost recovery and is incidental to the tasting of wine. Food service may not involve menu options and meal service such that the winery functions as a café or restaurant. (County Code Section 18.08.620 - Tours and Tastings)

Tours and tastings shall be limited to those wines set forth in County Code Section 18.16.030(G)(5)(c) - AP Zoning.

B. MARKETING

Marketing events are limited to the following:

1. Marketing Events
   Frequency: Four times per year
   Number of persons: 75 maximum
   Time of Day: 10:00 AM – 6:00 PM.

2. Marketing Events
   Frequency: Four times per year
   Number of persons: 200 maximum
   Time of Day: 10:00 AM – 6:00 PM

3. Harvest Event
   Frequency: One (1) time per year
   Number of persons: 500 maximum
   Time of Day: 10:00 AM – 6:00 PM.

"Marketing of wine" means any activity of a winery which is conducted at the winery on a prearranged basis for the education and development of customers and potential customers with respect to wine which can be sold at the winery on a retail basis pursuant to the County Code Chapters 18.16 and 18.20. Marketing of wine may include cultural and social events directly related to the education and development of customers and potential customers provided such events are clearly incidental, related and subordinate to the primary use of the winery. Marketing of wine may include food service, including food and wine pairings, where all such food service is provided without charge except to the extent of cost recovery.

Business events are similar to cultural and social events, in that they will only be considered as "marketing of wine" if they are directly related to the education and development of customers and potential customers of the winery and are part of a marketing plan approved as part of the winery's use permit. Marketing plans in their totality must remain "clearly incidental, related and subordinate to the primary operation of the winery as a production facility" (County Code Sections 18.16.030(G)(5) and 18.20.030(I)(5)). To be considered directly related to the education and development of customers or potential customers of the winery, business events must be conducted at no charge except to the extent of recovery of variable costs, and any business content unrelated to wine must be limited.

Careful consideration shall be given to the intent of the event, the proportion of the business event's non-wine-related content, and the intensity of the overall marketing plan (County Code Section 18.08.370 - Marketing of Wine).

All activity, including cleanup, shall cease by 8:00 PM. Start and finish times of activities shall be scheduled outside of peak traffic periods to the maximum extent feasible and shall be subject to the Programs' daily trip limitations set forth in Section 2(B). If any event is held which will exceed the available on-site parking, the applicant shall prepare an event-specific parking plan which may include, but not be limited to, valet service or off-site parking and shuttle service to the winery.

5. GRAPE SOURCE

At least 75% of the grapes used to make the winery's wine shall be grown within Napa County. The permittee shall keep records of annual production documenting the source of grapes to verify that 75% of the annual production is from Napa County grapes. The report shall recognize the Agricultural Commissioner's format for County of origin of grapes and juice used in the Winery Production Process. The report shall be provided to the Planning, Building and Environmental Services Department upon request, but shall be considered proprietary information and not available to the public.

6. GENERAL COMPLIANCE AND ANNUAL AUDITS

Permittee shall obtain and maintain all permits (Use Permits and Modifications) and licenses from the California Department of Alcoholic Beverage Control (ABC), United States Tax and Trade Bureau (TTB), and California Department of Food and Agriculture (CDFA) Grape Crush Inquiry data, all of which are required to produce and sell wine. In the event permittee loses the required ABC or TTB permits and licenses, permittee shall cease marketing events and tours and tastings until such time as those ABC and/or TTB permits and licenses are re-established.

Visitation log books, custom crush client records, and any additional documentation determined by staff to be necessary to evaluate compliance may be requested by the County for any code compliance (e.g., audit) or code enforcement process. The permittee (and their successors) shall be required to participate fully in the winery code compliance or enforcement process.

7. RENTAL/LEASING

No winery facilities, or portions thereof, including, without limitation, any kitchens, barrel storage areas, or warehousing space, shall be rented, leased, or used by entities other than persons producing and/or storing wine at the on-site winery, such as alternating proprietors and custom producers, except as may be specifically authorized in this use permit or pursuant to the Temporary Events Ordinance (County Code Chapter 5.36).

8. SIGNS

Prior to installation of any winery identification or directional signs, detailed plans, including elevations, materials, color, and lighting, shall be submitted to the Planning, Building, and Environmental Services Department for administrative review and approval. Administrative review and approval is not required if signage to be installed is consistent with signage plans submitted, reviewed and approved as part of this use permit approval. All signs shall meet the design standards as set forth in County Code

Chapter 18.116. At least one sign placed and sized in a manner to inform the public must legibly post the words “Tours and Tastings by Prior Appointment Only”.

9. LIGHTING

All exterior lighting, including landscape lighting, shall be shielded and directed downward, shall be located as low to the ground as possible, shall be the minimum necessary for security, safety, or operations, and shall incorporate the use of motion detection sensors to the greatest extent practical. No flood-lighting or sodium lighting of the building is permitted, including architectural highlighting and spotting. Low-level lighting shall be utilized in parking areas as opposed to elevated high-intensity light standards. Lighting utilized during harvest activities is not subject to this requirement.

Prior to issuance of any building permit pursuant to this approval, two copies of a detailed lighting plan showing the location and specifications for all lighting fixtures to be installed on the property shall be submitted for Planning Division review and approval. All lighting shall comply with the California Building Code.

10. LANDSCAPING

Two (2) copies of a detailed final landscaping and irrigation plan, including parking details, shall be submitted with the building permit application package for the Planning Division’s review and approval prior to the issuance of any building permit associated with this approval. The plan shall be prepared pursuant to the County’s Water Efficient Landscape Ordinance (WELO, County Code Chapter 18.118) as applicable, and shall indicate the names and locations of all plant materials to be used along with their method of maintenance.

Plant materials shall be purchased locally when practical. The Agricultural Commissioner’s office shall be notified of all impending deliveries of live plants with points of origin outside of Napa County.

No trees greater than 6” diameter at breast height shall be removed, except for those identified on the submitted site plan. Any Oak trees removed as a result of the project shall be replaced at a 2:1 ratio on the project site and shown on the landscaping plans for Planning staff’s review and approval. Trees to be retained shall be protected during construction by fencing securely installed at the outer most drip line of the tree or trees. Such fencing shall be maintained throughout the duration of the work undertaken in connection with the winery development/construction. In no case shall construction material, debris or vehicles be stored in the fenced tree protection area.

Evergreen screening shall be installed between the industrial portions of the operation (e.g. tanks, crushing area, parking area, etc.) and any off-site residence from which these areas can be viewed.

Landscaping shall be completed prior to issuance of a Final Certificate of Occupancy, and shall be permanently maintained in accordance with the landscaping plan.

11. OUTDOOR STORAGE/SCREENING/UTILITIES

All outdoor storage of winery equipment shall be screened from the view of residents of adjacent properties by a visual barrier consisting of fencing or dense landscaping. No item in storage shall exceed the height of the screening. Water and fuel tanks, and

similar structures, shall be screened to the extent practical so as to not be visible from public roads and adjacent parcels.

New utility lines required for this project that are visible from any designated scenic transportation route (see Community Character Element of the General Plan and County Code Chapter 18.106) shall be placed underground or in an equivalent manner be made virtually invisible from the subject roadway.

12. COLORS

The colors used for the roof, exterior walls and built landscaping features of the winery shall be limited to earth tones that will blend the facility into the colors of the surrounding site specific vegetation and the applicant shall obtain the written approval of the Planning, Building & Environmental Services Department prior to painting the building. Highly reflective surfaces are prohibited.

13. AIR QUALITY

During all construction activities the permittee shall comply with the Bay Area Air Quality Management District Basic Construction Mitigation Measures as provided in Table 8-1, May 2011 Updated CEQA Guidelines:

A. All exposed surfaces (e.g. parking areas, staging areas, soil piles, grading areas, and unpaved access (road) shall be watered two times per day.
B. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
C. All visible mud or dirt tracked out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
D. All vehicle speeds on unpaved roads shall be limited to 15 mph.
E. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
F. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
G. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
H. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The Air District's phone number shall also be visible.

14. SITE IMPROVEMENTS AND ENGINEERING SERVICES-SPECIFIC CONDITIONS

Please contact Engineering Services with any questions regarding the following.

A. GRADING AND SPOILS

All grading and spoils generated by construction of the project facilities, including cave spoils, shall be managed per Engineering Services direction. All spoils piles shall be removed prior to issuance of a Final Certificate of Occupancy.

B. ROAD IMPROVEMENTS

All road improvements on private property required per Engineering Services shall be maintained in good working condition and in accordance with the Napa County Roads and Streets Standards.

C. DUST CONTROL

Water and/or dust palliatives shall be applied in sufficient quantities during grading and other ground disturbing activities on-site to minimize the amount of dust produced. Outdoor construction activities shall not occur during windy periods.

D. STORM WATER CONTROL

The permittee shall comply with all construction and post-construction storm water pollution prevention protocols as required by the County Engineering Services Division, and the State Regional Water Quality Control Board (SRWQCB).

E. PARKING

The location of employee and visitor parking and truck loading zone areas shall be identified along with proposed circulation and traffic control signage (if any).

Parking shall be limited to approved parking spaces only and shall not occur along access or public roads or in other locations except during harvest activities and approved marketing events. In no case shall parking impede emergency vehicle access or public roads.

F. GATES/ENTRY STRUCTURES

Any gate installed at the winery entrance shall be reviewed by the Planning, Building and Environmental Services Department, and the Napa County Fire Department to assure that it is designed to allow large vehicles, such as motorhomes, to turn around if the gate is closed without backing into the public roadway, and that fire suppression access is available at all times. If the gate is part of an entry structure an additional permit shall be required according to the Napa County Code and in accordance with the Napa County Roads and Street Standards. A separate entry structure permit is not required if the entry structure is consistent with entry structure plans submitted, reviewed, and approved as part of this use permit approval.

15. ENVIRONMENTAL HEALTH-SPECIFIC CONDITIONS

Please contact Environmental Health with any questions regarding the following:

A. NOISE

Construction noise shall be minimized to the greatest extent practical and allowable under State and local safety laws. Construction equipment mufflering and hours of operation shall be in compliance with County Code Chapter 8.16. Equipment shall be shut down when not in use. Construction equipment shall normally be staged, loaded, and unloaded on the project site. If project terrain or access road conditions require construction equipment to be staged, loaded, or unloaded off the project site (such as on a neighboring road or at the base of a hill), such activities shall only occur between the hours of 8 AM to 5 PM. Exterior

winery equipment shall be enclosed or muffled and maintained so as not to create a noise disturbance in accordance with the County Code. There shall be no amplified sound system or amplified music utilized outside of approved, enclosed, winery buildings.

16. PUBLIC WORKS – SPECIFIC CONDITIONS

Please contact Public Works with any questions regarding the following:

A. WATER MONITORING

The permittee shall be required for the life of the project to monitor and maintain written records of water volumes pumped from the two wells. This data will be made available to the County upon request.

B. WATER USE EXCEEDING 10 ACRE-FT/YEAR

Combined water from the two wells shall not exceed 10 acre-ft. per year. If combined water use from the wells exceeds 10 acre-ft. in a given calendar year, the permittee shall notify the County, and provide the following:

1. water volume used;
2. the reason for increased use;
3. the plan the winery has for reducing water use; and
4. other information which may be affecting water use as reasonably requested by the County.

C. COUNTY GROUNDWATER MONITORING PROGRAM

The permittee shall be required to include either or both wells into the County's Groundwater Monitoring program if the County requests that they do so.

17. ARCHEOLOGICAL FINDING

In the event that archeological artifacts or human remains are discovered during construction, work shall cease in a 50-foot radius surrounding the area of discovery. The permittee shall contact the Planning, Building and Environmental Services Department for further guidance, which will likely include the requirement for the permittee to hire a qualified professional to analyze the artifacts encountered and to determine if additional measures are required.

If human remains are encountered during the development, all work in the vicinity must be, by law, halted, and the Napa County Coroner informed, so that the Coroner can determine if an investigation of the cause of death is required, and if the remains are of Native American origin. If the remains are of Native American origin, the nearest tribal relatives as determined by the State Native American Heritage Commission shall be contacted by the permittee to obtain recommendations for treating or removal of such remains, including grave goods, with appropriate dignity, as required under Public Resources Code Section 5097.98.

18. ADDRESSING

All project site addresses shall be determined by the Director of Planning, Building and Environmental Services, and be reviewed and approved by the United States Post Office, prior to issuance of any building permit. The Director of Planning, Building and Environmental Services reserves the right to issue or re-issue an appropriate situs address at the time of issuance of any building permit to ensure proper identification and

sequencing of numbers. For multi-tenant or multiple structure projects, this includes building permits for later building modifications or tenant improvements.

19. INDEMNIFICATION

If an indemnification agreement has not already been signed and submitted, one shall be signed and returned to the County within twenty (20) days of the granting of this approval using the Planning, Building and Environmental Services Department's standard form.

20. AFFORDABLE HOUSING MITIGATION

Prior to County issuance of a building permit, the applicant shall pay the Napa County Affordable Housing Mitigation Fee in accordance with the requirements of County Code Chapter 18.107.

21. PAYMENT OF FEES AS PREREQUISITE FOR ISSUANCE OF PERMITS

No building, grading or sewage disposal permits shall be issued or other permits authorized until all accrued planning permit processing fees have been paid in full.

22. MONITORING COSTS

All staff costs associated with monitoring compliance with these conditions, previous permit conditions, and project revisions shall be borne by the permittee and/or property owner. Costs associated with conditions and mitigation measures that require monitoring, including investigation of complaints, other than those costs related to investigation of complaints of non-compliance that are determined to be unfounded, shall be charged to the owner. Costs shall be as established by resolution of the Board of Supervisors in accordance with the hourly consulting rate established at the time of the monitoring and shall include maintenance of a $500 deposit for construction compliance monitoring that shall be retained until grant of Final Certificate of Occupancy. Violations of conditions of approval or mitigation measures caused by the permittee's contractors, employees, and/or guests are the responsibility of the permittee.

The Planning Commission may implement an audit program if compliance deficiencies are noted. If evidence of compliance deficiencies is found to exist by the Commission at some time in the future, the Commission may institute the program at the applicant's expense (including requiring a deposit of funds in an amount determined by the Commission) as needed until compliance assurance is achieved. The Planning Commission may also use the data, if so warranted, to commence revocation hearings in accordance with County Code Section 18.124.120.

23. TEMPORARY AND FINAL OCCUPANCY

All project improvements, including compliance with applicable codes, conditions, and requirements of all departments and agencies with jurisdiction over the project, shall be completed prior to granting of a Final Certificate of Occupancy by the County Building Official, which, upon granting, authorizes all use permit activities to commence. However, a Temporary Certificate of Occupancy may be granted pursuant to County Code Section 15.08.070(B) to allow commencement of production activities prior to completion of all project improvements. In special circumstances, departments and/or agencies with jurisdiction over the project are authorized as part of the Temporary Certificate of Occupancy process to require a security deposit or other financial instrument to guarantee completion of unfinished improvements.

24. STATUTORY AND CODE SECTION REFERENCES

All references to statutes and code sections shall refer to their successor as those sections or statutes may be subsequently amended from time to time.

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Previous Staff Report From Planning Commission Meeting

Project Name: Girard Winery P14-00053

Previous Meeting Date: December 17, 2014

Continued to: January 21, 2015

For attachments of this staff report please refer to the previous meeting date above.

A Tradition of Stewardship
A Commitment to Service

Agenda Date: 12/17/2014
Agenda Placement: 9A

Napa County Planning Commission
Board Agenda Letter

TO:	Napa County Planning Commission
FROM:	Charlene Gallina for David Morrison - Director Planning, Building and Environmental Services
REPORT BY:	Wyntress Balcher, Planner II - 707 299-1351
SUBJECT:	Girard Winery Use Permit #P14-00053

RECOMMENDATION

GIRARD WINERY USE PERMIT #P14-00053-UP

CEQA Status: Consideration and possible adoption of a Mitigated Negative Declaration and Mitigation Monitoring & Reporting Program (MMRP). According to the proposed Mitigated Negative Declaration and MMRP, the proposed project would have, if mitigation measures are not included, potentially significant environmental impacts in the following areas: Transportation/Traffic. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Request: Approval for a Use Permit to establish a new winery as follows: 1) 200,000 gallons per year production capacity; 2) Construction of new winery building, totaling 32,771 sq.ft. in area, to include: 28,955 sq.ft. production area (crush area, fermentation and barrel storage, restrooms); 3,816 sq.ft of accessory use area (offices, tasting rooms, retail storage, catered food prep area, and visitor restrooms), maximum height 35 ft. with 45 ft. tall cupolas; a 2,628 sq. ft. veranda; and a 2,871 sq. ft. covered work area; 3) Hosted daily tours and tastings for wine trade personnel and consumers by appointment only for a maximum of 75 persons per weekday (Monday-Friday); maximum of 90 persons per weekend day (Saturday-Sunday); 4) Hours of operation: 8:00 AM to 6:00 PM (production hours, except during harvest) and 10:00 AM to 6:00 PM (visitation hours), 7-days a week; 5) Employment of more than 25 employees: 11 employees (8 full time; 3 part-time) non harvest; maximum 19 additional employees (12 full time and 7 part time) during harvest; 6) Employee hours: production, 7:00 AM to 3:00 PM; hospitality/ tasting room, 9:30 AM to 6:30 PM; administration, 8:00 AM to 5:00 PM; 7) Construction of twenty-two (22) parking spaces; 8) Installation of landscaping, entry gate and a winery sign; 9) Establish a Marketing Program as follows: a) Four (4) events per year with a maximum of 75 guests; b) Four (4) events per year with a maximum of 200 guests; c) One (1) Harvest event per year with a maximum of 500 guests;d) All food to be catered utilizing a ±184 sq. ft. small prep/staging area; 10) On-premise consumption of wines produced on site within the tasting room and in the landscaped winery gardens in accordance with AB 2004; 11) Construct new 24” wide winery access driveway from Dunaweal Lane to the winery; 12) Construction of additional piping and service connections to the existing water system with an update to the existing Transient Non-Community Water System contract to

include Girard Winery; 13) Installation of on-site sanitary disposal improvements and installation of new connections into the existing on-site winery waste water ponds serving Clos Pegase Winery (APN:020-150-012); and, 14) Installation of 30' diameter, 25,000 gallon water storage tank. The project is located on a 25.63 acre parcel at 1077 Dunaweal Lane, Calistoga, on the east side of Dunaweal Lane, approximately 1,000 feet south of its intersection with Silverado Trail, within the AP (Agricultural Preserve) Zoning District; APN: 020-150-017

Staff Recommendation: Adopt the Mitigated Negative Declaration and approve the Use Permit, as conditioned.

Staff Contact: Wyntress Balcher, Planner II (707) 299-1351; wyntress.balcher@countyofnapa.org

Applicant Contact: Heather McCollister, (707) 287-5999; bhmccolli@sbcglobal.net

EXECUTIVE SUMMARY

Proposed Actions:

That the Planning Commission:

1. Adopt the Mitigated Negative Declaration and Mitigation Monitoring Reporting Plan for the Girard Winery based on Findings 1-6 of Exhibit A; and

2. Approve Use Permit (P14-00053) based on Findings 7-11 of Exhibit A, and subject to the recommended Conditions of Approval (Exhibit B).

Discussion:

The applicant requests approval of Use Permit application #P14-00053 to establish a new 200,000 gallon/year winery with the construction of a new winery building, totaling 32,771 sq.ft. in area, to include: 28,955 sq.ft. production area (crush area, fermentation and barrel storage, restrooms); 3,816sq.ft of accessory use area (offices, tasting rooms, retail storage, catered food prep area, and visitor restrooms); a 2,628 sq.ft. covered veranda; and a 2,871 sq. ft. covered work area. The maximum height of the building will be 35 ft. with two 45 ft. tall cupolas. The applicant also proposes: the construction of twenty-two (22) parking spaces; the construction of a new 24" wide winery access driveway from Dunaweal Lane to the winery; the construction of additional piping and service connections to the existing water system with an update to the existing Transient Non-Community Water System contract to include Girard Winery; and the installation of a 25,000 gallon water storage tank. The applicant is requesting tours and tastings by appointment only to a maximum 90 persons on weekends and 75 weekdays and a Marketing Program to hold 9 events per year: four/year for 75 guests; four/year for 200 guests and one/year for 500 guests, to be catered and during winery operation hours.

Although this is a relatively large project, staff is recommending in favor of its approval for the following reasons: 1) the proposal includes substantial greenhouse gas offset features; 2) potential traffic impacts have been fully mitigated; 3) Girard's Napa wines are presently made in Sonoma County and this facility will return Napa County fruit to production in Napa County; 4) the project will be subject to the County's expanded housing impact fees; 5) visitation is within the scope of what has been approved at other similar facilities, and marketing is on the low end; 6) the amount of visitation space is relatively modest in comparison to the amount of production space; and 7) the project requires no reductions or alternatives to winery zoning standards.

FISCAL IMPACT

Is there a Fiscal Impact? No

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: Mitigated Negative Declaration Prepared. According to the proposed Mitigated Negative Declaration, the proposed project would have, if mitigation measures are not included, a potentially significant environmental impact in the following areas: Transportation/Traffic. The project is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

BACKGROUND AND DISCUSSION

Owner/Applicant: Vintage Wine Estates, Pat Roney; 205 Concourse Blvd, Santa Rosa, CA 95403

Representative: Heather McCollister; 1512 D Street, Napa, CA 94559

Zoning: Agriculture Preserve – AP

GP Designation: Agricultural Resource – AR

Filed: February 28, 2014; **Completed:** November 12, 2014

Parcel Size: 26.53± acres

Existing Development: Clos Pegase Water System well and associated equipment & three Close Pegase Winery wastewater processing ponds and associated equipment, in addition to 12± acres of vineyard.

Proposed Winery Characteristics:
Winery Size (Proposed): 32,771 sq.ft. production building include: 28,955 sq.ft. production area (crush area, fermentation and barrel storage, restrooms); 3,816 sq.ft of accessory use area (offices, tasting rooms, retail storage, catered food prep area, and visitor restrooms), maximum height 35 ft. with 45 ft. tall cupolas; with a 2,628 sq. ft. covered veranda; and a 2,871 sq. ft. covered work area.

Production Capacity (Proposed): 200,000 gallons per year.

Development Area (Proposed): 139,763 sq. ft., or 3.21 acres.

Winery Coverage (Proposed): 132,793 sq. ft.; 3.05 acres; 11.49% of the 26.53± acre parcel (Maximum 25% or 15 acres).

Accessory/Production Ratio (Proposed): 3,816 sq. ft. accessory and 37,129 sq. ft. production; 10.2% (maximum 40% allowed).

Number of Employees (Proposed): More than 25 employees: maximum 11 employees (8 full time; 3 part-time), non harvest days; maximum 19 additional employees hired (12 full time and 7 part time) during harvest.

Visitation (Proposed): Hosted daily tours and tastings for wine trade personnel and visitors by appointment only for a maximum of 75 persons per weekday (Monday-Friday); maximum of 90 persons per weekend day (Saturday-

Sunday). Maximum of 555 persons/week.

Marketing Program (Proposed):
Four (4) events per year with a maximum of 75 guests, between the hours of 6:00 PM – 10:00 PM;
Four (4) events per year with a maximum of 200 guests between the hours of 6:00 PM – 10:00 PM; and,
One (1) Harvest event per year with a maximum of 500 guests between the hours of 6:00 PM – 10:00 PM.
All food to be catered utilizing a ±184 sq. ft. small prep/staging area located adjacent to the tasting room.

Days and Hours of Operation (Proposed): Employee hours: production, 7:00AM to 3:00 PM; hospitality/ tasting room, 9:00 AM to 6:00 PM; administration, 8:00 AM to 5:00 PM.

Parking (Proposed): 22 on-site parking spaces with 2 loading areas (15 visitor spaces and 7 employee spaces). The parking area also proposes to include an electric vehicle charging station space and one visitor clean air vehicle space.

Setbacks (Required): 20' side, 20' rear, 300' from Dunaweal Lane.
Setback (Proposed): No variance proposed. All required setbacks will be met.

Adjacent General Plan Designation/ Zoning / Land Use:

North:
Agricultural Resource (AR) /Agricultural Preserve Zoning (AP)/Agricultural use (vineyards) and residential use
South:
Agricultural Resource (AR) / Agricultural Preserve Zoning (AP)/Agricultural use (vineyards) and residential use
East:
Agricultural Resource (AR) /Agricultural Preserve Zoning (AP)/Agriculture (vineyards) and wine production (Sterling Vineyards Winery)
West:
Agricultural Resource (AR) /Agricultural Preserve zoning (AP)/Agricultural use (vineyards), residential use, and wine production use (Clos Pegase Winery)

Nearby Wineries (located within 1 mile of the project)

Winery Name	Address	Building Sq. Ft.	Production	Visitors (Ave/Wk)	Total Events/Yr	Employees
ARAUJO ESTATES WINES	2155 PICKETT RD	24,000	20,000	126	15	13
AZALEA SPRINGS WINERY	4301 AZALEA SPRINGS WAY	11,607	12,500	125	532	2
CLOS PEGASE INC	1060 DUNAWEAL LN	43,100	200,000	725	n/a	10
CUVAISON	4550 SILVERADO TRL	46,026	155,048	525	n/a	15
FISHER WINERY	4771 SILVERADO TR	16,200	30,000	50	23	3
JOSEPH CELLARS	4455 ST HELENA HWY	20,500	30,000	525	106	6
PAOLETTI ESTATES WINERY	4501 SILVERADO TRL N	10,004	16,000	350	3	1.5
PAVITT FAMILY VINEYARDS	4660 SILVERADO TRL	3,360	10,000	10	9	2

STERLING VINEYARDS	1111 DUNAWEAL LN	160,252	1,500,000	3,850n/a		143.5
TEACHWORTH WINERY	4451 N ST HELENA HWY	800	5,000	2	2	0.5
TWOMEY CELLARS	1183 DUNAWEAL LN	25,510	81,480	75n/a		3.5
VENGE VINEYARDS	4708 SILVERADO TRL	15,400	20,000	140	10	3

Parcel History and Evolution of this Application

The existing parcel is 26.53 acres in area and includes an existing storage building, three ponds for a wastewater processing system, water well, and associated infrastructure that are currently serving Clos Pegase Winery, which is also owned by the applicant, located at 1060 Dunaweal Lane (APN: 020-150-012), directly across the street. There are currently 12± acres of vineyards planted on the property, but there has been a history of a total of 18 acres of vineyard, of which 6± acres is now fallow. There are no other improvements on the property.

Code Compliance History

There are no open or pending code violations for the subject site.

Discussion Points

Setting - The project parcel (APN: 020-050-017) is 26.53 acres in area and is owned by Vintage Wine Estates. Across the street at 1060 Dunaweal Lane (APN: 20-150-012) is Clos Pegase Winery, also owned by Vintage Wine Estates. Water is provided to Clos Pegase Winery and the residence on that parcel through the "Clos Pegase Winery Water System", a transient non-community water system which utilizes the well on the project parcel. The old well on the Clos Pegase Winery parcel did not meet the seal depth requirements for the transient non-community water system regulations and is therefore not a part of the water system and used for back-up irrigation. The Clos Pegase Winery process wastewater is taken to the subject parcel for processing, utilizing the three existing ponds. The processed wastewater is used for vineyard and landscape irrigation on both the Clos Pegase property and the subject parcel. No groundwater is used for these activities.The proposed Girard Winery will connect to the existing water system and will require updating the water system permit to include additional piping and and service connections. The name of the water system will also be amended to include both wineries.The project parcel is rectangular with frontage on Dunaweal Lane, a collector status road, and is relatively flat. The frontage has non-native walnut trees lining the road and five are proposed for removal for the project driveway entrance. The nearest offsite residence is located approximately 130 feet south of the property line and is over 400 feet from the winery building site.

New Winery Proposal - Girard Wines is a label currently being produced by Vintage Wine Estates at a facility in Sonoma County. The wines are currently being sold at a tasting room in Yountville which is proposed to continue operating after completion of the the proposed new wine facility. The project proposes the construction of a 24' wide driveway to serve the 32,771 sq. ft. winery building located ±600 ft. from Dunaweal Lane and would circle around the building to the loading area in the rear. The required winery setback is 300 ft. The hospitality and administration areas are located on the west side of the building facing the street, where there is a landscaped veranda wrapping around the public entrance. The applicant is requesting approval of on-site consumption of wines produced on the site in the garden and veranda in addition to the tasting room in accordance with AB 2004 (also known as the Picnic Bill). The winery production area is located behind hospitality area with tanks, barrel storage, a covered crush area, and loading docks. There is an open covered work area adjacent to the refrigeration equipment at the rear of the building. The proposed building will be concrete, 33'-6" in height with metal roofing and stone veneers on the front (west) side of the building. Two cupolas are proposed at the front of the production

portion of the building, 45' in height, with metal roofing. The veranda will be concrete with stone veneer and the building's divided-lite windows will have low-E glass and with stone ledges.

Twenty-two (22) parking spaces are proposed, 15 in the visitor parking area adjacent to the front of the winery building and seven (7) in the employee area behind the winery building. The visitor parking area also proposes to include an electric vehicle charging station space and one visitor clean air vehicle space, in addition to one electric vehicle charging station in the employee parking area. Based upon estimates of 2.6 visitors/vehicle on weekday (20± vehicles) and 2.8 visitors/vehicle on weekends (22± vehicles), the parking demand per day would be satisfied by the 22 parking spaces. The parking demand generated from nine marketing events (179± vehicles at largest event) would exceed the number of parking spaces available in the parking lot. Additional parking in the paved area at the rear of the winery can be utilized during events or shuttling from off-site parking lots. The applicant proposes Best Management Practices to encourage a reduction of vehicle miles traveled with priority parking for efficient transportation and to use bus transportation for large marketing events. The applicant owns the winery property across the street and event guests can be shuttled over from there. No parking will be permitted within the right-of-way of Dunaweal Lane or permitted on the entrance driveway, which is too narrow to accommodate parking.

Tours and Tastings/Marketing Events - The project proposes hosted daily tours and tastings for wine trade personnel and consumers by appointment only for a maximum 75 persons per weekday (Monday-Friday); a maximum 90 persons per weekend day (Saturday-Sunday) for a weekly total maximum of 555 visitor. The proposed visitation hours are 10:00 AM to 6:00 PM (visitation hours), 7-days a week with on-premise consumption of wines produced on site within the tasting room and in the landscaped veranda in accordance with AB 2004. The Marketing Program would consist of: four (4) events per year with a maximum of 75 guests, between the hours of 6:00 PM – 10:00 PM; four (4) events per year with a maximum of 200 guests between the hours of 6:00 PM – 10:00 PM; and one (1) Harvest event per year with a maximum of 500 guests between the hours of 6:00 PM – 10:00 PM. All food to be catered utilizing a ±184 sq. ft. small prep/staging area located adjacent to the tasting room area.

Staff has provided a table comparing marketing and tours and tastings visitation at other wineries with annual production of 200,000 gallons, below. The proposed visitation program falls within the lower half amongst its peer group of wineries with an approved production capacity of approximately 200,000 gallons per year. The table also provides a comparison of winery building floor area to the wineries listed. As can be seen, the floor area for the proposed area relative to its production capacity is below the middle of the spectrum, at ±28,955 sq.ft., with other wineries ranging in size from 24,100 sq.ft. to 49,480 sq.ft.

Winery	**Location**	**Approved Production**	**Floor Area (sq. ft.)**	**Tours & Tastings visitors/week (average)**	**Marketing Events per year**	**Employees**
BY APPT ONLY						
Groth Winery and Oakcross Vineyards	Valley Floor	200,000	49,480	180	77	24
Shafer Vineyards	Valley Floor	200,000	33,630	105	29	2
Silverado Hill Vineyards LLC	Valley Floor	200,000	27,454	490	126	24
Paraduxx Vineyards	Valley Floor	200,000	32,909	840	160	38
Girard Winery (Proposed)	***Valley Floor***	***200,000***	***39,604***	***555***	***9***	***11***

PUBLIC

Clos Pegase, Inc	Valley Floor	200,000	24,100	725	0	10
Sutter Home Winery	Valley Floor	200,000	41,000	3,500	0	101
Whitehall Lane Winery	Valley Floor	200,000	34,227	600	60	7

Traffic - The project parcel is located on the east side of Dunaweal Lane, between State Highway 29 and Silverado Trail. Access to the proposed winery would be from both directions of Dunaweal Lane, via a 24 ft. wide driveway. The intersections with State Highway 29 and Silverado Trail are unsignalized; southbound traffic on State Highway 29 has a left turn lane. There are three existing wineries on Dunaweal Lane: Clos Pegase Winery, Sterling Vineyards, and Twomey Cellars. The project proposes to establish a new 200,000 gallon/year winery, office use, and hospitality functions. The proposed maximum daily visitation will be 75 persons on weekdays; 90 persons on weekends. There will be 25 or greater on-site employees: 8 full-time and 3 part-time, but will increase during harvest to 20 full-time and 10 part-time. Nine (9) marketing events per year are proposed: four (4) events with a maximum of 75 guests; four (4) events with a maximum of 200 guests; and one (1) harvest event with a maximum of 500 guests.

Whitlock & Weinberger Transportation, Inc. (W-Trans) prepared a focused traffic analysis (dated October 16, 2014) addressing potential traffic impacts and access needs for the winery. Mechanical counts of the traffic volumes on Dunaweal Lane were conducted on three consecutive peak days and intersection counts were taken during the month of September, 2014 to establish the existing conditions. The volume of traffic ranged from 1,484 vehicles on Thursday to 1,691 on Saturday. This count is considered relatively low. The turning movement data collected indicate that the intersections of State Highway 29 and Silverado Trail and Dunaweal Lane are operating at a LOS A or B overall and on all approaches. The anticipated daily trip generation for the project, winery plus tasting room, is projected at 74 trips during weekdays, including 26 weekday PM peak hour (4:00–6:00 PM) trips and 58 daily trips on weekends with 29 weekend PM peak hour trips (Saturdays 2:00-4:00PM). Upon adding project-generated trips to existing volumes, both intersections are expected to continue operating at LOS A or B overall as well as on all approaches.

The report addresses the future projected traffic volumes, using the 2030 and 2010 model volumes from the Solano Transportation Authority growth factor of 1.45 for State Highway 29. This growth factor was applied to turning movements to and from Dunaweal Lane and the remainder of the future increase was added to the volumes for the through movements. Based upon the projected future volumes, the two intersections are expected to operate acceptably overall, though the northbound Dunaweal approach to Silverado Trail is expected to operate at LOS E and the southbound Dunaweal Lane approach to State Route 29 is expected to operate at LOS F at the PM Peak Hour. Under the Napa County General Plan EIR, under projected 2030 volumes, State Route 29 is expected to operate at a LOS F in this project's study area during the PM Peak Hour, and, Silverado Trail is expected to continue operating at LOS C during the PM Peak Hour.

The traffic study proposes a mitigation measure that if the winery operation schedules employee shifts to minimize trips at the intersection during the PM peak periods (4:00-6:00 PM weekdays; 2:00-4:00 PM weekends) stating it will reduce the project's future potential impacts to the intersections at their most impacted time to a level of insignificance. The incorporation of a mitigation measure to reduce traffic during the PM Peak Hour can occur during the 9 events if the finish time of activities is scheduled to minimize vehicles arriving or leaving between 4:00 PM and 6:00 PM would reduce potential future traffic impacts to a level of insignificance. Further, the installation of directional signs at the winery exit to direct traffic to right-turn actions, such as southbound traffic from Dunaweal Lane to use Silverado Trail, and northbound traffic to use State Highway 29, would be a reduction in the LOS at those intersections, further reducing traffic impacts to a less than significant level. The applicant proposes Best

Management Practices to encourage a reduction of vehicle miles traveled with priority parking for efficient transportation and to use bus transportation for larger 200 to 500-guest marketing events.

Groundwater Availability - As indicated above, the well on the project parcel provides water to the applicant's Clos Pegase Winery (APN: 020-150-012) across the street. The well on the Clos Pegase winery is utilized as back up irrigation water. The Clos Pegase winery process waste water system is also located on the project parcel, which include the three processing and storage ponds. The reclaimed water is used to irrigate the vineyards and landscaping on the Clos Pegase parcel, and the vineyards on the project parcel. Girard Winery will be incorporated into these existing systems. Therefore, the Water Availability Analysis Report, prepared by Always Engineering (dated November 24, 2014) and the Phase One Study prepared for each of the parcels, evaluated the existing demand and the demand generated from the proposed Girard Winery.

The Phase One Study prepared for the 20.39 acre, valley area, Clos Pegase Winery property states that the Allowable Water Allotment for the property is 20.39 acre feet per year (af/yr), determined by multiplying its 20.39 acre size by the one af/yr/acre fair share water use factor. Clos Pegase Winery is a 200,000 gallon winery, with 10 employees (total 30 employees during harvest) and a visitation average of 725 people per week. The Clos Pegase Phase One study indicates the existing total demand is 9.70 af/yr.

The Water Availability Analysis-Phase One Study prepared for the 26.53 acre, the proposed Girard Winery property, states that the Allowable Water Allotment for the property is 26.53 acre feet per year (af/yr), determined by multiplying its 26.53 acre size by the one af/yr/acre fair share water use factor. The study found that the proposed 200,000 gallon Girard Winery with a proposed 11 employees (additional 19 for a total 30 employees during harvest), a maximum 10,090 visitors, and 9 events with a maximum 500 people, would result in a total demand of 16.70 af/yr.

The combined allowable water use for both parcels would be 46.92 af/yr. The existing and proposed water use for both parcels is 26.40 af/yr., which is 20.52 af/yr. below the threshold for the combined parcels. As such, the project meets the valley floor groundwater sustainability threshold in gross terms without consideration of other water sources such as reuse of treated process water and surface water captured within existing irrigation ponds. The Water Availability Analysis report indicates that currently all vineyard irrigation (both parcels) is provided for using the existing irrigation pond located on the property. The existing irrigation pond is filled with rainwater, vineyard subdrain collection water, and treated process wastewater. No well has been used to irrigate the existing vineyards and the existing landscaping. In addition, the proposed Girard Winery will also contribute additional process wastewater into the reclaimed wastewater irrigation system. Therefore, the total project demand on groundwater supplies would be 12.49 af/yr. Conditions from the Environmental Health Division require that an agreement to grant a water easement or an approved water easement for the water system located on and serving the two parcels must be filed prior to approval of a building permit. This will ensure that the Clos Pegase Water System is amended to include the new winery.

Greenhouse Gases/Climate Action Plan - The County requires project applicants to consider methods to reduce Green House Gas (GHG) emissions consistent with Napa County General Plan Policy CON-65(e), which requires GHG review of discretionary projects. The applicant has completed the Department’s Best Management Practices Checklist for Development Projects, which is attached to this report as part of the application materials. The applicant proposes to incorporate GHG reduction methods including: alternative fuel and electrical vehicles in fleet; build to CALGREEN Tier 2; new vegetation plantings; CVMT reduction plan; energy conserving lighting; connection to an existing recycled water system; water efficient landscaping and shade trees; limiting the amount of grading and tree removal; composting; sustainable purchasing and shipping programs; electrical vehicle charging stations; bicycle incentives; and education of staff and visitors on sustainable practices.

GHG Emission reductions from local programs and project level actions, such as application of the CalGreen Building Code, tightened vehicle fuel efficiency standards, and more project specific on-site programs including

those winery features noted above would combine to reduce emissions.

Grape Sourcing - The property is currently planted in 12 acres of vineyards. Upon completion of the project, the applicant proposes to replant those areas that are fallow or were disturbed by the project, resulting in 14.53 acres of vineyard. The applicant has informed staff that the 75% Napa Valley Grape Source can be met since there are contracts with other Napa County vineyards for 1,075 tons of grapes (154,800 gallons) that will be processed at the new winery. The applicant has advised that the Girard Winery label is currently active and the wines are being sold out of a tasting room located in Yountville, which will also remain open after completion of the winery.

Public Comments - On December 4, 2014, an e-mail was received from an adjacent neighbor, Norma Tofanelli, requesting a continuance of the hearing to allow time to review all of the reports and prepare for the hearing (See attached). Staff had been advised that the applicant and the neighbor will be meeting to discuss the project and the neighbor's concerns.

Consistency with Standards

Zoning - The project is consistent with the AP (Agricultural Preserve) zoning district regulations. A winery (as defined in the Napa County Code Section 18.08.640) and uses in connection with a winery (refer to Napa County Code Section 18.16.030) are permitted in the AP District with an approved use permit. The project, as conditioned, complies with the Napa County Winery Definition Ordinance and all other requirements of the Zoning Code as applicable.

Environmental Health Division - Recommends approval with standard conditions in the attached Memorandum dated December 10, 2014.

Engineering Services Division - Recommends approval with standard conditions in the attached Memorandum dated July 11, 2014.

Public Works Department (Ground Water and Traffic) - Recommends approval in the attached Memorandum, dated May 12, 2014.

Fire Department - Recommends approval with standard conditions in the attached Inter-Office Memo dated April 3, 2014.

SUPPORTING DOCUMENTS

A . Exhibit A - Findings

B . EXHIBIT B - CONDITIONS OF APPROVAL

C . Department Conditions

D . Public Comments

E . Mitigated Negative Declaration

F . Mitigation Monitoring & Reporting Program

G . Water Availability - Phase One

H . Biological Survey Report

I . Traffic Analysis

J . Wastewater Feasibility Study

K . Waters System Feasibility Report

L . Application documents

M . GRAPHICS

Napa County Planning Commission: Approve

Reviewed By: Charlene Gallina

Previous Staff Report From Planning Commission Meeting

Project Name: Girard Winery P14-00053

Previous Meeting Date: January 21, 2015

Continued to: February 18, 2015

For attachments of this staff report please refer to the previous meeting date above.

A Tradition of Stewardship
A Commitment to Service

Agenda Date: 1/21/2015
Agenda Placement: 9A
Continued From: December 17, 2014

Napa County Planning Commission
Board Agenda Letter

TO:	Napa County Planning Commission
FROM:	Charlene Gallina for David Morrison - Director Planning, Building and Environmental Services
REPORT BY:	Wyntress Balcher, Planner II - 707 299-1351
SUBJECT:	Girard Winery Use Permit #P14-00053

RECOMMENDATION

GIRARD WINERY USE PERMIT #P14-00053-UP

CEQA Status: Consideration and possible adoption of a Mitigated Negative Declaration and Mitigation Monitoring & Reporting Program (MMRP). According to the proposed Mitigated Negative Declaration and MMRP, the proposed project would have, if mitigation measures are not included, potentially significant environmental impacts in the following areas: Transportation/Traffic. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Request: Approval of a Use Permit to establish a new winery as follows: 1) 200,000 gallons per year production capacity; 2) Construction of new winery building, totaling 32,771 sq.ft. in area, to include: 28,955 sq.ft. production area (crush area, fermentation and barrel storage, restrooms); 3,816 sq.ft of accessory use area (offices, tasting rooms, retail storage, catered food prep area, and visitor restrooms), maximum height 35 ft. with 45 ft. tall cupolas; a 2,628 sq. ft. veranda; and a 2,871 sq. ft. covered work area; 3) Hosted daily tours and tastings for wine trade personnel and consumers by appointment only for a maximum of 75 persons per weekday (Monday-Friday); maximum of 90 persons per weekend day (Saturday-Sunday); 4) Hours of operation: 8:00 AM to 6:00 PM (production hours, except during harvest) and 10:00 AM to 6:00 PM (visitation hours), 7-days a week; 5) Employment of more than 25 employees: 11 employees (8 full time; 3 part-time) non harvest; maximum 19 additional employees (12 full time and 7 part time) during harvest; 6) Employee hours: production, 7:00 AM to 3:00 PM; hospitality/ tasting room, 9:30 AM to 6:30 PM; administration, 8:00 AM to 5:00 PM; 7) Construction of twenty-two (22) parking spaces; 8) Installation of landscaping, entry gate and a winery sign; 9) Establish a Marketing Program as follows: a) Four (4) events per year with a maximum of 75 guests; b) Four (4) events per year with a maximum of 200 guests; c) One (1) Harvest event per year with a maximum of 500 guests;d) All food to be catered utilizing a ±184 sq. ft. small prep/staging area; 10) On-premise consumption of wines produced on site within the tasting room and in the landscaped winery gardens in accordance with AB 2004; 11) Construct new 24” wide winery access driveway from Dunaweal Lane to the winery; 12) Construction of additional piping and service connections to the existing water system with an update to the existing Transient Non-Community Water System contract to

include Girard Winery; 13) Installation of on-site sanitary disposal improvements and installation of new connections into the existing on-site winery waste water ponds serving Clos Pegase Winery (APN:020-150-012); and, 14) Installation of 30' diameter, 25,000 gallon water storage tank. The project is located on a 26.53 acre parcel at 1077 Dunaweal Lane, Calistoga, on the east side of Dunaweal Lane, approximately 1,000 feet south of its intersection with Silverado Trail, within the AP (Agricultural Preserve) Zoning District; APN: 020-150-017

Staff Recommendation: Adopt the Mitigated Negative Declaration and approve the Use Permit, as conditioned.

Staff Contact: Wyntress Balcher, Planner II (707) 299-1351; wyntress.balcher@countyofnapa.org

Applicant Contact: Heather McCollister, (707) 287-5999; bhmccolli@sbcglobal.net

ITEM CONTINUED FROM DECEMBER 17, 2014.

EXECUTIVE SUMMARY

Proposed Actions:

That the Planning Commission:

1. Adopt the Mitigated Negative Declaration and Mitigation Monitoring Reporting Plan for the Girard Winery based on Findings 1-5 of Exhibit A; and

2. Approve Use Permit (P14-00053) based on Findings 6-10 of Exhibit A, and subject to the recommended Conditions of Approval (Exhibit B).

Discussion:

The applicant requests approval of Use Permit application #P14-00053 to establish a new 200,000 gallon/year winery with the construction of a new winery building, totaling 32,771 sq.ft. in area, to include: 28,955 sq.ft. production area (crush area, fermentation and barrel storage, restrooms); 3,816sq.ft of accessory use area (offices, tasting rooms, retail storage, catered food prep area, and visitor restrooms); a 2,628 sq.ft. covered veranda; and a 2,871 sq. ft. covered work area. The maximum height of the building will be 35 ft. with two 45 ft. tall cupolas. The applicant also proposes the construction of: twenty-two (22) parking spaces; a new 24" wide winery access driveway from Dunaweal Lane to the winery; and additional piping and service connections to the existing water system with an update to the existing Transient Non-Community Water System contract to include Girard Winery; and the installation of a 25,000 gallon water storage tank. The applicant is requesting tours and tastings by appointment, for a maximum of 90 persons on weekends and 75 persons on weekdays and a Marketing Program to hold 9 events per year: four/year for 75 guests; four/year for 200 guests and one/year for 500 guests, to be catered and during winery operation hours.

A public hearing was held on December 17, 2014 and based upon Commission discussion, this item was continued. At that meeting, the Commission presented questions about the proposed project that they wanted answered: clarification of the size of the Clos Pegase Winery (APN: 020-150-012); confirmation of the size of the project parcel; and information regarding a transient non-community water system. Also, a continuance was requested by Ms. Norma Tofanelli and Mr. David Clark. The continuance enables Ms. Norma Tofanelli time for her consultant to prepare a report on water availability in the area.

FISCAL IMPACT

Is there a Fiscal Impact? No

ENVIRONMENTAL IMPACT

Mitigated Negative Declaration Prepared. According to the proposed Mitigated Negative Declaration, the proposed project would have, if mitigation measures are not included, a potentially significant environmental impact in the following areas: Transportation/Traffic. The project is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

BACKGROUND AND DISCUSSION

Response to Planning Commission Comments - A public hearing was held on December 17, 2014, and was continued to allow staff to prepare and to provide the Commission information regarding the size of the Clos Pegase Winery, confirmation of the size of the project parcel; and, provide background information regarding the transient non-community water system.

The project parcel (APN) 020-150-017, is 26.53 acres in area. The numbers were transposed on the Initial Study/Mitigated Negative Declaration document (Pg 1) and staff report background section (Pg 2), where the location is indicated.

Use Permit #458687 was approved by the Planning Commission to expand the production capacity of Clos Pegase Winery to 200,000 gallons/year; roof an existing work area; add 19,000 sq.ft. of caves; and construct a wastewater treatment pond on the adjacent parcel across Dunaweal Lane. According to the application, the existing winery is 25,000 sq. ft. in area. A copy of the approval letter is attached to this staff report.

The Water System Feasibility Report (Always Engineering, Inc; dated February 21, 2014) states the well on the project property (APN: 20-150-017) provides water to the Clos Pegase Winery, located across the street (1060 Dunaweal Lane, APN: 020-150-012), through a transient non-community water system permit. Transient noncommunity water systems are public water systems which serve at least 15 service connections or 25 or more persons for at least 60 days of the year (Example: A winery with less than 25 employees that has public wine tasting with an average of 25 or more visitors for 60 days of the year). The report stated that the parcel and the water system are both owned by Vintage Wine Estates. Upon grant of the use permit, the water system permit will be updated and the system name changed to The Clos Pegase and Girard Wineries Water System. Additional expanded information regarding public water systems is attached with this report.

Public Comment Responses - Ms. Norma Tofanelli, a neighbor who had requested the continuance of this item to have the water analysis reviewed by a hydrologist has notified staff that she needs additional time and indicated to staff that her additional information would not be available until January 16, 2015, which is after the packets are distributed. Upon receipt, staff will forward the information to the Commission under separate cover.

A letter from Ellison Folk of Shute, Mihaly, & Weinberger, LLP legal counsel for the Tofanelli family, was received on December 14, 2014, requesting a continuance of the hearing and requesting additional information regarding statements in the Initial Study: "(Pg 13) Minimum thresholds for water use established by Napa County Department of Public Works on USGS reports and copies of USGS' water resources investigations" and "(Pg 14) Napa County environmental resource mapping (Water Deficient Areas/Storage Areas)." This information was provided to Ms. Tofanelli at the hearing on December 17, 2014, and the documents were also e-mailed to the attorney on

December 19, 2014. These are attached to this report for Commission review.

Mr. David Clark also requested a continuance to accommodate additional time to review the project.

A Letter from the Mount Veeder Stewardship Council (December 16, 2014) was submitted to the Commission, expressing objection to the adoption of a Negative Declaration for the Girard Winery Use Permit Application, and respectfully requested that the Planning Commission not adopt (sic) the Negative Declaration, and instead have the applicant conduct the Environmental Impact Report addressing cumulative impacts of the project. Mt. Veeder further requested the applicant provide additional information regarding the water availability for the project. It should be noted that a Mitigated Negative Declaration, not a negative declaration, was prepared and circulated for the project.

The Mount Veeder Stewardship Council states in its letter that the Planning Department failed to require the applicant to provide any actual water availability data in support of its application. A Water System Feasibility Report (Always Engineering, Inc. dated February 21, 2014) was in fact prepared for the project and submitted with the application. The report indicated that the existing well produces 23 gpm, based upon the well logs which have been filed with the county. The report further indicates that the current pump supplies 18 gpm, and that this production amount is adequate to supply the winery processing, employees, tasting visitors, and events. Clos Pegase Winery incorporates many conservation measures in their water demands and proposes to incorporate the proposed Girard Winery into the existing recycled processed wastewater system for irrigation of the vineyards and landscaping. The wineries will share a well and the proposed Girard Winery will be added into the existing transient non-community water system serving Clos Pegase Winery. No new wells are proposed. There are three ponds on the Girard parcel, one which holds the irrigation water. In addition to the recycled water, the irrigation pond also captures rainwater and water from the vineyard subdrain collection system. No ground water is being proposed for the irrigation of the vineyards and landscaping. The use of the recycled processed wastewater for irrigation reduces the estimated water demand from the two wineries to 12.49 acre-feet/year (af/yr). The minimum threshold established by the County for this is 26.53 af/yr. The County has no record of problems or complaints of diminished groundwater supplies at the project site or in the general vicinity.

As discussed in the Mitigated Negative Declaration/Initial Study, minimum thresholds for water use have been established by the Napa County Department of Public Works, using reports by the United States Geological Survey (USGS). These reports are the result of water resources investigations performed by the USGS in cooperation with the Napa County Flood Control and Water Conservation District and more recently reviewed and found acceptable and defensible by Lundorff and Scalmanini in their work with the GRAC and their "Updated Hydrogeologic Conceptualization and Characterization of Conditions" (January, 2013). Any project which reduces water usage or any water usage which is at or below the established threshold is presumed not to have a significant effect on groundwater levels. The project is located on the valley floor in an area that has an established acceptable water use criteria of 1.0 acre foot per acre per year.

The cumulative traffic impacts were discussed in the Mitigated Negative Declaration/Initial Study, specifically regarding the turning movement at the intersection of Dunaweal Land with State Highway 29, and Silverado Trail. The Napa County General Plan Environmental Impact Report identified expected reduction in the Level of Service (LOS) on State Highway and Silverado Trail in 2030. Mitigation measures have been proposed to address this potential impact, and were incorporated into the project and agreed to by the applicant.

Based upon the above concerns, staff maintains that the proposed Mitigated Negative Declaration adequately addresses potential impacts of the project and is recommending in favor of the project: 1) the proposal includes substantial greenhouse gas offset features; 2) potential traffic impacts have been fully mitigated; 3) Girard’s Napa wines are presently made in Sonoma County and this facility will return Napa County fruit to production in Napa County; 4) the project will be subject to the County’s expanded housing impact fees; 5) visitation is within the scope of what has been approved at other similar facilities, and marketing is on the low end; 6) the amount of visitation

space is relatively modest in comparison to the amount of production space; and 7) the project requires no reductions or alternatives to winery zoning standards.

SUPPORTING DOCUMENTS

A . EXHIBIT A - PROPOSED FINDINGS

B . EXHIBIT B - PROPOSED CONDITIONS

C . Clos Pegase Use Permit Approval Letter

D . Water Systems Background Information

E . Ellison Folk Correspondence

F . Water System Feasibility Report

G . 1973 Northern Napa Valley Groundwater Study

H . 1977 USGS Report

I . 1991 Public Works Water Availability Analysis

J . Girard - Water Deficient Areas GIS Map

K . Continuance Requests - Tofanelli - Clark

L . Mount Veeder Stewardship Council

M . Previous Commission Staff Report of December 17, 2014

Napa County Planning Commission: Approve

Reviewed By: John McDowell

Previous Staff Report From Planning Commission Meeting

Project

Name: Girard Winery P14-00053

Previous Meeting

Date: February 18, 2015

Continued to: Removed from Calendar

For attachments of this staff report please refer to the previous meeting date above.

A Tradition of Stewardship
A Commitment to Service

Agenda Date: 2/18/2015
Agenda Placement: 9B
Continued From: 1/17/14 & 1/21/15

Napa County Planning Commission
Board Agenda Letter

TO:	Napa County Planning Commission
FROM:	Charlene Gallina for David Morrison - Director Planning, Building and Environmental Services
REPORT BY:	Wyntress Balcher, Planner II - 707 299-1351
SUBJECT:	GIRARD WINERY USE PERMIT #P14-00053-UP

RECOMMENDATION

GIRARD WINERY USE PERMIT #P14-00053-UP

CEQA Status: Consideration and possible adoption of a Mitigated Negative Declaration and Mitigation Monitoring & Reporting Program (MMRP). According to the proposed Mitigated Negative Declaration and MMRP, the proposed project would have, if mitigation measures are not included, potentially significant environmental impacts in the following areas: Transportation/Traffic. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Request: Approval of a Use Permit to establish a new winery as follows: 1) 200,000 gallons per year production capacity; 2) Construction of new winery building, totaling 32,771 sq.ft. in area, to include: 28,955 sq.ft. production area (crush area, fermentation and barrel storage, restrooms); 3,816 sq.ft of accessory use area (offices, tasting rooms, retail storage, catered food prep area, and visitor restrooms), maximum height 35 ft. with 45 ft. tall cupolas; a 2,628 sq. ft. veranda; and a 2,871 sq. ft. covered work area; 3) Hosted daily tours and tastings for wine trade personnel and consumers by appointment only for a maximum of 75 persons per weekday (Monday-Friday); maximum of 90 persons per weekend day (Saturday-Sunday); 4) Hours of operation: 8:00 AM to 6:00 PM (production hours, except during harvest) and 10:00 AM to 6:00 PM (visitation hours), 7-days a week; 5) Employment of more than 25 employees: 11 employees (8 full time; 3 part-time) non harvest; maximum 19 additional employees (12 full time and 7 part time) during harvest; 6) Employee hours: production, 7:00 AM to 3:00 PM; hospitality/ tasting room, 9:30 AM to 6:30 PM; administration, 8:00 AM to 5:00 PM; 7) Construction of twenty-two (22) parking spaces; 8) Installation of landscaping, entry gate and a winery sign; 9) Establish a Marketing Program as follows: a) Four (4) events per year with a maximum of 75 guests; b) Four (4) events per year with a maximum of 200 guests; c) One (1) Harvest event per year with a maximum of 500 guests;d) All food to be catered utilizing a ±184 sq. ft. small prep/staging area; 10) On-premise consumption of wines produced on site within the tasting room and in the landscaped winery gardens in accordance with AB 2004; 11) Construct new 24” wide winery access driveway from Dunaweal Lane to the winery; 12) Construction of additional piping and service connections to the existing water system with an update to the existing Transient Non-Community Water System contract to

include Girard Winery; 13) Installation of on-site sanitary disposal improvements and installation of new connections into the existing on-site winery waste water ponds serving Clos Pegase Winery (APN:020-150-012); and, 14) Installation of 30' diameter, 25,000 gallon water storage tank. The project is located on a 26.53 acre parcel at 1077 Dunaweal Lane, Calistoga, on the east side of Dunaweal Lane, approximately 1,000 feet south of its intersection with Silverado Trail, within the AP (Agricultural Preserve) Zoning District; APN: 020-150-017.

Staff Recommendation: Drop the item from the agenda and renotice for a future hearing date.

Staff Contact: Wyntress Balcher, Planner II, (707) 299-1351 or wyntress.balcher@countyofnapa.orgtyofnapa.org

CONTINUED FROM THE DECEMBER 17, 2014 AND JANUARY 21, 2015 MEETINGS

TO BE DROPPED FROM THE AGENDA AND RENOTICED AT A FUTURE DATE

EXECUTIVE SUMMARY

Proposed Action:

That the Planning Commission:

1. Drop the item from the agenda for renoticing at a future hearing date.

Discussion:

On December 17, 2014, the Planning Commission held a public hearing to consider Use Permit application #P14-00053 to establish a new 200,000 gallon/year winery with the construction of a new winery building totaling 32,771 sq.ft. in area. Based upon the Commission's discussion and a request by Ms. Tofanelli (a neighbor) to continue, this item was continued to January 21, 2015. At that meeting, the Planning Commission resumed the public hearing and received testimony and evidence from Ms. Tofanelli, interested parties and the applicant's representative. The Commission also asked for further information and analysis from staff regarding the County's policies or regulations applicable to parcels already encumbered by development from another parcel's development and grape sourcing. The item was continued to February 21st to allow staff time to respond to the issues raised by the Commission. Because the issues that were raised will require preparation of additional analysis by the applicant's team and staff to address comments and staff is still conducting its analysis, it is recommended that the item be dropped from the agenda and renoticed at a future date. The applicant supports this recommendation.

FISCAL IMPACT

Is there a Fiscal Impact? No

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: Mitigated Negative Declaration Prepared. According to the proposed Mitigated Negative Declaration, the proposed project would have, if mitigation measures are not included, a potentially significant environmental impact in the following areas: Transportation/Traffic. The project is not

included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

BACKGROUND AND DISCUSSION

SUPPORTING DOCUMENTS

A . Comments received after packet was mailed out (Added after meeting)

Napa County Planning Commission: Approve

Reviewed By: John McDowell

COUNTY OF NAPA
PLANNING, BUILDING & ENVIRONMENTAL SERVICES DEPARTMENT
1195 THIRD ST., SUITE 210, NAPA, CA 94559
(707) 253-4416

Initial Study Checklist
(form updated September 2010)

REVISED JULY 14, 2015; THIS INITIAL STUDY SUPERCEEDS AND REPLACES THE INITIAL STUDY CIRCULATED ON NOVEMBER 26, 2014

1. **Project Title:** Girard Winery Use Permit P14-00053

2. **Property Owner:** Vintage Wine Estates , 205 Concourse Blvd Santa Rosa, CA 95403; (877) 289-9463

3. **Project Sponsor's Name and Address**: Pat Roney, 205 Concourse Blvd Santa Rosa, CA 95403; (707) 289-9463

4 **Representative**: Heather McCollister, 1512 D Street, Napa, CA 94559, (707) 287-5999; bhmccolli@sbcglobal.net.

5. **County Contact Person, Phone Number and email:** Wyntress Balcher; (707) 299-1351; wyntress.balcher@countyofnapa.org

6. **Project Location and APN:** The project is located on a 26.53 acre parcel on the east side of Dunaweal Lane, approximately 1000 feet south of its intersection with Silverado Trail, within the AP (Agricultural Preserve) Zoning District; 1077 Dunaweal Lane; Calistoga, CA 94515, APN: 020-150-017.

7. **General Plan description:** Agricultural Resource (AR) Designation.

8. **Zoning:** Agricultural Preserve (AP) District.

9. **Background/Project history:** The existing parcel is 26.53 acres in area and includes an existing storage building, three ponds for the wastewater processing system, water well, and associated infrastructure that is currently serving Clos Pegase Winery(200,000 gallons), also owned by the applicant, located directly across the street at 1060 Dunaweal Lane (APN: 020-150-012). There are currently 12±acres of vineyards planted on the property, but there has been a history of a total of 18 acres of vineyard, of which 6± acres is now fallow. There are no other improvements on the property. Based upon comments received during the public hearing on the project, the circulated initial study was referred back to staff, additional studies regarding the groundwater and traffic information were requested and was obtained to address the issues presented. It was then determined that the revised initial study/proposed negative declaration document should be recirculated.

10. **Project Description**: **Request:** Approval of a Use Permit to establish a new winery with an annual production capacity of 200,000 gallons as follows:

    A. Construction of new winery building, totaling 32,771 sq.ft. in area to include: 28,955 sq.ft. production area (crush area, fermentation and barrel storage, restrooms); ±3,816 sq.ft of accessory use area (offices, tasting rooms, retail storage, catered food prep area, and visitor restrooms), maximum building height 33.5 ft., with 15 ft. tall decorative cupolas to 45 ft. In addition, a ±2,560 sq. ft. covered veranda; and a ±2,871 sq. ft. covered work area;
    B. Hosted daily tours and tastings for wine trade personnel and consumers by appointment only for a maximum of 75 persons per weekday (Monday-Friday); maximum of 90 persons per weekend day (Saturday-Sunday);
    C. Hours of operation: 8:00 AM to 6:00 PM (production hours, except during harvest) and 10:00 AM to 6:00 PM (visitation hours), 7-days a week;
    D. Employment of: 11 employees (8 full time; 3 part-time) non harvest; 19 additional employees (12 full time and 7 part time) during harvest, for a total maximum of 30;
    E. Employee hours: production, 7:00 AM to 3:00 PM; hospitality/ tasting room, 9:30 AM to 6:30 PM;
    F. Construction of twenty-two (22) parking spaces;
    G. Installation of landscaping, entry gate and a winery sign;

H. Establish a Marketing Program as follows:

   i. Four (4) events per year with a maximum of 75 guests;
   ii. Four (4) events per year with a maximum of 200 guests;
   iii. One (1) Harvest event per year with a maximum of 500 guests;
   iv. All food to be catered utilizing a ±184 sq. ft. small prep/staging area;

I. On-premise consumption of the wines produced on-site, consistent with Business and Professions Code §§23356, 23390, and 23396.5 (also known as AB 2004 (Evans 2008 or the Picnic Bill) within the tasting rooms (±2,320 sq. ft.), covered porch(±2,560 sq. ft.), and within a 4,000 sq. ft. portion of the front entry landscaped winery garden;

J. Construct a new 24-ft. wide winery access driveway from Dunaweal Lane to the winery;

K. Construction of additional piping and service connections to the existing Clos Pegase water system on the site, and update the existing Clos Pegase Transient Non-Community Water System contract to include Girard Winery;

L. Installation of on-site sanitary disposal improvements and installation of connections into the existing on-site winery wastewater processing ponds serving Clos Pegase Winery (APN:020-150-012); and,

M. Installation of ±45,000 gallon water storage tank (±30 ft. diameter; ±12 ft. height).

11. **Environmental setting and surrounding land uses:**

The 26.53 acre parcel is relatively flat at the 330± elevation. The property has frontage on the east side of Dunaweal Lane (classified as a local road by the General Plan). There are hills to the east and south with elevations of 550'± and mountains starting to the north along Silverado Trail, reaching the 3,000'± elevation. Currently, approximately 12 acres of the 26.53 acres is planted in vineyard. Native vegetation in the area consists of Valley Oak Savanna, with most of the Oaks scattered on the small hills and along the banks of the Napa River. The geology of the land is Quaternary surficial deposits overlain by Holocene alluvium, undifferentiated and the majority of the soils on site are Bale loam (0 to 2 percent slopes), with Cole silt loam (0 to 2% slopes); and Clear lake clay, drained along the most easterly side of the parcel near the base of the hill. The property is located within the Napa River Watershed, located approximately 1200 feet south of the parcel, outside of the 100 year flood hazard zone, but a portion is within the 500-year flood hazard zone.

The property is located within an area delineated by the California Department of Fish and Wildlife Natural Diversity Maps as a potential community of the Calistoga Popcornflower, Jepsons's leptosiphon, Baker's navarretia papose tarplant, narrow-anthered brodiaea, and pallid bat.

In addition to the existing 12± acres of vineyards, the parcel is developed with an irrigation pond and a wastewater processing system (its two wastewater processing ponds use the existing irrigation pond) serving the Clos Pegase Winery, an agricultural storage building; and water well with associated infrastructure. Clos Pegase Winery is located directly across from the subject parcel. The well on the subject property is included in the existing transient non-community water system, "Clos Pegase Water System", owned by the applicant, which serves the Clos Pegase Winery plus a residence located on the Clos Pegase Winery property (also owned by the applicant). The surrounding land uses include vineyards, wineries (Clos Pegase; Sterling Vineyards, Twohey Cellars, Paoletti Estates Winery) and residential development on large parcels. The nearest residence is over 400 feet from the winery building site. The City of Calistoga waste processing facilities are located approximately 600 feet south of the winery property, on the west side of Dunaweal Lane.

Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement).
The project would also require various ministerial approvals by the County, including but not limited to building permits, grading permits, and waste disposal permits, in addition to CalFire. Permits may also be required by the Department of Alcoholic Beverage Control and Bureau of Alcohol, Tobacco, & Firearms.

Responsible (R) and Trustee (T) Agencies
None Required.

Other Agencies Contacted
Federal Trade and Taxation Bureau
Department of Alcoholic Beverage Control

ENVIRONMENTAL IMPACTS AND BASIS OF CONCLUSIONS:

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of the Napa County Environmental Resource Maps, the other sources of information listed in the file, and the comments received, conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and, where necessary, a visit to the site. For further information, see the environmental background information contained in the permanent file on this project.

On the basis of this initial evaluation:

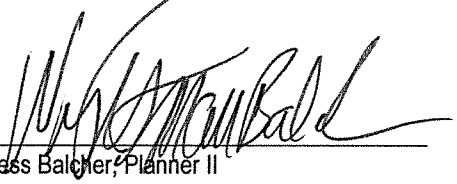
☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Wyntress Balcher, Planner II
Napa County Planning, Building, and Environmental Services

7/14/2015
Date

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I.	**AESTHETICS.** Would the project:				
	a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
	b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
	c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
	d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion:

a-c Visual resources are those physical features that make up the environment, including landforms, geological features, water, trees and other plants, and elements of the human cultural landscape. A scenic vista, then, would be a publicly accessible vantage point such as a road, park, trail, or scenic overlook from which distant or landscape-scale views of a beautiful or otherwise important assembly of visual resources can be taken-in. Dunaweal Lane (a scenic roadway) is defined by a mix of vineyards, wineries, residential uses, flat land trending toward small tree-covered minor ridgelines then to the tall distant mountain ridgelines. The proposed 31' tall winery building (with two, 45' tall decorative cupolas) will settle against the immediate small hills backdrop and will not obstruct the scenic distant ridgelines. The project would not result in substantial damage to scenic resources or substantially degrade the visual character or quality of the site and its surroundings since the proposed building will be located ±560 feet from the road; the design of the buildings will utilize earth tones and stone textures, with a low angle roofline; a smaller scale hospitality building is placed at the front of the winery building; and the frontage/entrance of the building will include attractive garden landscaping. This development will be located in the middle of the parcel, surrounded by vineyard designed to complement the surrounding distant mountain views, hillside vineyards and tree-covered knolls. There are no rock outcroppings visible from the road or other designated scenic resources on the property.

d. The construction of winery uses will result in the installation of additional lighting that may have the potential to impact nighttime views. The installation of new sources of nighttime lights may affect nighttime views. Pursuant to standard Napa County conditions of approval for wineries, outdoor lighting will be required to be shielded and directed downwards, with only low level lighting allowed in parking areas. As designed, and as subject to the standard condition of approval, below, the project will not have a significant impact resulting from new sources of outside lighting.

> *All exterior lighting, including landscape lighting, shall be shielded and directed downward, shall be located as low to the ground as possible, and shall be the minimum necessary for security, safety, or operations and shall incorporate the use of motion detection sensors to the greatest extent practical. No flood-lighting or sodium lighting of the building is permitted, including architectural highlighting and spotting. Low-level lighting shall be utilized in parking areas as opposed to elevated high-intensity light standards. Lighting utilized during harvest activities is not subject to this requirement. Prior to issuance of any building permit for construction of the winery, two (2) copies of a detailed lighting plan showing the location and specifications for all lighting fixtures to be installed on the property shall be submitted for Planning Division review and approval. All lighting shall comply with California Building Code.*

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
II.	**AGRICULTURE AND FOREST RESOURCES.**[1] Would the project:				
	a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Important (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
	b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
	c) Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code Section 12220(g), timberland as defined in Public Resources Code Section 4526, or timberland zoned Timberland Production as defined in Government Code Section 51104(g)?	☐	☐	☐	☒
	d) Result in the loss of forest land or conversion of forest land to non-forest use in a manner that will significantly affect timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, or other public benefits?	☐	☐	☐	☒
	e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒

Discussion:

a. Based on a review of Napa County environmental resource mapping (Department of Conservation Farmlands, 2012 layer), the site is classified as "Prime Farmland". General Plan Agricultural Preservation and Land Use policies AG/LU-2 and AG/LU-13 recognize wineries, and any use consistent with the Winery Definition Ordinance and clearly accessory to a winery, as agriculture. As a result, this application will not result in the conversion of special status farmland to a non-agricultural use.

b. The property is zoned Agricultural Preserve (AP) but is not subject to a Williamson Act contract. Since agricultural activities will occur on the site, there will be no resulting conflict with the zoning within which the subject property is located.

c/d. The project site is zoned AP (Agricultural Preserve), which allows wineries upon grant of a use permit. The project site does not contain woodland or forested areas, and thus would not result in the loss of or conversion of forest lands to a non-forest use.

e. As discussed in item "a.", above, the winery and winery accessory uses are defined as agricultural by the Napa County General Plan and are allowed under the parcels' AP (Agricultural Preserve) zoning. Neither this project, nor any foreseeable consequence thereof, would result in changes to the existing environment which would result in the conversion of special status farmland to a non-agricultural use.

Mitigation Measures: None required.

[1] "Forest land" is defined by the State as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." (Public Resources Code Section 12220(g)) The Napa County General Plan anticipates and does not preclude conversion of some "forest land" to agricultural use, and the program-level EIR for the 2008 General Plan Update analyzed the impacts of up to 12,500 acres of vineyard development between 2005 and 2030, with the assumption that some of this development would occur on "forest land." In that analysis specifically, and in the County's view generally, the conversion of forest land to agricultural use would constitute a potentially significant impact only if there were resulting significant impacts to sensitive species, biodiversity, wildlife movement, sensitive biotic communities listed by the California Department of Fish and Wildlife, water quality, or other environmental resources addressed in this checklist.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
III.	**AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
	a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
	b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
	c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state Ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
	d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
	e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion:

a-c. On June 2, 2010, the Bay Area Air Quality Management District's Board of Directors unanimously adopted thresholds of significance to assist in the review of projects under the California Environmental Quality Act (CEQA). The thresholds were designed to establish the level at which the District believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on the Air District's website and included in the Air District's May 2011 updated CEQA Guidelines.

On March 5, 2012 the Alameda County Superior Court issued a judgment finding that the Air District had failed to comply with CEQA when it adopted the thresholds. However, on August 31, 2013, the Court of Appeal reinstated the Air District's thresholds of significance provided in Table 3-1 (Criteria Air Pollutants & Precursors Screening Levels Sizes) which are applicable for evaluating projects in Napa County.

Over the long term, emission sources for the proposed project will consist primarily of mobile sources including vehicles visiting the site. The Air District's threshold of significance provided in Table 3-1 has determined that similar projects such as a quality restaurant that do not exceed a threshold of 47,000 sq. ft. will not significantly impact air quality and do not require further study (BAAQMD CEQA Guidelines, May 2011 Pages 3-2 & 3-3.). Given the size of the entire project, which is approximately 32,771 sq. ft. of enclosed floor area including about 2,320 sq. ft. of floor area for tasting/hospitality uses compared to the BAAQMD's screening criterion of 47ksf (high quality restaurant) and 541ksf (general light industry) for NO_x (oxides of nitrogen), the project would contribute an insignificant amount of air pollution and would not result in a conflict or obstruction of an air quality plan. (Please note: a high quality restaurant is considered comparable to a winery tasting room for purposes of evaluating air pollutant emissions, but grossly overstates emissions associated with other portions of a winery, such as office, barrel storage and production, which generate fewer vehicle trips. Therefore, a general light industry comparison has also been used for other such uses.)

The proposed project would not conflict with or obstruct the implementation of any applicable air quality plan. Wineries as proposed here are not producers of air pollution in volumes substantial enough to result in an air quality plan conflict. The project site lies within the Napa Valley, which forms one of the climatologically distinct sub-regions (Napa County Sub region) within the San Francisco Bay Area Air Basin. The topographical and meteorological features of the Valley create a relatively high potential for air pollution. Over the long term, emissions resulting from the proposed project would consist primarily of mobile sources, including production-related deliveries and visitor and employee vehicles traveling to and from the winery. The resulting busiest day plus marketing total is well below the threshold of significance. The proposed project would not result in a cumulatively considerable net increase in any criteria pollutant for which the project region is in non-attainment under an applicable federal or state Ambient air quality standard.

d. In the short term, potential air quality impacts are most likely to result from earthmoving and construction activities required for project construction. Earthmoving and construction emissions would have a temporary effect; consisting mainly of dust generated during grading and other construction activities, exhaust emissions from construction related equipment and vehicles, and relatively minor emissions from paints and other architectural coatings. The Air District recommends incorporating feasible control measures as a means of addressing construction impacts. If the proposed project adhere to these relevant best management practices identified by the Air District and the County's standard conditions of project approval, construction-related impacts are considered less than significant:

The permittee shall comply during all construction activities with the Bay Area Air Quality Management District Basic Construction Mitigation Measures as provided in Table 8-1, May 2011 Updated CEQA Guidelines.

Furthermore, while earthmoving and construction on the site will generate dust particulates in the short-term, the impact would be less than significant with dust control measures as specified in Napa County's standard condition of approval relating to dust:

Water and/or dust palliatives shall be applied in sufficient quantities during grading and other ground disturbing activities on-site to minimize the amount of dust produced. Outdoor construction activities shall not occur during windy periods.

e. While the Air District defines public exposure to offensive odors as a potentially significant impact, wineries are not known operational producers of pollutants capable of causing substantial negative impacts to sensitive receptors. The closest residence is over 400 ft. from the winery building site. Construction-phase pollutants will be reduced to a less than significant level by the above-noted standard condition of approval. The project will not create pollutant concentrations or objectionable odors affecting a substantial number of people.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IV.	**BIOLOGICAL RESOURCES.** Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, Coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion:

a/b. According to the Napa County Environmental Resource Maps (based on the following layers - plants CNPS points & polygons, plant surveys, red legged frog core area and critical habitat, vernal pools & vernal pool species, Spotted Owl Habitat – 1.5 mile buffer and known fish presence and California Department of Fish and Wildlife Natural Diversity Map) the project site is located within an area delineated as a potential community of the Calistoga Popcornflower, Jepsons's leptosiphon, Baker's navarretia papose tarplant, narrow-anthered brodiaea, and pallid bat. A Biological Resource Survey by Kjeldsen Biological Consulting, dated July 2014, was prepared to identify any biological resources that may be affected by the proposed project. Field work in the proposed project envelope, the property, and the adjoining environment was conducted in accordance with accepted protocols.

The Biologist's report found that the project footprint is within a developed landscape; that the project as proposed will not have any direct impacts to Federal or State protected wetlands as defined by Section 404 of the Clean Water Act; and that the proposed project will not significantly reduce habitat for or have the potential to negatively impact any special-status plans or animals. No sensitive plants, sensitive plant habitat, or special-status plant species were identified on the property or on the project site. The biologist stated that it is unlikely that the proposed project would impact any of the special-status species known for the Quadrangle or the region based on their fieldwork, the habitat present and historic use within and associated with the project footprint. In addition, the project site has been developed in agriculture for decades.

The report further concluded that no sensitive animals, sensitive wildlife habitat, or special-status animal species was identified on the project site, and found that it is unlikely that the proposed project would impact any of the special-status animals known for the Quadrangle or the region based upon their fieldwork, the habitat present and historic use within and associated with the project footprint. The biologist observed a

juvenile western pond turtle on the bank of one the existing wastewater processing ponds; however, the biologist determined that it is unlikely that turtles would move in the area proposed for the winery site since the disturbed area and vineyard do not provide potential nesting habitat, due to soil compaction and dry ground with no cover or vegetated cover. The biologist stated that the turtles most likely have moved in from the adjacent pond southeast of the property. No raptor activity or nests were observed; no indication of the presence of sensitive natural communities regulated by the California Department of Fish and Wildlife or US Fish and Wildlife was found within or directly associated with the project footprint. The project proposal and associated construction are minimal with no significant grading required. The removal of trees is limited to five non-native walnut trees planted along the road for the access driveway. Furthermore, the footprint of the project will not significantly contribute to habitat loss or habitat fragmentation.

The report finds that the historic use of the property and the project site conditions are such that there is no reason to expect any impact to special-status species on site or off-site provided standard construction practices area utilized. The project must comply with the Napa County SWPP (storm water protection plan) requirements to ensure that best management practices are adopted in order to minimize the amount of sediment and other pollutants leaving the site during construction activities. The following condition regarding stormwater control, which will require the incorporation of BMP's during development, is a standard site improvements and engineering services-specific condition that will applied to the project:

STORM WATER CONTROL
The permittee shall comply with all construction and post-construction storm water pollution prevention protocols as required by the County Engineering Services Division, and the State Regional Water Quality Control Board (SRWQCB).

The project would have a less than significant impact on biological resources with the implementation of Best Management Practices required by the conditions of approval.

c/d. According to the Biological Survey prepared for the project, there are no wetlands on the property or on neighboring properties that would be affected by this project. Therefore, the project activities will not interfere with the movement of any native resident or migratory fish or wildlife species or with their corridors or nursery sites, because no sensitive natural communities have been identified on the property and the project as proposed would have no impact to biological resources.

e/f. This project would not interfere with any ordinances protecting biological resources. With the exception of the ten introduced trees along the road (where five are proposed for removal), there are no trees on the property. There are no tree preservation ordinances in effect in the County. The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plans, Natural Community Conservation Plans or other approved local, regional or state habitat conservation plans.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
V.	**CULTURAL RESOURCES.** Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	☐	☐	☐	☒
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines§15064.5?	☐	☐	☐	☒
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☐	☒
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Discussion:

a-c. According to the Napa County Environmental Resource Maps (based on the following layers – Historical sites points & lines, Archaeology surveys, sites, sensitive areas, and flags) an archaeological study was prepared on the subject property for the proposed Clos Pegase wastewater processing ponds and recorded on April 7, 1987, by Archaeological Services. No archaeological or ethnographic sites were identified on the property and no archaeological sites were found during the surficial survey. Based on the proposed project plans, there would be no impact to cultural resources. However, if resources are found during any earth disturbing activities associated with the project, construction of the project is required to cease, and a qualified archaeologist will be retained to investigate the site in accordance with the following standard condition of approval:

"In the event that archeological artifacts or human remains are discovered during any subsequent construction in the project area, work shall cease in a 50-foot radius surrounding the area of discovery. The permittee shall contact the Planning, Building, and Environmental Services Department for further guidance, which will likely include the requirement for the permittee to hire a qualified professional to analyze the artifacts encountered and to determine if additional measures are required. If human remains are encountered during the development, all work in the vicinity must be, by law, halted, and the Napa County Coroner informed so that the Coroner can determine if an investigation of the cause of death is required, and if the remains are of Native American origin. If the remains are of Native American origin, the nearest tribal relatives as determined by the State Native American Heritage Commission shall be contacted by the permittee to obtain recommendations for treating or removal of such remains, including grave goods, with appropriate dignity, as required under Public Resources Code Section 5097.98."

d. No human remains have been encountered on the property and no information has been encountered that would indicate that this project would encounter human remains. However, if resources are found during grading of the project, construction of the project is required to cease, and a qualified archaeologist will be retained to investigate the site in accordance with standard condition of approval noted above.

Mitigation Measures: None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VI. **GEOLOGY AND SOILS.** Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil creating substantial risks to life or property? Expansive soil is defined as soil having an expansive index greater than 20, as determined in accordance with ASTM (American Society of Testing and Materials) D 4829.	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐

Discussion:

a.

i.) There are no known faults on the project site as shown on the most recent Alquist-Priolo Earthquake Fault Zoning Map. As such, the proposed project would result in a less than significant impact with regards to rupturing a known fault.

ii.) All areas of the Bay Area are subject to strong seismic ground shaking. Construction of the project will be required to comply with all the latest building standards and codes, including the California Building Code that would reduce any potential impacts to a less than significant level.

iii.) No subsurface conditions have been identified on the project site that indicated a susceptibility to seismic-related ground failure or liquefaction. Compliance with the latest editions of the California Building Code for seismic stability would result in less than significant impacts.

iv.) According to the Napa County Environmental Resource Maps (Landslides line, polygon, and geology layers) there are no landslide deposits in the proposed development area.

b. The proposed development is minimal and will occur on slopes 0% to 1%. Based upon the Soil Survey of Napa County, prepared by the United States Department of Agriculture (USDA), the soils on site are comprised of Bale loam (0 to 2 percent slopes), with Cole silt loam (0 to 2% slopes); and Clear lake clay, drained. The Bale loams and Cole silt loams are somewhat poorly drained, with a low runoff classification; the Clear lake clay is poorly drained, but medium runoff classification. The project will require incorporation of best management practices and will be subject to the Napa County Stormwater Ordinance which addresses sediment and erosion control measures and dust control, as applicable.

c/d. According to preliminary geologic mapping of the Calistoga Quadrangle performed by the California Geologic Survey (CGS-2004), the geology of the land is Quaternary surficial deposits overlain by Holocene alluvium, undifferentiated. Based on the Napa County Environmental Sensitivity Maps (liquefaction layer) the project site has medium susceptibility for liquefaction. Development will be required to comply with all the latest building standards and codes, including the California Building Code that would reduce any potential impacts to the maximum extent possible.

e. The Use Permit Wastewater Feasibility Study prepared for the project by Always Engineering, dated May 5, 2014 indicates that a site evaluation was performed on November 14, 2013 and test pits displayed a sandy clay loam surface soil which ranged from 36" to 56". However, at the time of preparation of the study, there had not been sufficient rainfall to perform groundwater monitoring, and therefore made an assumption that a minimum of 24" of suitable soil is available for septic system design. In the event that groundwater monitoring cannot occur prior to the application for construction permits, an irrigation reuse alternative system is included in the feasibility study for the ability to provide a pretreatment and irrigation reuse system. If the alternative system is proposed, the project must first obtain approval from the San Francisco Bay Regional Water Quality Control Board (RWQCB) for its use.). If future groundwater monitoring cannot occur in a time schedule appropriate for building permits or does not provide at least 24 inches of separation to groundwater, treatment, irrigation, and reuse will be required for the project. In this event, RWQCB must also grant system approval prior to building permit issuance. With the proposed installation of a new sanitary management system, as discussed in the report, the site is capable of supporting the proposed sanitary sewage loads. With the proposed installation of additional aerators and a collection system and pump station, the existing aerated facultative pond system is sufficient for the proposed winery process wastewater flows in addition to the existing Clos Pegase process wastewater flows.

Mitigation Measures: None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. **GREENHOUSE GAS EMISSIONS.** Would the project:				
a) Generate a net increase in greenhouse gas emissions in excess of applicable thresholds adopted by the Bay Area Air Quality Management District or the California Air Resources Board which may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with a county-adopted climate action plan or another applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion:

a/b. Overall increases in Greenhouse Gas (GHG) emissions in Napa County were assessed in the Environmental Impact Report (EIR) prepared for the Napa County General Plan Update and certified in June 2008. GHG emissions were found to be significant and unavoidable in that document, despite the adoption of mitigation measures incorporating specific policies and action items into the General Plan.

Consistent with these General Plan action items, Napa County participated in the development of a community-wide GHG emissions inventory and "emission reduction framework" for all local jurisdictions in the County in 2008-2009. This planning effort was completed by the Napa County Transportation and Planning Agency in December 2009, and served as the basis for development of a refined inventory and emission reduction plan for unincorporated Napa County.

In 2011, the Bay Area Air Quality Management District (BAAQMD) released California Environmental Quality Act (CEQA) Project Screening Criteria and Significance of Thresholds [1,100 metric tons per year (MT) of carbon dioxide and carbon dioxide equivalents (CO_2e)]. This threshold of significance is appropriate for evaluating projects in Napa County.

During our ongoing planning effort, the County requires project applicants to consider methods to reduce GHG emissions consistent with Napa County General Plan Policy **CON-65(e)**. (Note: Pursuant to State CEQA Guidelines Section 15183, because this initial study assesses a project

that is consistent with an adopted General Plan for which an environmental impact report (EIR) was prepared, it appropriately focuses on impacts which are "peculiar to the project," rather than the cumulative impacts previously assessed.)

The applicant proposes to incorporate GHG reduction methods including but not limited to: alternative fuel and electrical vehicles in fleet; build to CALGREEN Tier 2; new vegetation plantings; VMT reduction plan; energy conserving lighting; connection of winery wastewater recycling processing system to the existing Clos Pegase system, minimizing the amount of new mechanical required for processing; water efficient landscaping and shade trees; limiting the amount of grading and tree removal; composting; sustainable purchasing and shipping programs; electrical vehicle charging stations; bicycle incentives; and education of staff and visitors on sustainable practices.

The proposed project has been evaluated against the BAAQMD thresholds and determined that the project would not exceed the 1,100 MT/yr of CO_2e. GHG Emission reductions from local programs and project level actions, such as application of the Cal Green Building Code, tightened vehicle fuel efficiency standards, and more project-specific on-site programs including those winery features noted above would combine to further reduce emissions below BAAQMD thresholds.

The increase in emissions expected as a result of the project will be relatively modest and the project is in compliance with the County's efforts to reduce emissions as described above. For these reasons, project impacts related to GHG emissions are considered less than significant.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII.	**HAZARDS AND HAZARDOUS MATERIALS.** Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h)	Expose people or structures to a significant risk of loss, injury or death involving wild-land fires, including where wild-lands are adjacent to urbanized areas or where residences are intermixed with wild-lands?	☐	☐	☐	☒

Discussion:

a. The proposed project will not involve the transport of hazardous materials other than those small amounts normally used in winery operations. A Business Plan will be filed with the Environmental Health Division should the amount of hazardous materials reach reportable levels. However, in the event that the proposed use or a future use involves the use, storage or transportation of greater the 55 gallons or 500 pounds of hazardous materials, a use permit and subsequent environmental assessment would be required in accordance with the Napa County Zoning

Ordinance prior to the establishment of the use. During construction of the project some hazardous materials, such as building coatings/ adhesives/ etc., will be utilized. However, given the quantities of hazardous materials and the limited duration, they will result in a less-than-significant impact.

b. The project would not result in the release of hazardous materials into the environment.

c. There are no schools located within one-quarter mile from the proposed project site.

d. The proposed site is not included on the Cortese List prepared in compliance with Government Code Section 65962.5.

e. The project site is not located within two miles of any public airport.

f. The project site is not located within the vicinity of any private airports.

g. The proposed driveway of project has direct access to and will not cause obstruction of public roads or highways and will therefore not impair the implementation of or physically interfere with an adopted emergency response plan or evacuation plan.

h. The project would not increase exposure of people and/or structures to a significant loss, injury or death involving wild land fires.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IX.	**HYDROLOGY AND WATER QUALITY.** Would the project:				
	a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
	b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
	c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
	d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or Amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
	e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
	f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
	g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
	h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
	i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
	j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion:

a. The proposed project will not violate any known water quality standards or waste discharge requirements. Based upon public concerns and comments regarding ground water, the applicant requested that O'Connor Environmental, Inc. prepare an extended Phase II WAA report on the groundwater in the area ("Girard Winery Water Availability Analysis", dated 3/26/2015) which included discussion regarding the known boron and arsenic concentrations in the Calistoga area's water. Elevated concentrations of arsenic and boron have been document at wells located north of the project parcels and concerns were raised that the proposed pumping could result in contaminant migration. These elevated concentrations do not appear to extend as far south as the project parcels as evidenced by the water quality analyses available for the Clos Pegase well and by Luhdorff and Scalmanini (2011) for nearby wells. The findings indicate that the proposed pumping is significantly less than the mean annual recharge and that long-term reduction in groundwater elevations are unlikely to occur as a result of the project pumping. Even short-term reductions in elevations associated with pumping do not extend far enough away from the project wells to intersect areas documented as having elevated concentrations of arsenic and boron. Given the limited effects of pumping on groundwater elevations, it is highly unlikely that the proposed pumping would affect contaminant migration or water quality. The project will connect to the "Clos Pegase Water System", regulated by the County PBES Department. Required water quality analyses performed on the water system (March 2009, Brelje and Race Laboratories) found the water met all primary standard maximum contaminant levels (MCL). Arsenic concentrations were below the MCL. Arsenic concentrations in the three closest wells to the project site complied by Luhdorff and Scalmanini (2011) indicated concentrations well below the MCL. The project will connect to the existing on-site process wastewater system used by the Clos Pegase Winery (1060 Dunaweal Lane, APN: 020-150-012) and will require the installation of a new sanitary sewage system to serve the project winery employees, visitors and events. The "Use Permit Wastewater Feasibility Study" prepared by Always Engineering, Inc. (dated 2/20/2014, revised 5/5/2014), has been reviewed by Napa County Division of Environmental Health and recommends approval as conditioned. Additionally, any earth disturbing activities would be subject to the County's Stormwater Ordinance which would include measures to prevent erosion, sediment, and waste materials from entering waterways both during and after any construction activities. Given the County's Best Management Practices, which comply with RWQCB requirements, the project does not have the potential to significantly impact water quality and discharge standards.

On January 14, 2014 Governor Jerry Brown declared a drought emergency in the state of California. The declaration stopped short of imposing mandatory conservation measures statewide. Mandatory water restrictions are being left to individual jurisdictions. On April 1, 2015, Governor Brown issued Executive Order B-29-15 imposing restrictions to achieve a wide 25% reduction in potable urban water usage through February 28, 2016. However, such restrictions were not placed on private well users in rural areas. At this time the County of Napa has not adopted or implemented mandatory water use restrictions. The County requires all Use Permit applicants to complete necessary water analyses in order to document that sufficient water supplies are available for the proposed project.

To better understand groundwater resources, on June 28, 2011 the Board of Supervisors approved creation of a Groundwater Resources Advisory Committee (GRAC). The GRAC's purpose was to assist County staff and technical consultants with recommendations regarding groundwater, including data collection, monitoring, well pump test protocols, management objectives, and community support. The County retained Luhdorff and Scalmanini who completed a county-wide assessment of groundwater resources (Napa County Groundwater Conditions and Groundwater Monitoring Recommendations Report (Feb. 2011)); developed a groundwater monitoring program (Napa County Groundwater Monitoring Plan 2013 (Jan. 2013)) and also completed a 2013 Updated Hydrogeologic Conceptualization and Characterization of Groundwater Conditions (Jan. 2013).

Groundwater Sustainability Objectives were recommended by the GRAC and adopted by the Board of Supervisors which acknowledged the important role of monitoring as a means to achieving groundwater sustainability and the principles underlying the sustainability objectives. In 2009 Napa County began a comprehensive study of its groundwater resources to meet identified action items in the County's 2008 General Plan update. The study, by Luhdorff and Scalmanini Consulting Engineers (LSCE), emphasized developing a sound understanding of groundwater conditions and implementing an expanded groundwater monitoring and data management program as a foundation for integrated water resources planning and dissemination of water resources information. The 2011 baseline study by LSCE, which included over 600 wells and data going back over 50 years, concluded that "the groundwater levels in Napa County are stable, except for portions of the MST district". Most wells elsewhere within the Napa Valley Floor with a sufficient record indicate that groundwater levels are more affected by climatic conditions, are within historical levels, and seem to recover from dry periods during subsequent wet or normal periods. The LSCE Study also concluded that, on a regional scale, there appear to be no current groundwater quality issues except north of Calistoga (mostly naturally occurring boron and trace metals) and in the Carneros region (mostly salinity). LSCE prepared the 2014 Annual Groundwater Monitoring Report, presented to the Napa County Board of Supervisors on March 3, 2015, which clearly states that, based on the network of monitored groundwater level in the area, the groundwater levels in the area south of Calistoga are stable, even in context of the current drought. The subject property is located within Napa Valley Floor, Calistoga area.

Minimum thresholds for water use have been established by the Napa County Department of Public Works, using reports by the United States Geological Survey (USGS), the GRAC recommendations, and the LSCE reports. These reports are the result of water resources investigations performed by the USGS in cooperation with the Napa County Flood Control and Water Conservation District and LSCE. LSCE concluded that the 1.0 acre-ft/acre criteria on the Valley Floor have proven to be both scientifically and operationally adequate. Any project which reduces water usage or any water usage which is at or below the established threshold is assumed not to have a significant effect on groundwater levels.

Vintage Wine Estates owns and operates the existing "Clos Pegase Water System", serving Clos Pegase Winery, across the street from the proposed Girard Winery parcel. The system currently serves Clos Pegase Winery and the residence located at 1060 Dunaweal Lane. The water system is currently regulated as a Transient Non-Community water system (Always Engineering, Inc. Water System Feasibility Report, 3/26/15), and the existing water system consists of: one active onsite well (Well #2), pressure tanks, sediment filer, softeners, located at 1077 Dunaweal Lane; and, a second active well (Well #1), 58,000 gallon storage tank, ultraviolet disinfection treatment and potable use located at 1060 Dunaweal Lane. Both wells are supplying the currently permitted transient community water system. Vintage Wine Estates is applying for a use permit to establish a new winery (the proposed Girard Winery) and the "Clos Pegase Water System" will be updated to include additional piping, a new 25,000 gallon storage tank, and service connections for the proposed Girard Winery. The public water system documents must be updated as a result.

A Water Availability Analysis-Phase One Study was prepared by Always Engineering, Inc. (dated 2/18/14, revised 3/26/15, Supplemented 6/18/15) for the proposed Girard Winery on the 26.53 acre parcel and for the Clos Pegase Winery property, a 20.39 acre parcel. Both parcels are located on the Valley Floor. As stated above, any project which reduces water usage or any water usage which is at or below the established threshold is assumed not to have a significant effect on groundwater levels, and since the project is located on the Valley Floor in an area that has an established acceptable water use criteria of 1.0 acre foot per acre per year, the Allowable Water Allotment for the Girard project property **26.53 af/yr** and the Allowable Water Allotment for the Clos Pegase Winery is **20.39 af/yr**. These allotments were determined by multiplying the acreage of each parcel by the one af/yr/acre fair share water use factor.

To meet the requirements of a Phase II Water Availability Analysis, O'Connor Environmental, Inc. (OEI) prepared the Girard Winery Water Availability Analysis" report, dated March 26, 2015. Analysis of the Clos Pegase Winery property was also included in the report. The report included an examination of the surficial geology of the project site, evaluated recent available long-term hydrographs for the Napa Valley Floor – Calistoga subarea, and conducted aquifer testing. Analysis of the resulting time/drawdown data provides a way of estimating aquifer properties, evaluating the extent of lateral drawdown away from the wells, and determining the relative sufficiency of the well for meeting expected water demands. The report concluded that the proposed Girard Winery combined with the existing Clos Pegase Winery would have an approximately 8.23 af/yr total annual water demand. This demand represents only 24% of the parcel-based mean annual groundwater recharge for both parcels, and only ~0.3% of the total recharge to the tuffaceous aquifer up-gradient of the project parcels. Given that mean annual recharge is significantly higher than the proposed demand, it is highly unlikely that the proposed pumping would result in long-term declines in groundwater elevations or depletion of groundwater resources.

The OEI report further concludes that the expected magnitudes of drawdown associated with the proposed pumping are reasonably small and the spheres of influence associated with pumping at the required rates and durations needed to meet the demands do not extend far enough away from the project wells to intersect neighboring wells or the Napa River. These findings coupled with the fact that the project wells draw water from the tuffaceous rocks of the Sonoma Volcanics rather than from the alluvial aquifer (the primary aquifer providing water to many of the wells in the area and the material responsible for baseflow discharge to the Napa River) indicate that the proposed pumping is highly unlikely to result in interference to neighboring wells or impacts to river baseflows.

The OEI report was referred to the Napa County Department of Public Works for review. The Department, concluded that: 1) the groundwater table in the area shows a long term stable trend; 2) Impact on neighboring wells or the Napa River are not anticipated; and 3) The project is unlikely to cause directional flow changes which would draw chemicals from Calistoga into the area.

Clos Pegase Winery is a 200,000 gallon winery, with 10 employees (total 30 employees during harvest), visitation with an average of 725 per week and 24 events per year. The Phase I study indicates that the existing total water demand by the Clos Pegase winery is 4.79 af/yr, which is well below the 20.39 af/yr allowable water allotment. The winery uses/demands are outlined below:

EXISTING CLOS PEGAS WINERY WATER DEMAND	
	Acre feet/year
Winery Processing	2.93
Employees (30 full-time/harvest; 10 full time/non-harvest)	.251
Tasting Visitors (725/52 weeks)	.347
Event Visitors (150/24 events/year)	.0552
Residence	1.21
4 acres Vineyard – Irrigation, frost protection and heat protection, sourced by process wastewater ponds	[3.00]
TOTAL	4.79

The Phase I report was revised to indicate that while analyzing the existing Clos Pegase Winery and the existing Girard process operations for the wastewater feasibility study, the engineer calculated approximately 4.78 gallons of water were used per gallon of wine produced. The engineer had originally completed the Water Availability Analysis form utilizing the County Estimated Water Use Guidelines, 2.15 acre-feet per 100,000 gallons of wine. The 4.78 gallons of water/gallon of wine figure was used for the preparation of the revised projected water demand in

lieu of the estimated figures supplied by the County. Therefore, in the revised water availability analysis for the Clos Pegase Winery, the engineers determined that approximately 2.93 af/yr is required for processing the wine and a demand of .65 af/yr is projected for employees and visitors. Further, the residential landscaping and pool were added to the residence demands resulting in the residence's need of 1.21 af/yr. The 4 acres of vineyards and the landscaping on the Clos Pegase parcel utilize the processed wastewater from the ponds that are located on the Girard Winery parcel for irrigation, and are therefore not included in the total water demand, but provided for informational purposes only. Frost and heat protection demand will also utilize the processed wastewater.

The proposed Girard Winery is a 200,000 gallon winery, 11 employees (additional 19 during harvest for total 30 during harvest), a maximum of 75 weekday visitors/90 weekend visitors, and 9 events, the largest with a maximum 500 people. As discussed above, the revised study utilized the current water use data from the existing Girard processing facility, located in Sonoma County, when the wastewater feasibility study was prepared. In that analysis, it was estimated that approximately 4.78 gallons of water were used per gallon of wine produced. Projecting the ultimate production levels of 200,000 gallons, the projected water use estimate for the winery processing was 2.93 af/yr. The projected water demand by employees is .185 af/yr; tasting visitors, .29 af/yr; and event use, .03 af/yr. The projected water demand from the proposed Girard Winery is 3.43 af/yr, which is well below the 26.53 af/yr allowable water allotment. The winery uses/demands are outlined below:

PROPOSED GIRARD WINERY WATER DEMAND	
	Acre feet/year
Winery Processing	2.93
Employees	---
Harvest (12 full time)	.05
Harvest (7 part time)	.015
Non-Harvest (8 full time)	.10
Non-Harvest (3 part time)	.02
Visitors	---
Weekday (75, 4 days/week)	.15
Weekend (100, 3 days/week)	.14
Event (Large – 500 people 1/year)	.01
Event (Medium - 200 people 4/year)	.01
Event (Small – 75 people 4/year)	.01
Landscaping Irrigation, frost protection and heat protection, sourced by process wastewater ponds	[1.0]
14.53 acres Vineyard – Irrigation, frost protection (no heat protection) Irrigation, frost protection and heat protection, sourced by process wastewater ponds	[10.89]
TOTAL	3.43

The water availability analysis report states that the total water demands of the Girard Winery project plus the "Clos Pegase Water System" on the Girard parcel would be 8.22 af/yr. The Water Availability Analysis report further indicates that currently, all vineyard irrigation (both parcels) and all winery landscaping is and will be provided for using the existing process wastewater irrigation pond located on the Girard winery property. The project will be conditioned to ensure that no groundwater is used for landscape or vineyard irrigation. The existing irrigation pond is supplied by rainwater, vineyard subdrain collection water, and treated process wastewater. No well water has been used to irrigate the existing vineyards and the existing landscaping. In addition, the proposed Girard Winery will contribute additional process wastewater into the reclaimed wastewater irrigation system. Even with the drought conditions occurring over the last several years, the ponds have had sufficient water to accommodate these uses.

In summary, the overall water use for the proposed Girard Winery and the existing Clos Pegase would be 8.22 af/yr. The total Allowable Water Allotment for the two parcels would be 46.92 af/yr. The alternate water source of processed winery wastewater for the irrigation of vineyards and landscaping, and for frost and heat protection significantly reduces the water demand on groundwater.

Winery Groundwater Demand		Vineyard Irrigation, Frost and Heat Protection Demand
Clos Pegase Winery	4.79 af/yr	3.0 af/yr
Girard Winery	3.43 af/yr	10.8975 af/yr
Total Demand	8.22 af/yr	13.8975 af/yr

Based on these figures and the associated water reuse system which would eliminate the vineyard irrigation demands, the proposed project will not result in a substantial increase the demand on ground water supplies or interfere with groundwater recharge or lowering of the local groundwater level. As indicated in the OEI analysis, the demand from the two wineries represents only 24% of the parcel-based mean annual groundwater recharge and only 0.3% of the total recharge to the tuffaceous aquifer up-gradient of the project parcels. Given that mean annual recharge is significantly higher than the proposed demand, it is highly unlikely that the demand of the proposed winery would result in long-term

declines in groundwater elevations or depletion of groundwater resource. According to Napa County Environmental Resource Mapping (*Water Deficient Areas/Storage Areas*), the project site is not located within a water deficient area, and the project would have a less than significant impact on the hydrology of the area.

c.-e. The proposed project will not substantially alter the drainage pattern on the site nor cause a significant increase in erosion or siltation on or off site. There are no existing or planned stormwater systems that would be affected by this project. Because the project disturbs more than one acre of land, the permittee will be required to comply with the requirements of the Regional Water Quality Control Board addressing stormwater pollution during construction activities. The project site includes vineyards, landscaping and other pervious areas that have the capacity to absorb runoff.

f. The OEI report, "Girard Winery Water Availability Analysis", dated March 26, 2015, included an analysis of the project's potential impact to groundwater quality. The report cites the water quality analysis compiled for various wells in the Calistoga area as part of a 2011 evaluation of groundwater conditions (Luhdorff and Scalmanini, 2011). Most of the poor quality groundwater was found to occur north of Calistoga. Elevated concentrations of arsenic and boron were found in the wells north of the project parcels, but these elevated concentrations do not appear to extend as far south as the project parcels, as evidenced by the water quality analyses available for the Clos Pegase well and supported by Luhdorff and Scalmanini (2011) for nearby wells. The report further concludes that the proposed pumping is significantly less than the mean annual recharge and that long-term reductions in groundwater elevations are unlikely to occur as a result of the project pumping. The report further states that even short-term reductions in elevations associated with pumping do not extend far enough away from the project wells to intersect areas documented as having elevated concentrations of arsenic and boron. Given the limited effects of pumping on groundwater elevations, it is highly unlikely that the proposed pumping would affect contaminant migration or water quality. As discussed in greater detail at, "a.," above, the Division of Environmental Health has reviewed the sanitary wastewater proposal and has found the proposed system adequate to meet the facility's septic needs as conditioned. There is nothing included in this proposal that would otherwise substantially degrade water quality. As discussed in greater detail at, "a.," above, the Division of Environmental Health has reviewed the sanitary wastewater proposal and has found the proposed system adequate to meet the facility's septic needs as conditioned.

g.-i. The project does not include the placement of new housing on the property. According to Napa County Environmental Resource Mapping (*Floodplain* and *DAM Levee Inundation* layers), the parcel is located outside the 100-year flood zone, but a small portion of the property falls within the 500-year flood zone. The winery site, however, is well outside any area of potential flooding. The project would not impede or redirect flood flows, does not propose any housing or expose structures or people to flooding. The project site is not located within a dam or levee failure inundation zone.

j. In coming years, higher global temperatures are expected to raise sea level by expanding ocean water, melting mountain glaciers and small ice caps, and causing portions of Greenland and the Antarctic ice sheets to melt. The Intergovernmental Panel on Climate Change estimates that the global average sea level will rise between 0.6 and 2 feet over the next century (IPCC, 2007). However, the project area is located at approximately 330-ft. above mean sea level and there is no known history of mud flow in the vicinity. The project will not subject people or structures to a significant risk of inundation from tsunami, seiche, or mudflow.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
X.	**LAND USE AND PLANNING.** Would the project:				
	a) Physically divide an established community?	☐	☐	☐	☒
	b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
	c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion:

a-c. The project would not occur within an established community, nor would it result in the division of an established community. The project complies with the Napa County Code and all other applicable regulations. The subject parcel is located in the AP (Agricultural Preserve) zoning district, which allow wineries and uses accessory to wineries subject to use permit approval. The proposed project is in compliance with the physical limitations of the Napa County Zoning Ordinance. The County has adopted the Winery Definition Ordinance (WDO) to protect agriculture and open space and to regulate winery development and expansion in a manner that avoids potential negative environmental effects.

Agricultural Preservation and Land Use Policy AG/LU 1 of the 2008 General Plan states that the County shall, "preserve existing agricultural land uses and plan for agriculture and related activities as the primary land uses in Napa County." The property's General Plan land use designation is AR (Agricultural Resource), which allow "agriculture, processing of agricultural products, and single-family dwellings." More specifically, General Plan Agricultural Preservation and Land Use Policy AG/LU-2 recognizes wineries and other agricultural processing facilities, and any use clearly accessory to those facilities, as agriculture. The project would allow for the continuation of agriculture as a dominant land use within the county and is fully consistent with the Napa County General Plan.

The proposed use of the property for the "fermenting and processing of grape juice into wine" (NCC §18.08.640) supports the economic viability of agriculture within the county consistent with General Plan Agricultural Preservation and Land Use Policy AG/LU-4 ("The County will reserve agricultural lands for agricultural use including lands used for grazing and watershed/ open space...") and General Plan Economic Development Policy E-1 (The County's economic development will focus on ensuring the continued viability of agriculture...).

The General Plan includes two complimentary policies requiring wineries to be designed generally of a high architectural quality for the site and its surroundings. The proposed winery will convey the required permanence and improving the buildings overall attractiveness. There are no applicable habitat conservation plans or natural community conservation plans applicable to the property.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XI.	**MINERAL RESOURCES.** Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion:

a/b. Historically, the two most valuable mineral commodities in Napa County in economic terms have been mercury and mineral water. More recently, building stone and aggregate have become economically valuable. Mines and Mineral Deposits mapping included in the Napa County Baseline Data Report (*Mines and Mineral Deposits*, BDR Figure 2-2) indicates that there are no known mineral resources nor any locally important mineral resource recovery sites located on or near the project site.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XII.	**NOISE.** Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c)	A substantial permanent increase in Ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d)	A substantial temporary or periodic increase in Ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion:

a/b. The project will result in a temporary increase in noise levels during the brief construction of the project. Construction activities will be limited to daylight hours using properly muffled vehicles. Given the proximity to the neighbors, the closest of whom is located over 400 feet away from the winery building site, there is a relatively low potential for significant adverse impacts related to construction noise. To control noise from construction activities, the County has established noise limits for construction activities and all construction activities will be conducted in compliance with the Napa County Noise Ordinance (Napa County Code Chapter 8.16). Construction activities are limited to the period of 7AM-7PM on weekdays, during normal hours of human activity and avoiding noise sensitive hours. Further, conditions of approval would require construction activities to be limited to daylight hours, vehicles to be muffled, and backup alarms adjusted to the lowest allowable levels. Compliance with the regulations will ensure that the proposed project will not result in long-term significant construction noise impacts.

c/d. Wineries are the predominant non-residential land uses within the County. Noise from winery operations is generally limited and intermittent, meaning the sound level can vary over the course of the year, depending on the activities at the winery. The primary noise-generating activities are equipment associated with wineries include refrigeration equipment, bottling equipment, barrel washing, de-stemmer and press activities occurring during the harvest crush season, and delivery and delivery trucks and other vehicles. Community noise is commonly described in terms of the "ambient" noise level which is defined as the all-encompassing noise level associated with a given noise environment. The Napa County General Plan EIR indicates the average, or equivalent, sound level (L_{eq}) for winery activities is 51dBA in the morning and 41dBA in the afternoon. Audibility of a new noise source and/or increase in noise levels within recognized acceptable limits are not usually considered to be significant noise impacts, but these concerns should be addressed and considered in the planning an environmental review processes.

The standard conditions of approval require that any exterior winery equipment be enclosed or muffled and maintained so as not to create a noise disturbance in accordance with the Napa County Code. The applicant has indicated that the winery equipment such as crusher or de-stemmer (60-67 dBA average at 70 feet), will be located within the indoor crush area of the winery building. With the location of the equipment within the building and the distance between the equipment and the receptors, the potential noise impacts will not reach a level of significance. The proposed marketing activities could create additional noise impacts, with the submitted marketing plan including a number of events on a weekly, monthly and annual basis, one of which would include up to 500 visitors (1 per year). The Napa County Noise Ordinance, which was adopted in 1984, sets the maximum permissible received sound level for a residence in a rural area as 45 dBA between the hours of 10 p.m. and 7 a.m.; While the 45 dBA limitation is strict (45 dBA is roughly equivalent to the sound generated by a quiet conversation), the area surrounding the subject property is developed, with a scattering of homes located in the immediate vicinity and directly adjacent to the site with the nearest residences located about 400 feet from winery building site. The potential for the creation of significant noise from visitation is significantly reduced, since the tasting areas are predominantly within the winery itself, and large gatherings for events will occur indoors within the barrel areas of the winery. Continuing enforcement of Napa County's Noise Ordinance by the Division of Environmental Health and the Napa County Sheriff, including the prohibition against amplified music, should further ensure that marketing events and other winery activities do not create a significant noise impact. Events and non-amplified music are required to finish by 10:00 p.m. every evening.

e/f. The project site is not located within an airport land use plan or within two miles of a public airport or within the vicinity of a private airstrip.

Mitigation Measures: None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII. **POPULATION AND HOUSING.** Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:

a. Staffing for the winery would include a maximum 11 employees eight (8 full time and 3 part-time), plus an additional 19 employees during harvest. The Association of Bay Area Governments' *Projections 2003* figures indicate that the total population of Napa County is projected to increase some 23% by the year 2030 (*Napa County Baseline Data Report,* November 30, 2005). Additionally, the County's *Baseline Data Report* indicates that total housing units currently programmed in county and municipal housing elements exceed ABAG growth projections by approximately 15%. The eleven positions which are part of this project will most likely lead to some population growth in Napa County. However, relative to the County's projected low to moderate growth rate and overall adequate programmed housing supply, that population growth does not rise to a level of environmental significance. In addition, the project will be subject to the County's housing impact mitigation fee, which provides funding to meet local housing needs.

   Cumulative impacts related to population and housing balance were identified in the 2008 General Plan EIR. As set forth in Government Code §65580, the County of Napa must facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community. Similarly, CEQA recognizes the importance of balancing the prevention of environment damage with the provision of a "decent home and satisfying living environment for every Californian." (See Public Resources Code §21000(g).) The 2008 General Plan sets forth the County's long-range plan for meeting regional housing needs, during the present and future housing cycles, while balancing environmental, economic, and fiscal factors and community goals. The policies and programs identified in the General Plan Housing Element function, in combination with the County's housing impact mitigation fee, to ensure adequate cumulative volume and diversity of housing. Cumulative impacts on the local and regional population and housing balance will be less than significant.

b/c. This application will not displace a substantial volume of existing housing or a substantial number of people and will not necessitate the construction of replacement housing elsewhere.

Mitigation Measures: None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. **PUBLIC SERVICES.** Would the project result in:				
a) Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

Discussion:

a. Public services are currently provided to the project site and the additional demand placed on existing services would be marginal. Fire protection measures are required as part of the development pursuant to Napa County Fire Marshall conditions and there will be no foreseeable impact to emergency response times with the adoption of standard conditions of approval. The Fire Department and Engineering Services Division have reviewed the application and recommend approval as conditioned. School impact mitigation fees, which assist local school districts with capacity building measures, will be levied pursuant to building permit submittal. The proposed project will have little to no impact on

public parks. County revenue resulting from any building permit fees, property tax increases, and taxes from the sale of wine will help meet the costs of providing public services to the property. The proposed project will have a less than significant impact on public services.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XV.	**RECREATION.** Would the project:				
	a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
	b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion:

a/b. The project would not significantly increase the use of recreational facilities, nor does the project include recreational facilities that may have a significant adverse effect on the environment.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI.	**TRANSPORTATION/TRAFFIC.** Would the project:				
	a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system and/or conflict with General Plan Policy CIR-16, which seeks to maintain an adequate Level of Service (LOS) at signalized and unsignalized intersections, or reduce the effectiveness of existing transit services or pedestrian/bicycle facilities?	☐	☐	☒	☐
	b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the Napa County Transportation and Planning Agency for designated roads or highways?	☐	☐	☒	☐
	c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
	d) Substantially increase hazards due to a design feature, (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
	e) Result in inadequate emergency access?	☐	☐	☒	☐
	f) Conflict with General Plan Policy CIR-23, which requires new uses to meet their anticipated parking demand, but to avoid providing excess parking which could stimulate unnecessary vehicle trips or activity exceeding the site's capacity?	☐	☐	☐	☒
	g) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

Discussion:

a/b. The subject 26.53 acre parcel is located on the east side of Dunaweal Lane, designated a local road by the General Plan, between State Highway 29 and Silverado Trail. Access to the proposed winery would be from both directions of Dunaweal Lane, via a 24 ft. wide driveway. The intersections with State Highway 29 and Silverado Trail are unsignalized; southbound traffic on State Highway 29 has a southbound left turn lane. There are no other wineries pending or unbuilt on Dunaweal Lane and there are three existing wineries located on Dunaweal Lane:

Clos Pegase Winery, Sterling Vineyards, and Twomey Cellars. The project proposes to establish a 200,000 gallon/year winery. The project proposes 22 on-site parking spaces with 2 loading areas (15 visitor spaces and 7 employee spaces) to serve the facility. The parking area also proposes to include an electric vehicle charging station space and one visitor clean air vehicle space. The proposed maximum daily visitation will be 75 persons; 90 persons on weekends. There will be 25 or greater on-site employees (production and hospitality): 8 full-time and 3 part-time, but will increase during harvest to 20 full-time and 10 part-time. Nine (9) marketing events per year are proposed: four (4) events with maximum 75 guests; four (4) events with a maximum 200 guests; and one (1) harvest event with a maximum 500 guests.

As part of the project, the project proposes to minimize the peak hour employee trips by scheduling production employee shifts daily from 7:00 AM to 3:00 PM and scheduling the hospitality staff daily from 9:30 AM to 6:30 PM in a transportation demand management program, removing the employee trips generated during the PM peak period. The proposed employee shift scheduling will be included as a condition of approval for the project. The resulting weekday PM peak hour trips will be associated with tasting visitors only, where based upon the County trip generation sheet would be 16 vehicles, 6 inbound and 10 outbound. The report identified administrative employees scheduled to leave during the PM peak hour, however, the applicant advised that no administrative personnel would be located at this winery.

Traffic conditions on roads and at intersections are generally characterized by their "level of service" or LOS. LOS is a convenient way to express the ratio between **volume** and **capacity** on a given link or at a given intersection, and is expressed as a letter grade ranging from LOS A through LOS F. Each level of service is generally described as follows:

LOS A- Free-flowing travel with an excellent level of comfort and convenience and freedom to maneuver.
LOS B- Stable operating conditions, but the presence of other road users causes a noticeable, though slight, reduction in comfort, convenience, and maneuvering freedom.
LOS C- Stable operating conditions, but the operation of individual users is substantially affected by the interaction with others in the traffic stream.
LOS D- High-density, but stable flow. Users experience severe restrictions in speed and freedom to maneuver, with poor levels of comfort and convenience.
LOS E- Operating conditions at or near capacity. Speeds are reduced to a low but relatively uniform value. Freedom to maneuver is difficult with users experiencing frustration and poor comfort and convenience. Unstable operation is frequent, and minor disturbances in traffic flow can cause breakdown conditions.
LOS F- Forced or breakdown conditions. This condition exists wherever the volume of traffic exceeds the capacity of the roadway. Long queues can form behind these bottleneck points with queued traffic traveling in a stop-and-go fashion. (2000 Highway Capacity Manual, Transportation Research Board)

General Plan Policy CIR-16 states that "The County will seek to maintain an arterial Level of Service D or better on all County roadways, except where maintaining this level of service would require the installation of more travel lanes than shown on the Circulation Map." State Highway 29 and Silverado Trail are listed as two-lane Rural Throughways on the General Plan Circulation Map. A one percent criteria for the threshold of significance is used for analysis because it is well within the range of daily variation in traffic as well as within the range of the accuracy of travel demand forecasts and therefore not likely to be noticeable to drivers.

A focused traffic analysis addressing potential traffic impacts and access needs for the proposed Girard winery was prepared by W-Trans ("Traffic Impact Study for the Girard Winery Project", dated 12/18/2014). Then, in response to public comments, a supplemental traffic analysis was submitted ("Response to Comments on the Traffic Impact Study for the Girard Winery Project," dated 4/9/15). The report stated that mechanical tube counts were collected for three consecutive days (Thursday through Saturday) in March 2014 and then intersection counts were taken during the PM Peak period in September 2014 at the Silverado Trail/Dunaweal Lane and the State Route 29/Dunaweal intersections. The total volume of traffic on Dunaweal ranged from 1,484 vehicles (NB 828/SB 746) on a Thursday, to 1,691 vehicles (NB 880/SB 811) on Saturday. Using the turning movement data collected at the two intersections together with the current configurations, existing operating conditions at each intersection were evaluated. The report concluded that both intersections are currently operating at LOS A or B overall and on all approaches. With all approaches at LOS A or B, the current operation of both intersections would be considered acceptable. While weekend operation was not evaluated, given the similarity of volumes on a weekday versus a weekend day together with the very low average delays currently being encountered, the report found that it appears reasonable to conclude that operation during the weekend peak period is also low and therefore acceptable.

The County of Napa's Winery Traffic Information /Trip Generation sheet was used for the report to determine the anticipated traffic generation. The anticipated daily trip generation and the PM peak hour generation (4:00 PM – 6:00 PM) for the project, winery plus tasting room, is projected as follows:

		Trip Generation	Trip Generation
Weekday employees	8 full-time 3/part-time	24/6 trips	26 weekday PM peak hour 29 weekend PM peak hour
Weekend employees	2 full/4 part-time	6/8 trips	
Visitors	52 weekday/62 weekend	40/44 trips	
Truck trips	---	4 trips	

+Harvest Saturday	20 full/10 part-time/62 visitors/ truck trips	61/19/44/4 trips	142 daily trips
Event staff	30	60 trips	20 Additional trips
Event trucks	10	20 trips	
Event Guests	500	357 trips	

The applicant proposes to enact transportation demand management (TDM) program to eliminate adding **any** peak hour trips; the evaluated conditions would only occur if there were employee and visitor trips as estimated without the benefit of the TDM program. Given that it is relatively easy for employee and visitor trips to be managed, it appears reasonable to accept this TDM plan as a realistic and feasible option for addressing potential traffic impacts, even if they would be less than significant. However, based on the most conservative analysis it was determined that even without the TDM program, the projects trips would result in less than significant impacts.

This analysis indicates that the added volume is so small as to result in no discernable change to the operation of State Highway 29 from what would occur without the project. A review of the traffic volumes on State Highway 29 and added by the project indicates that the number of project-generated trips is one percent or less of existing volumes (The project adds 2 peak hour trips south of Dunaweal to the State Highway 29 volumes of 194 PM trips and 396 weekend trips, and 2:00 PM and 1:00 PM weekend trips, respectively, added to the 262 and 612 existing trips north of Dunaweal).

The traffic consultant concluded that upon adding project-generated trips to existing volume, both the Dunaweal Lane/State Highway 29 and the Dunaweal Lane/Silverado Trail intersections are expected to continue operating at LOS A or B overall, as well as, on all approaches.

In the April 9, 2015 supplement to the W-Trans Traffic Impact Study, an analysis was performed to determine the project's potential impact on the operation of State Highway 29 under the projected Future 2030 PM peak hour volumes. Both with the maximum estimated project volumes added to anticipated 2030 volumes and without, operation would remain at LOS E both north and south of Dunaweal Lane, with no change in the volume-to-capacity (v/c) ratios. The two study intersections are expected to operate acceptably. Based upon the projected 2030 future volumes, the two intersections are expected to operate acceptably overall, though the northbound Dunaweal Lane approach to Silverado Trail is expected to operate at LOS E and the southbound Dunaweal Lane approach to State Highway 29 is expected to operate at LOS F at the PM Peak Hour,

The report addresses the future projected traffic volumes, using the joint Napa County/Solano County 2010-2030 Travel Demand Forecasting Model. The data used included directional segment volumes along State Highway 29 and Silverado Trail for the PM peak hour. Using the 2030 and 2010 model volumes, a growth factor of 1.45 was determined for State Highway 29. This growth factor was applied to turning movements to and from Dunaweal Lane and the remainder of the future increase was added to the volumes for the through movements. The report notes that the projected 78 vehicle trips added to Dunaweal Lane during the PM peak hour would adequately represent increases associated with three new wineries or expansions to existing along Dunaweal Lane.

c. This proposed project would not result in any change to air traffic patterns. The project does not propose the construction of significantly tall structures.

d-e. Access to the proposed winery will be via a 24-ft wide driveway from Dunaweal Lane, onto the site and would meet County Road and Street Standards. The traffic impact study indicates that the calculated collision rate for Dunaweal lane at .090 collision/million vehicle miles (c/mvm) is lower than the statewide average for similar facilities. The project will not require any changes to the existing roadway or introduce incompatible roadway use. The entrance driveway is not adequate to allow on-pavement parking and therefore the driveway will remain open and will not interfere with emergency access. Dunaweal Lane is relatively flat and straight and the sight distances are more than adequate and meet the recommended distance for the posted 45 MPH speed limit. It has been determined that the installation of a left turn pocket into the project is not warranted.

f. General Plan Policy CIR-23 states that new uses shall provide adequate parking to meet their anticipated parking demand and shall not provide excess parking that could stimulate unnecessary vehicle trips or commercial activity exceeding the site's capacity. The project proposes the construction of 22 parking places (15 visitors, 7 employees) and one loading zone. Based upon estimates of 2.6 visitors/vehicle on weekday (20± vehicles) and 2.8 visitors/vehicle on weekends (22± vehicles) the parking demand per day would be satisfied by the 22 parking spaces. The parking demand generated from nine marketing events (179± vehicles at largest event) will exceed the number of parking spaces available in the parking lot. Additional parking in the paved area at the rear of the winery can be utilized during events (approximately 20,000 sq. ft. at 180 sq.ft/car =±111 cars) or shuttling from an off-site parking lot. The applicant proposes Best Management Practices to encourage a reduction of vehicle miles traveled with priority parking for efficient transportation and to use bus transportation for large marketing events. The applicant owns the winery property across the street and event guests can be shuttled over from there. No parking will be permitted within the right-of-way of Dunaweal Lane or on the entrance driveway, which is too narrow to accommodate parking.

g. There is no aspect of this proposed project that would conflict with any adopted policies, plans or programs supporting alternative transportation. Route 10 of the Vine transit system travels between the Cities of Napa and Calistoga, with a stop located on Dunaweal Lane.

Bicycle carriers are also included on the buses. Dunaweal Lane is also included on the City of Calistoga Bike Map. The paved access driveway and adequate sight distances would not interfere with bicycle use on Dunaweal Lane.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI.	**UTILITIES AND SERVICE SYSTEMS.** Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b)	Require or result in the construction of a new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c)	Require or result in the construction of a new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion:

a. The project will not exceed wastewater treatment requirements of the Regional Water Quality Control Board and will not result in a significant impact.

b. The project will connect to an existing water treatment system, and will not require construction of any new water treatment facilities that will result in a significant impact to the environment. Water will be provided by an existing well. A new sanitary wastewater system will be constructed on site. The system will be designed by a licensed engineer and will be reviewed and approved by the Division of Environmental Health.

c. The project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, which will cause a significant impact to the environment.

d. As discussed in **Section IX** above, the total County allowable water allotment for the Clos Pegase Winery property (APN: 020-150-012) is 20.39 af/yr and 26.53 af/yr for the proposed Girard Winery property (APN: 020-150-017). The Revised Phase 1 Study (Always Engineering, dated 3/26/15; supplemented 6/18/2015) consolidated the all-total allowable water allotment (46.92 af/yr) and analyzed all of the demand of the water resources on the proposed Girard Winery parcel. The two wineries will have an interrelationship resulting from the consolidation of the transient non-community water system and from the shared used process wastewater system utilizing the irrigation pond located on the proposed Girard Winery parcel. The vineyards and landscaping will be irrigated from the recycled processed wastewater, therefore, the primary demand for groundwater will come from the winery processing, domestic needs (employees, visitors, and the residence), which can be accommodated well within the allowable water allotment for either parcel: Clos Pegase, total 3.58 af/yr; the residence, 1.21 af/yr; Girard Winery 3.43 af/yr; total 8.22 af/yr. In summary, the existing yield will be sufficient to serve all uses on the property and the existing wastewater processing system ponds serve to eliminate vineyard and landscaping demands. As previously discussed, any project which reduces water usage or any water usage which is at or below the established threshold is assumed not to have a significant effect on groundwater levels.

e. Wastewater will be treated on-site and will not require a wastewater treatment provider.

f. The project will be served by a landfill with sufficient capacity to meet the projects demands. No significant impact will occur from the disposal of solid waste generated by the project.

g. The project will comply with federal, state, and local statutes and regulations related to solid waste.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII.	**MANDATORY FINDINGS OF SIGNIFICANCE**				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Discussion:

a. The project as proposed will not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. The project will be located on lands that have been historically developed in agriculture, and there are existing wastewater ponds and an irrigation reservoir on the property.

b. The project does not have impacts that are individually limited, but cumulatively considerable. Potential air quality, greenhouse gas emissions, hydrology, and traffic impacts are discussed in the respective sections above. The project would also increase the demands for public services to a limited extent, increase traffic and air pollutions, all of which contribute to cumulative effects when future development in Napa Valley is considered. Cumulative impacts of these issues are discussed in previous sections of this Initial Study, wherein the impact from an increase in air pollution is being addressed as discussed in the project's Greenhouse Gas Voluntary Best Management Practices including but not limited to use of alternative fuel and electrical vehicles in their operational fleet; vehicle miles travelled reduction plan through priority parking for efficient transportation; bus transportation for large marketing events; bicycling incentives; and installation of an electrical vehicle charging station. Potential impacts are discussed in the respective sections above. The project trip generation was calculated from winery operations, where the calculated trips reflect total visitation, on-site employees and wine production trips generated by the winery. Under the Napa County General Plan, traffic volumes are projected to increase and will be caused by a combination of locally generated traffic as well as general regional growth. The General Plan EIR indicates that much of the forecasted increase in traffic on the arterial roadway network will result from traffic generated outside of the county, however the project will contribute a small amount toward the general overall increase. The Traffic Impact Study prepared for the project concluded that under future plus project conditions, the overall operation at the State Highway 29/Dunaweal Lane intersection for the southbound (Dunaweal) approach is projected to be reduced to a LOS F.

General Plan Policy CIR-16 states that "The County will seek to maintain an arterial Level of Service D or better on all County roadways, except where maintaining this level of service would require the installation of more travel lanes than shown on the Circulation Map." State Highway 29 and Silverado Trail are listed as two-lane Rural Throughways on the General Plan Circulation Map. As discussed above under **Section XVI Transportation**, implementation of mitigation measures to eliminate the project's additional traffic at the PM peak hours will help to delay the expected future deterioration of the level of service on Highway 29 to LOS F at PM Peak Hour.

c. There are no environmental effects caused by this project that would result in substantial adverse effects on human beings, whether directly or indirectly. No hazardous conditions resulting from this project have been identified. The project would not have any environmental effects that would result in significant impacts.

Mitigation Measures: None required

A Tradition of Stewardship
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Division of Public Works

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Steven E. Lederer
Director

April 3, 2015

From: Steve Lederer, Director, Napa County Department of Public Works
To: Planning, Building & Environmental Services

Subject: Girard Water Use Analysis, Girard Winery Use Permit (#P14-00053-UP)

Planning, Building, and Environmental Services (PBES) requested Public Work's review and analysis regarding water availability and water quality concerns raised during the processing of Girard Winery Use Permit (#P14-00053-UP).

Evidence offered in opposition to the project is primarily contained in:

1) Norma Tofanelli letter, dated January 21, 2015, which includes an attachment entitled "Dunaweal Area Well Records", dated 1987), and
2) Tom Myers Technical Memorandum (TM), dated January 20, 2015

Summarizing these concerns from the Myers TM (bold font added by this author):

1) "The proposed expansion of pumping for the Girard Winery project could possibly have two potentially significant impacts. First, the pumping could **unacceptably lower the groundwater levels** because there is not as much recharge on the area as the county assumes. This memorandum considers the river base flow and suggests that existing recharge estimates may be too high. **Pumping could also draw water from the Napa River.**
2) Second, the **pumping could affect groundwater flow directions and cause boron and arsenic plumes** to expand through a larger portion of the Calistoga area. There are very high concentrations of each contaminant northwest of the project site and along the base of the mountains south of the site. The project pumping, especially if it causes substantial drawdown due to too little recharge, could create a drawdown which pulls contaminants toward the project."

Analysis of Applicant Response

In response to these concerns, the applicant has offered a revised Water Availability Analysis (WAA) dated March 26, 2015. The key points covered in this revised WAA are as follows:

1) **Groundwater Levels:** While disagreeing with the analysis Myers conducted of earlier groundwater monitoring reports, the revised Girard WAA also now includes in this project record (by reference), the 2014 Annual Groundwater Monitoring Report, which clearly states

that, based on the network of monitored groundwater levels in the area, the groundwater levels in the area south of Calistoga are stable, even in the context of the current drought. (The 2014 Annual Report was not available to either party until it was presented to the Board of Supervisors at their March 3, 2015 meeting). The WAA continues by comparing proposed groundwater use on the parcels (8.23 acre-ft/year for both wineries combined) to a calculated recharge number (34.5 acre-ft/year), and found that the proposed use is only some 25% of the recharge rate. The Myers report also calculated a recharge rate, but then compared it to a use of 29 acre-ft/year, their presumed maximum use of the well if it was operated on a full basis. That assumption of 100% well run time is not contained in the project proposal. This substantial evidence provided by the Girard WAA indicates that the Myers report is not factually supported by evidence.

Drawing Water From The Napa River: While the Myers report presents this hypothesis, the Girard WAA (under response to concerns), points out, among other site specific facts, that the project wells are approximately 1500 feet from the Napa River (the normal distance limit beyond which this issue is not a concern), and that the groundwater level in this area is below the level of the riverbed, meaning that the river and the groundwater are likely not hydraulically connected.

2) **Drawing Arsenic and Boron Into the Area:** The revised WAA provides water quality data from the project well, showing that arsenic above Maximum Contaminant Levels (MCLs) has not been found in samples from the project well, and that water quality sampling from 3 nearby wells tested for boron found levels below the State Notification Level (Boron does not have an MCL). The WAA continues (under response to concerns) calculating reasonably expected drawdown and cones of depression expected from project pumping, and finds that the proposed pumping is "highly unlikely" to result in contaminant migration.

Public Works Review

While the Applicant's submittal provides substantial evidence, Public Works (PW) conducted its own review and evaluation of available evidence as well. This review included input and discussions with Vicki Kretsinger, who was the lead licensed professional in producing the various LSCE reports referenced herein.

Public Works comments to the Myers report are as follows:

1) Recharge and Groundwater Levels:
    a. The suggested impact relating to recharge is technically unsupported. Groundwater levels in the Calistoga area are stable based on hydrographs that have been updated in the 2014 Annual Report.
    b. Myers discusses the recharge analyses conducted by LSCE & MBK (2013) and goes on to describe why he believes recharge is overestimated. However, his analysis relies on very generalized application of base flow separation techniques which do not account for climatic variation or other factors that could affect base flow.
    c. There is no basis in the data presented to support his opinion that groundwater extraction is exceeding the rate of recharge to the aquifer system. On the contrary, groundwater levels for representative wells in the area suggest otherwise.

2) Myers states that "drawdown will eventually change the flow gradient for discharge to the Napa River and pumping will affect the river."
    a. There is no technical basis provided to justify this conclusion. Pumping of a well for some unspecified period of time at an uncertain rate from a well constructed in uncertain geologic conditions is not evidence that the gradient will change. He actually says "treating the aquifer as confined is preferable based on the low conductivity clay in the upper part of the log." This does not support his hypothesis relating to eventual change in the flow gradient for discharge to the River, since a confined aquifer would, by definition, be physically separated from surface waters by a confining geologic unit.
    b. From a practical standpoint, the existing conditions surrounding the property argue against the hypothesis of this project causing a flow gradient change. The two wells involved are both existing (constructed in 1971 and 1985). In addition, according to the December 17, 2014 staff report, there are 10 other wineries operating within one mile of the proposed project, along with numerous residences and vineyards, all with their own groundwater wells. Given this existing network of groundwater wells, data indicating a stable water table, and the small increase in pumping associated with the proposed project, it is simply not credible in the eyes of this engineer that this small percentage of additional pumping is likely to change the direction of the flow gradient.

3) Myers describes use of the standard Theis equation to assess potential drawdown.
    a. Drawdown calculations conducted by the Girard WAA, and admittedly quick computations by LSCE using variables cited by Myers, came to an entirely different conclusion relating to drawdown. Drawdown estimates that we arrived at are a couple of orders of magnitude lower than what Myers shows in plots. There does not appear to be factually supported evidence that there would be a significant effect on wells in the vicinity of the project.

To further investigate the condition of the area, PW requested that PBES query their permit database for new wells constructed within 1500 feet of the subject parcel. The database produced records for 7 new wells since 2004. While the reason for new wells is not formally tracked, information provided by Kim Withrow (who has been in the Department this whole time period and is the current supervisor of the section responsible for well permits) indicates that only one of the 7 wells was drilled to replace an existing well, and that that was done because the existing well was located too close to a septic system, not because of water quantity issues. While PW appreciates the 1987 well data supplied by Ms. Tofanelli, we consider the well data from the past 10 years to be more relevant.

PW also requested water quality data from Ms. Withrow on the existing project wells. Her response is as follows:

> "The well serving the Clos Pegase water system was tested for arsenic in 2009 and the result was 4.1 ug/L. The MCL for arsenic in drinking water is 10 ug/L. Clos Pegase isn't required to sample for arsenic on a regular basis because of their permit type. Sterling sampled one of their wells in 2014 and the result for arsenic was 2.1 ug/L. Another of the wells was sampled in 2010 and the level of arsenic was 5.6 ug/L. Sterling had some elevated sample results in one well (I believe in 2009) for arsenic (16 ug/L), zinc (7200 ug/L), mercury (8.3 ug/L) and aluminum (4600 ug/L). Sample results from 2014 indicated arsenic at 2.1 ug/L, aluminum at 230 ug/L and zinc at 4800 ug/L in the same well."

This information is consistent with that provided in the Girard WAA, indicating that naturally occurring arsenic (but not above the MCL level) is already chronic in the area, but there is no evidence to support the hypothesis that there are, or will be, increasing levels from Calistoga. (Please note that the 2009 Sterling sample was most likely a result of laboratory contamination as it is inconsistent with all other sampling data in the area, but it is nonetheless reported here for full disclosure purposes).

Ms. Tofanelli offered anecdotal reports of water problems on neighbor lands, as well as certain parties trucking in water. In the interest of full disclosure this information is repeated here, though we have no additional information to corroborate or investigate this.

Summary and Recommendations

In summary, the substantial evidence in the record indicates that:

1) The groundwater table in the area shows a long term stable trend;
2) Impacts on neighboring wells or the Napa River are not anticipated;
3) The project is unlikely to cause directional flow changes with would draw chemicals from Calistoga into the area.

Public Works does recommend that the Planning Commission include the following conditions of approval if the permit is approved:

1) The permittee shall be required for the life of the project to monitor and maintain records of water volumes pumped from the two wells. This data will be made available to the County upon request.
2) If combined water use from the wells exceeds 10 acre-ft. in a given calendar year, the permittee shall proactively notify the county, providing
    a. water volume used,
    b. the reason for increased use,
    c. the plan the winery has for reducing water use, and
    d. other information which may be affecting water use as reasonably requested by the County.
3) The permittee shall be required to include either or both wells into the County's Groundwater Monitoring program if the county requests that they do so.

Girard Winery Water Availability Analysis

Prepared for:

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March 26, 2015

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Introduction

The proposed Girard Winery is planned to be located at 1077 Dunaweal Lane, Calistoga, CA (APN 020-150-017). The proposal consists of construction of a new winery with a production capacity of 200,000 gallons of wine per year and associated site improvements, tasting room, and hospitality events.

In February 2014, Vintage Wine Estates filed a Use Permit Application and proposed Negative Declaration pursuant to the provisions of the California Environmental Quality Act (CEQA) for the proposed Girard Winery. As part of the application process a Phase I Water Availability Analysis was performed according to Napa County guidelines. The Phase I study included an estimate of the current and proposed water use and a determination of the "allowable water allotment".

In January 2015, comments were submitted to the county by Shute, Mihaly, and Weinberger LLP on behalf of the Tofanelli family. These comments included a hydrologic report prepared by Tom Meyers which claimed that the project could have significant impacts on water supply and water quality conditions. In response to these comments, Napa County directed the applicant to conduct a Phase II Water Availability Analysis. This document describes the analyses conducted to meet the Phase II requirements as well as additional analyses which have been conducted to address the various concerns raised about the project.

Project Description

The proposed Girard Winery to be located at 1077 Dunaweal Lane, Calistoga lies within the Napa Valley floor. The project proposes to utilize an existing water system (ID #28-01007) which is shared with an adjacent property (APN 020-150-012) where the existing Clos Pegase winery is located. The water system is supplied by two wells: the Clos Pegase Well (Well #1) which was drilled in July of 1985 and the Girard Well (Well #2) which was drilled in June of 1971 (Figure 1; Table 1). The water system consists of the two wells, pressure tanks, a water treatment system (sediment filters, water softeners, ultraviolet disinfection), and a 58,000 gallon storage tank. An existing irrigation storage pond supplied by vineyard field sub-drains is used to supply water for vineyard and landscape irrigation and frost protection.

Table 1: Water supply wells.

Well Details	Well #1 Clos Pegase	Well #2 Girard
Date Drilled	Jul-85	Jun-91
Depth (ft)	185	220
Screened Interval (ft)	80 - 185	80 - 220

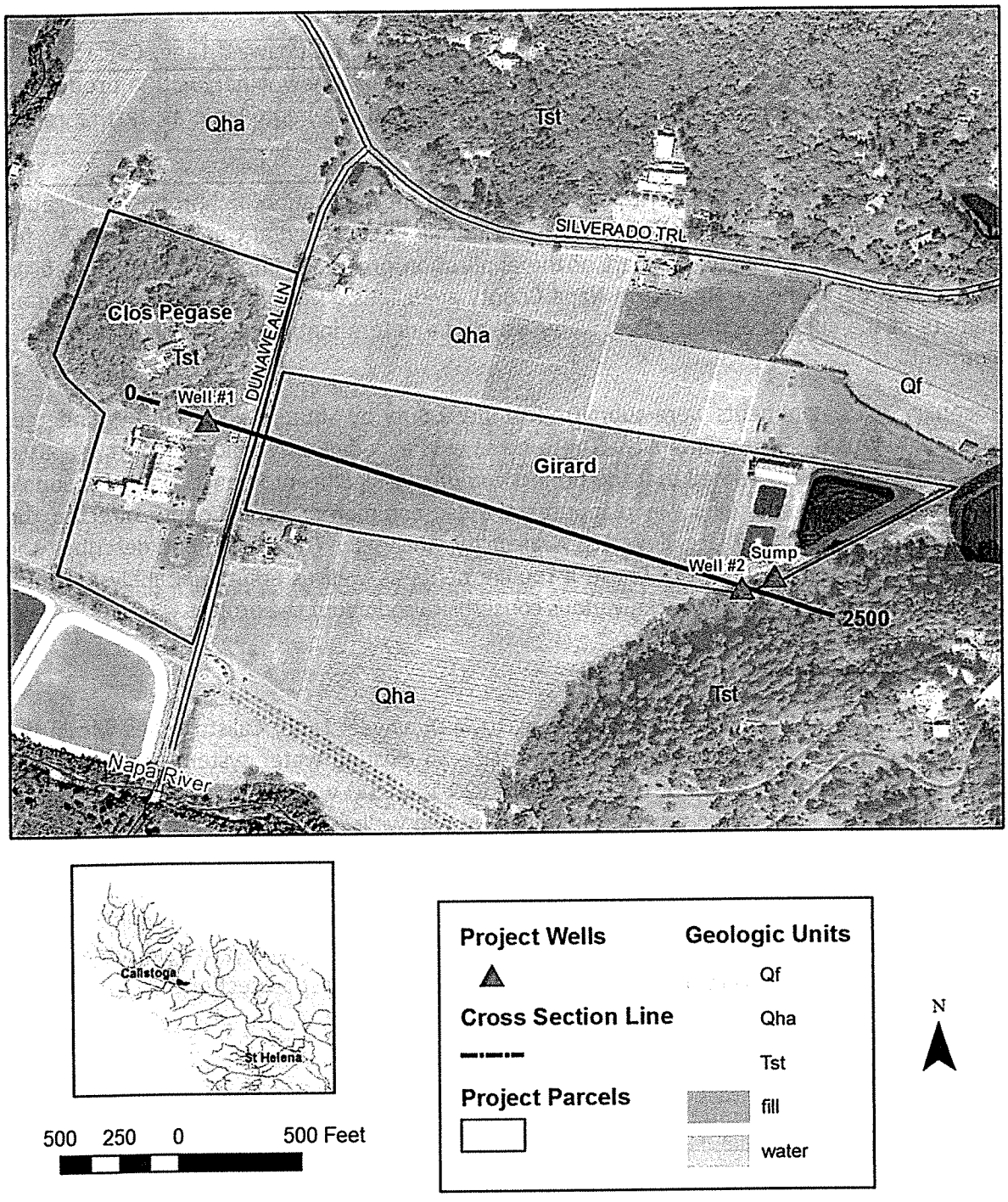


Figure 1: Project parcel map indicating well locations and primary geologic units.

Hydrogeology

The Clos Pegase and Girard parcels are located within the Napa Valley floor about 1500 ft east of the Napa River and about one mile south of Calistoga. The surficial geology is primarily Holocene Alluvium (Qha) with the tuffaceous member of the Sonoma Volcanics (map unit Tst) forming the hills on the northern portion of the Clos Pegase parcel and to the east and southeast of the Girard parcels (Figure 1). A small portion of the northeast corner of the Girard parcel is mapped as Quaternary Alluvial Fan Deposits (Qf). The Clos Pegase well (Well #1) is drilled completely within the tuff and the Girard well (Well #2) penetrates some 90-ft through the alluvium and into the underlying tuff. The Girard well is screened almost entirely within the tuff and the portion of the screened interval within the alluvium is indicated as clay on the driller's log; hence the well is effectively isolated from the alluvium. Given that both wells penetrate the tuff and that the tuff is also exposed in the hills both west and east of the valley at this location, it is reasonable to assume that the tuff underlies all of both parcels. A conceptual geologic cross section through the two wells is presented in Figure 2.

Alluvium

The alluvium within the north Napa Valley consists of lenticular, unconsolidated, poorly sorted deposits of gravel, sand, silt, and clay. Individual lenses are generally not more than 10-ft thick but may be laterally extensive (Faye, 1973). The alluvium is considered one of the principle water-bearing units in the area and well yields can vary substantially from 50 to 3,000 gal/min depending on the number and thickness of gravel and sand lenses penetrated by a particular well. Groundwater is generally unconfined though confined conditions are possible locally. Faye (1973) found that both the thickness and hydraulic conduictivity (K) of the alluvium increases from north to south and from the edges of the valley towards the Napa River. In the vicinity of the project parcels, the alluvium is estimated to be less than 100-ft thick and the K is estimated to be between 30 and 50 ft/day (Faye, 1973). DHI (2006) also estimated the thickness of the alluvium as part of the development of a distributed surface water/groundwater model based on the data from Faye (1973) and interpretation of additional driller's logs. In that study, the alluvial thickness was estimated to be on the order of 70-ft in the vicinity of the project parcels.

Sonoma Volcanics

The Sonoma Volcanics consist of a thick and highly variable series of volcanic rocks including basalt, andesite, and rhyolite lava flows, tuff, tuff breccia, agglomerate, scoria, and their sedimentary derivatives (Kunkel and Upson, 1960). The tuffaceous, scoriaceous, and sedimentary units are the principle water-bearing units whereas the lava flows generally yield little to no water (Kunkel and Upson, 1960; Faye, 1973).

Many wells in the Calistoga area are relatively shallow and tap water within the alluvium. The deeper wells draw water from the underlying Sonoma Volcanics. Water in the Sonoma Volcanics is commonly confined though few wells completed in the unit are artesian. The

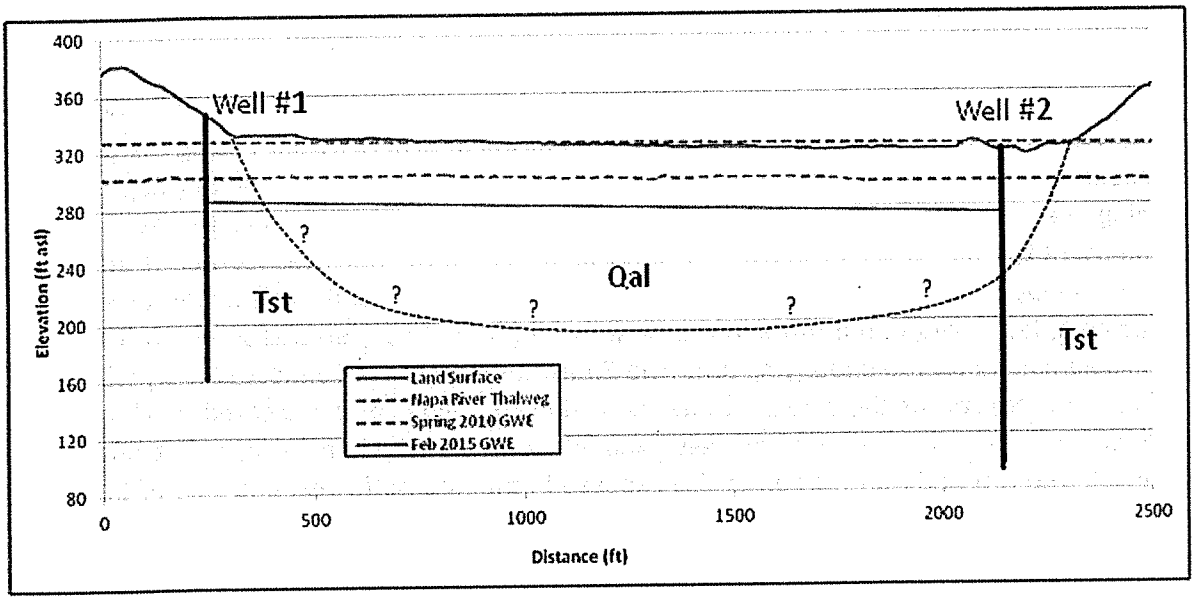


Figure 2: Geologic cross section through the project wells.

artesian wells are generally deep and screened entirely within the Sonoma Volcanics supporting the notion of confined conditions (Kunkel and Upson, 1960). Faye (1973) estimated that the hydraulic conductivity (K) of the permeable units within the Sonoma Volcanics is on the order of 0.01 to 0.1 ft/day. Well yields are generally less than for the alluvium and average 32 gpm based on sample of 140 wells (Faye, 1973).

Groundwater Elevations

Luhdorff and Scalmanini (2011) compiled available long-term groundwater elevation hydrographs for various subareas within Napa County. Groundwater levels within the Napa Valley Floor - Calistoga subarea indicate that groundwater levels have generally been stable since at least 1950 and that no significant long-term trends in groundwater elevation occur. Short-term declines in elevation associated with periods of below average precipitation (such as the 1976-1977 drought) do occur, however elevations recover to near pre-drought conditions within a few years. Depths to groundwater are generally shallow (less than 10-ft in the Spring) and seasonal fluctuations are relatively small and generally less than 10-ft (Luhdorff and Scalmanini, 2011). Data compiled for a recent annual report on the county's groundwater monitoring program confirmed the long-term stability of groundwater elevations in the Calistoga area (Luhdorff and Scalmanini, 2015). Data for the four wells with long-term monitoring data that are closest to the project parcels are reproduced from Luhdorff and Scalmanini (2011) in Figure 3.

Luhdorff and Scalmanini (2013) presented groundwater elevation contours from Spring of 2008 and Spring of 2010 which indicate that the general direction of groundwater flow is roughly parallel to the valley axis in the northern Napa Valley. The underlying well data is insufficient to provide details at finer spatial scales other than to note that groundwater elevations were on

the order of 315 to 325 ft asl in the vicinity of the project parcels. These elevations are within a few feet of land surface, suggesting that groundwater likely occurs at very shallow depths beneath the low-lying portions of the project parcels.

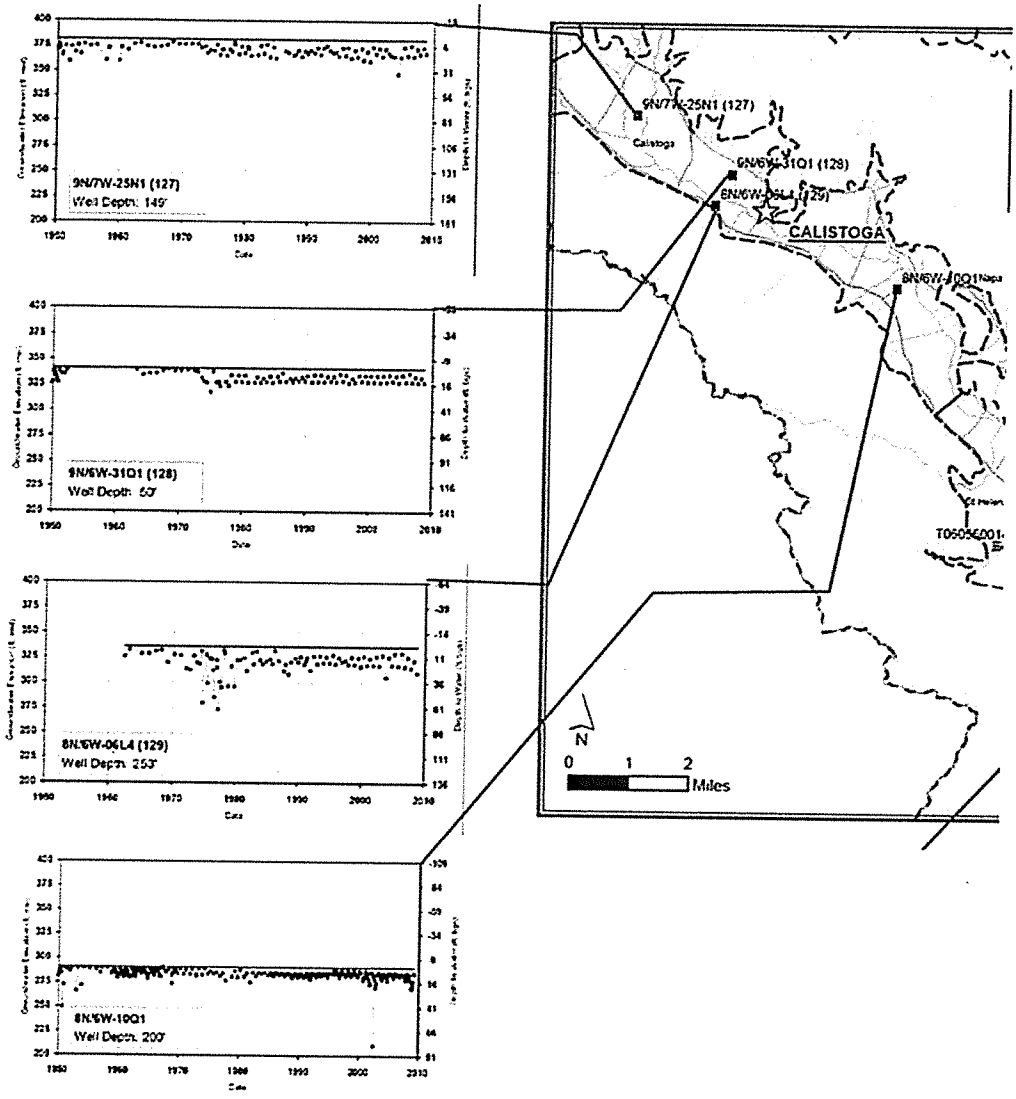


Figure 3: Groundwater elevation data for wells in the Calistoga area reproduced from Luhdorff and Scalmanini (2011); the yellow star indicates the location of the project parcels.

Interpretation of the well hydrographs and elevation contour maps is complicated by the fact that many of the wells likely penetrate both the alluvium and the underlying Sonoma Volcanics. Given the consistently shallow depths to groundwater, it is reasonable to assume that most of the wells are perforated within the alluvium and many are likely also perforated within the underlying tuffaceous rocks.

In prior groundwater investigations of regional hydrogeology, there was no attempt to isolate wells completed entirely within the Sonoma Volcanics in the Calistoga area in order to characterize the confined volcanic aquifer beneath the alluvium. Thus little is known about the potentiometric surface of the Sonoma Volcanics in this area and its relationship to the water table in the overlying alluvium. The two project wells are, however, completed almost entirely within the volcanic rocks. Water level measurements at the project wells in February 2015 indicate static depths to groundwater are on the order of 35 to 50-ft, some 30 to 40-ft below regional groundwater elevations (Figure 2). This observation supports the notion that the project wells are abstracting groundwater from the volcanic aquifer underlying the alluvium and that this groundwater occurs under confined conditions.

Groundwater Quality

Water quality analyses were compiled for various wells in the Calistoga area as part of a 2011 evaluation of groundwater conditions (Luhdorff and Scalmanini, 2011). Boron concentrations ranged from non-detected to 14,000 ug/L, substantially higher than the 1,000 ug/L drinking water standard. Arsenic concentrations ranged from non-detected to 85 ug/L, also substantially higher than the 10 ug/L maximum contaminant level (MCL). Most of the poor quality groundwater was found to occur north of Calistoga.

Water quality analyses were performed on a sample from the Clos Pegase Well (Well #1) in March 2009 and analyzed by Brelje and Race Laboratories. The water was found to meet all primary standard MCLs and secondary levels were exceeded for iron and manganese (Figure 4). Arsenic concentrations measured at 4.1 ug/L were below the MCL. The sample was not analyzed for Boron, however the three closest wells to the project site that were compiled by Luhdorff and Scalmanini (2011) indicate concentrations ranging from 120 to 200 ug/L (well below the MCL).

Water Demand

Existing water uses that rely on the groundwater-supplied water system include Winery Process Use, Winery Domestic Use, and Residential Use associated with the Clos Pegase parcel. Proposed water uses include Winery Process Use and Winery Domestic Use associated with the Girard parcel. The existing vineyards on both the Clos Pegase and Girard parcels rely entirely on water from the irrigation pond located on the Girard parcel. The existing landscape irrigation on the Clos Pegase parcel as well as the proposed landscape irrigation on the Girard parcel will also rely entirely on the irrigation pond. This pond is filled from direct precipitation, shallow groundwater inflows, and shallow subsurface drainage from an existing vineyard sub-drain system. The pond has proved sufficient for meeting all irrigation, landscaping, and frost protection demands consistently over the past 15 years of operations (Jason Duval, Clos Pegase Winery, personal communication).

Existing Conditions

As part of a 2011 Due Diligence Report for the Clos Pegase Winery, the average annual Process Wastewater (PW) from 2009 through 2011 was found to be 512,000 gallons or 1.57 ac-ft/yr (Summit Engineering, 2011). Actual wine production over this period was 107,100 gallons; significantly less than the approved 200,000 gal/yr capacity. Assuming production were to be increased to the approved capacity, the existing Winery Process Use is on the order of 2.93 ac-ft/yr. This is significantly less than the Napa County Phase I Water Availability guideline of 2.15

Chemical Group: 64432 – Primary – Inorganics			
Chemical	Last Results	Units	MCL
Aluminum	<50	µg/L	1000
Antimony	<6.0	µg/L	6
Arsenic	4.1	µg/L	50
Barium	<100	µg/L	1000
Beryllium	<1.0	µg/L	4
Cadmium	<1.0	µg/L	5
Chromium	<1.0	µg/L	50
Fluoride	0.33	mg/L	2
Mercury	<1.0	µg/L	2
Nickel	<10	µg/L	100
Selenium	<5.0	µg/L	50
Thallium	<1.0	µg/L	2

Chemical Group: 64449-A&B – Secondary Standards			
Chemical	Last Results	Units	MCL
Bicarbonate	49	mg/L	
Calcium	16	mg/L	
Carbonate	<1.0	mg/L	
Hydroxide	<1.0	mg/L	
Iron	18000	µg/L	300
Magnesium	4	mg/L	
Manganese	1100	µg/L	50
Sodium	18	mg/L	
Total Alkalinity (as $CaCO_3$)	40	mg/L	
Total Hardness	58	mg/L	
pH	5.9		

Figure 4: Water quality analyses from a sample collected from the Clos Pegase Well (Well #1) in March of 2009.

ac-ft/yr per 100,000 gallons of wine indicating that the existing Clos Pegase operations are effectively conserving water relative to industry standards.

The per capita use assumptions, number of employees, and an estimate of the number of tasting visitors, and event visitors for the Clos Pegase Winery are presented in Tables 2 and 3. The Winery Domestic Use can be estimated as the sum of Employee Use (0.26 ac-ft/yr), Tasting Visitor Use (0.35 ac-ft/yr), and Event Use (0.06 ac-ft/yr) yielding an estimate of the total Winery Domestic Use of 0.67 ac-ft/yr.

Table 2: Calculation of Employee Use for the Clos Pegase Winery (Always Engineering, 2014).

Work Category	# of Employees	# Work Days per Year	Use per Employee (gal/day)	Annual Water Use (ac-ft/yr)
Full-time Harvest Period	30	91	15	0.13
Part-time Harvest Period	0	0	7.5	0.00
Full-time Non-harvest Period	10	273	15	0.13
Part-time Non-harvest Period	0	0	7.5	0.00
TOTAL				**0.26**

Table 3: Calculation of Event and Tasting Room Visitor Use for the Clos Pegase Winery (Always Engineering, 2014).

Visitor Category	# of Vistors	# Days per Year	Use per Visitor (gal/day)	Annual Water Use (ac-ft/yr)
Medium Event	150	24	5	0.06
Tasting Room	105	365	3	0.35
TOTAL				**0.41**

The Clos Pegase parcel has one residence. The Napa County Phase I Water Availability guidelines suggest a base Residential Use value of 0.50 to 0.75 ac-ft/yr plus an additional 0.10 ac-ft/yr for an uncovered pool. The residence has approximately 0.15 acres of landscaping which is primarily grass. Based on the CIMIS ETo data for Oakville, the irrigation demand for this landscaping is approximately 0.36 ac-ft/yr. The total Residential Use can be approximated by summing the base use (0.75 ac-ft/yr), the pool use (0.10 ac-ft/yr), and the landscape use (0.36 ac-ft/yr) yielding an estimate of the total Residential Use of approximately 1.21 ac-ft/yr.

The total Existing Demand is the sum of the Winery Process Use (2.93 ac-ft/yr), Winery Domestic Use (0.67 ac-ft/yr), and Residential Use (1.21 ac-ft/yr) and is estimated to be 4.81 ac-ft/yr (Table 4).

Proposed Conditions

As discussed above for Existing Conditions, the average annual Process Use for the Clos Pegase Winery is on the order of 4.78 gallons per gallon of wine produced. Assuming a similar level of use for the Girard Winery, the proposed 200,000 gallons of wine production per year will require approximately 2.93 ac-ft/yr.

Table 4: Water Use by Use Category for the Clos Pegase Winery.

Use Category	Annual Water Use (ac-ft/yr)
Winery Process Use	2.93
Winery Domestic Use	0.67
Residential Use	1.21
TOTAL	**4.81**

Table 5: Calculation of Employee Use for the Girard Winery (Always Engineering, 2014).

Work Category	# of Employees	# Work Days per Year	Use per Employee (gal/day)	Annual Water Use (ac-ft/yr)
Full-time Harvest Period	1	91	15	0.05
Part-time Harvest Period	7	91	7.5	0.01
Full-time Non-harvest Period	8	273	15	0.10
Part-time Non-harvest Period	3	273	7.5	0.02
TOTAL				**0.18**

Table 6: Calculation of Event and Tasting Room Visitor Use for the Girard Winery (Always Engineering, 2014).

Visitor Category	# of Vistors	# Days per Year	Use per Visitor (gal/day)	Annual Water Use (ac-ft/yr)
Large Event	500	1	5	0.01
Medium Event	200	4	5	0.01
Small Event	75	4	5	0.01
Weekday Tasting Room	75	208	3	0.14
Weekend Tasting Room	100	157	3	0.14
TOTAL				**0.31**

The per capita use assumptions, number of employees, and an estimate of the number of tasting visitors, and event visitors for the Girard Winery are presented in Tables 5 and 6. The Winery Domestic Use can be estimated as the sum of Employee Use (0.18 ac-ft/yr), Tasting Visitor Use (0.28 ac-ft/yr), and Event Use (0.03 ac-ft/yr) yielding an estimate of the total Winery Domestic Use of 0.49 ac-ft/yr.

The total Proposed Demand is the sum of the Winery Process Use (2.93 ac-ft/yr) and Winery Domestic Use (0.49 ac-ft/yr), and is estimated to be 3.42 ac-ft/yr (Table 7).

Table 7: Water Use by Use Category for the Girard Winery.

Use Category	Annual Water Use (ac-ft/yr)
Winery Process Use	2.93
Winery Domestic Use	0.49
TOTAL	**3.42**

Total Proposed Demand

The total Proposed Demand is the sum of the Existing Demand for the Clos Pegase Winery (4.81 ac-ft/yr) and the Proposed Demand for the Girard Winery (3.42 ac-ft/yr), and is estimated to be 8.23 ac-ft/yr (Table 8). If water use is allocated uniformly throughout the year, this would be equivalent to a mean daily demand of 7,347 gal/day. For the purposes of determining the sufficiency of the project wells to meet the demand it is useful to consider the peak daily demand. Peak water demand occurs during the harvest period. Assuming that 50% of the total annual Process Use occurs during the three month harvest period and that the other water use components during this period are equivalent to mean daily demands indicates that peak daily demand is on the order of 12,608 gal/day.

It is important to note that the water use estimates presented here have been refined significantly since the Phase I Water Availability Analysis was conducted. The previous estimates were based largely on default values in order to be conservative (tend towards over-estimating) whereas the estimates presented here, while still conservative, have been developed based on the best available information about the subject parcels and the past and expected future winery operations.

Table 8: Summary of Existing and Proposed Water Demand.

Use Category	Annual Water Use (ac-ft/yr)
Existing Use	4.81
Proposed Use	3.42
TOTAL	**8.23**

Groundwater Recharge

Previous Estimates

The relatively high permeabilities of the alluvium within the Napa Valley Floor permit significant groundwater recharge to occur through both precipitation and seepage from streams (Faye, 1973; Luhdorff and Scalmanini 2013). Much of the stream seepage occurs along the valley margins where tributary streams leave older impermeable rocks and cross over permeable alluvium or tuff.

Luhdorff and Scalmanini (2013) noted that water recharged through the exposures of tuff in the mountains west and east of the valley eventually flows towards the tuff that is concealed by alluvium along the Napa Valley floor. This is consistent with Kunkel and Upson (1960) who found that most of the water in the Sonoma Volcanics in the Calistoga area is derived from infiltration of precipitation and seepage from streams within the outcrop areas bordering the valley.

Recharge processes within the tuffaceous units of the Sonoma Volcanics have been studied fairly extensively in the MST basin northeast of the City of Napa in contrast to the Calistoga area where they have not been studied in detail. Johnson (1977) and Farrar and Metzger (2003) performed a series of seepage experiments on the major creeks in the MST basin. Johnson (1977) concluded that infiltration from precipitation and runoff was greatest where the tuffs were exposed or underlying shallow Quaternary deposits and that the dominant source of recharge was from streambed infiltration where streams come into contact with the tuff directly.

Faye (1973) performed a water balance estimate for the north Napa Valley Groundwater Basin for an average water year (1963) and a dry water year (1931). Recharge was estimated to vary from ~2,606 ac-ft/yr during dry water years to ~17,013 ac-ft/yr during average water years. These volumes are equivalent to ~0.8 to 5.3 inches/yr, and the average year recharge is equivalent to approximately 12% of the precipitation. During average water years, approximately 53% of the recharge was derived from infiltration of precipitation, 45% was from tributary seepage, and 2% was from subsurface inflows.

Another estimate of the water balance for the north Napa Valley Groundwater Basin was performed for the period from 1962 through 1989 (Montgomery Consulting Engineers, 1991). That study estimated that that mean annual recharge was on the order of 26,800 ac-ft/yr which is equivalent to 9.2 inches/yr or ~26% of the mean annual precipitation over the same period.

DHI (2006) developed a distributed surface water/groundwater numerical model and presented water balance results for a series of sub-basins throughout the county. Results for the Napa River - Larkmead Reach sub-basin (which contains the project parcels) indicates that between 2000 and 2003 mean annual recharge was ~26% of mean annual precipitation.

Luhdorff and Scalmanini (2013) applied a Root Zone Water Balance approach utilizing observed streamflow data from the USGS Napa River at Calistoga gauging station which was active from 1976 to 1983. This analysis revealed that mean annual recharge varied substantially from ~2,000 ac-ft/yr in the extremely dry year of 1977 to ~17,200 ac-ft/yr in the wet year of 1983. These volumes are equivalent to approximately ~8.8 inches/yr or ~19% of mean annual precipitation. While this estimate did account for the spatial variations in land cover and soil characteristics, the results represent the average or lumped water balance for the entire watershed area above the gauging location including areas with high and low recharge potential whereas the earlier estimates focus on the valley floor where recharge potential is expected to be high.

Project Aquifer

The four previous estimates of recharge discussed above suggest that mean annual groundwater recharge within the northern Napa Valley is equivalent to approximately 12% to 26% of the mean annual precipitation. For the purposes of estimating recharge to the project aquifer, we selected the Luhdorff and Scalmanini (2013) values since they represent the most recent water balance work in the area and the estimates lie in the middle of the range between the low and high end estimates.

Normalizing the Luhdorff and Scalmanini (2013) recharge estimates by drainage area reveals that the average annual recharge over the 1976 - 1983 period was 8.8 inches and varied substantially from 1.7 inches in the extremely dry year of 1977 to 14.8 inches in the wet year of 1983. Applying these watershed-averaged rates to the project parcel areas suggests that ~6.7 to 57.6 ac-ft/yr of recharge occurs on the project parcels with a mean value of 34.5 ac-ft/yr.

While a parcel-based approach to estimating recharge is useful, it greatly simplifies the spatial complexities of recharge processes. The project wells are completed almost entirely within the tuffaceous unit of the Sonoma Volcanics. As described in previous studies, most recharge to this unit is derived from infiltration of precipitation and seepage from streams within the outcrop areas bordering the valley. Examination of the surficial geology reveals that approximately 4,010 acres of this material is exposed within the watershed area upstream of the project parcels (Figure 5). Several tributary streams including Cyrus Creek (totaling 6.4 miles of stream length) flow over the areas of exposed tuff, and recharge from seepage through the streambed in these areas is expected to be an important component of the total recharge (Figure 5) following the findings of Johnson (1977) and Farrar and Metzger (2005) from the MST basin. Applying the watershed-averaged recharge rates to the area of exposed tuff suggests that total recharge to the exposed tuff is on the order of 575 to 4,943 ac-ft/yr.

The tuff is also present along the valley flow where it is overlain by shallow alluvium. The degree of connectivity between the tuff and the overlying alluvium is poorly understood, however a potentially significant additional source of recharge is seepage between the

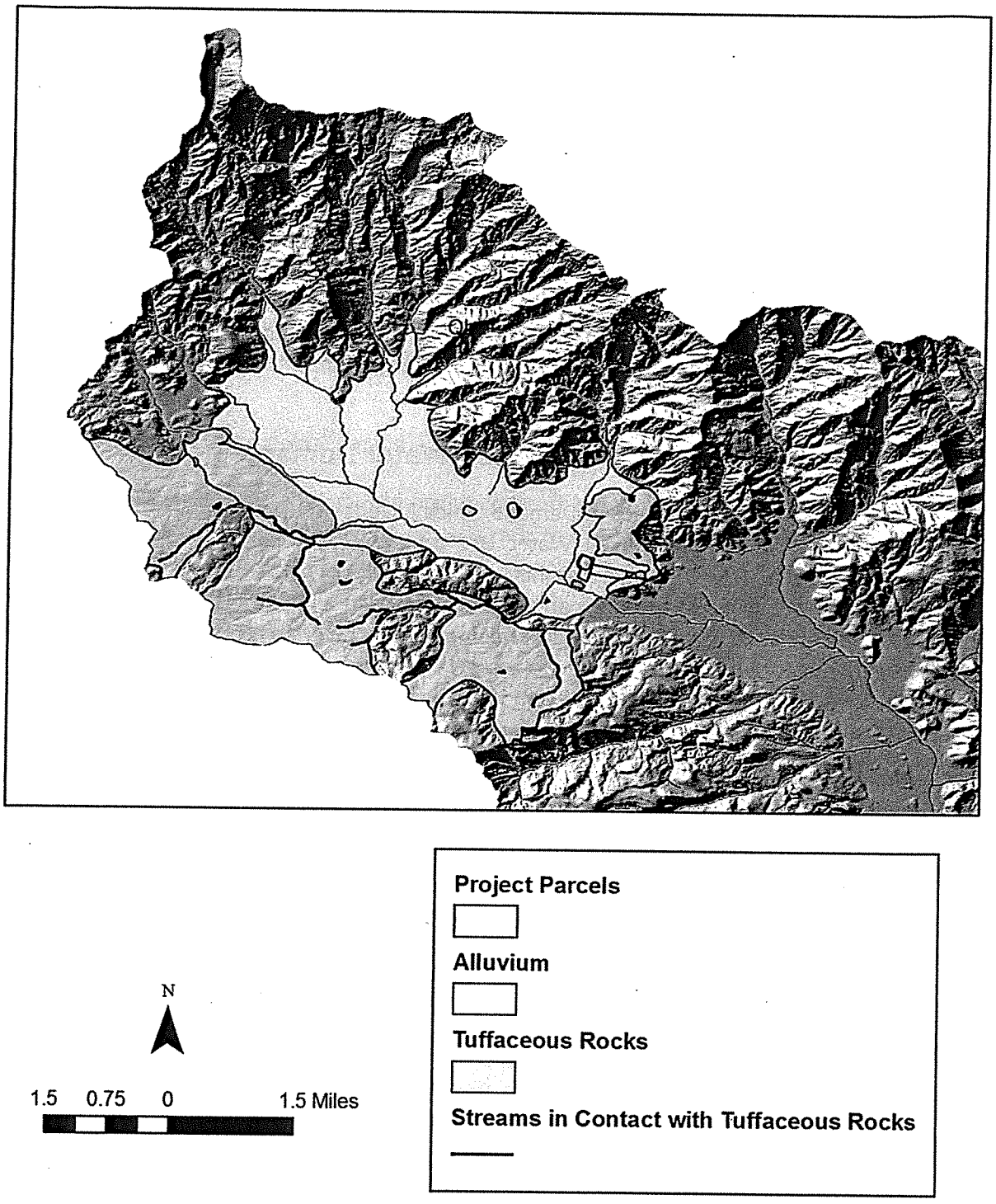


Figure 5: Extent of exposures of tuffaceous rocks and alluvium up-gradient of the project parcels.

saturated alluvium and the underlying tuff. Applying the watershed-averaged recharge rates to the area of exposed alluvium within the watershed area upstream of the project parcels (3,750 acres) suggests that total recharge to the alluvium is on the order of 538 to 4,627 ac-ft/yr (Figure 5); an unknown portion of that recharge likely percolates to the underlying tuff.

While the recharge estimates presented here are realistic, they most likely under-estimate the actual recharge. First, as acknowledged in the report, Luhdorff and Scalmanini (2013) included all gauged flow in their calculation of runoff from the Napa River at Calistoga gauge record whereas a portion of the flow represents baseflow rather than runoff. This would tend to over-predict runoff and thus under-predict recharge. Secondly, the Luhdorff and Scalmanini (2013) estimate is a watershed-wide estimate which includes a diverse area underlain by areas of both high and low recharge potential and those estimates have been applied here to areas underlain entirely by units of high recharge potential where recharge would be expected to be higher than the watershed average rates.

Comparison of Recharge and Proposed Water Demand

As discussed above, the Total Proposed Demand which includes the Existing Water Use on the Clos Pegase parcel and the Proposed Water Use on the Girard parcel is expected to be approximately 8.23 ac-ft/yr. This represents approximately 24% of the 34.5 ac-ft/yr mean annual recharge as calculated using a parcel-based approach and the total combined parcel area of 46.92 acres. The average annual recharge is generally taken to represent the volume up to which groundwater pumping is unlikely to result in reduced water availability over time. As discussed above, recharge can vary widely and in wet years the demand could be as low as 14% of recharge and as high as 123% of recharge during extremely dry years.

For additional perspective, it is useful to note that based on the Phase I Water Availability Analysis guidelines for the Napa Valley, the Allowable Water Allotment for the combined parcel area would be 46.9 ac-ft/yr, and the actual Total Proposed Demand represents only 18% of this Phase I allotment value.

Another useful way to evaluate the Total Proposed Demand is to compare it to the total aquifer recharge up-gradient of the project parcels. This comparison reveals that the Total Proposed Demand represents less than 0.3% of the mean annual recharge to the tuffaceous aquifer up-gradient of the project parcels and less than 0.2% of the mean annual recharge to the tuffaceous and alluvial aquifers up-gradient of the project parcels.

Given that the proposed water demands are significantly less that the mean annual recharge, the proposed pumping is unlikely to result in reduced water availability over time. On shorter time-scales such as during drought conditions when recharge rates are substantially reduced, demands in excess of recharge can result in temporary reductions in groundwater storage. This occurred during the 1976-1977 drought as evidenced by the lower groundwater elevations recorded during this period at wells throughout the Napa Valley. Importantly, groundwater

elevations recovered within a few years indicating that there is overall stability in water availability conditions.

Table 9: Comparison of proposed demand and recharge.

	Volume (ac-ft/yr)	Recharge Surplus (ac-ft/yr)	Demand as % of Recharge
Total Proposed Demand	8.2		
Parcel-based Mean Annual Recharge	34.5	26.3	23.9%
Aquifer-based Mean Annual Recharge	2938.0	2929.8	0.3%

Aquifer Testing

Overview

A pressure transducer (Solonist Troll 700s) was deployed in the Girard project well to automatically record water levels every two minutes between February 12th and 23rd, 2015. Manual water level measurements were taken periodically using an electronic sounder to validate the transducer data. A staff plate was also installed in the sump located southeast of the Girard Well. The sump is open to the shallow aquifer material and staff-plate readings were observed periodically.

A constant rate 24-hr pump test with a pump rate of 5.37 gal/min was performed on the Girard Well beginning on February 18th. Analysis of the resulting time/drawdown data provides a means of estimating aquifer properties, evaluating the extent of lateral drawdown away from the wells, and determining the relative sufficiency of the well for meeting expected water demands. No observation wells located reasonably close to the Girard Well could be identified and given the lack of observation well data, the time/drawdown data is useful for estimating the aquifer Transmisivity (T) but not the Storage Coefficient (S).

Test Results

Groundwater levels at the Girard Well show a general trend of increasing elevations over the data collection period with a total increase of ~10-ft over the 11-day observation period indicating that the aquifer is receiving recharge. The effects of four short-duration pumping events can be seen between 2/13/15 and 2/17/15 (Figure 6). The observations over this period are helpful in that they indicate the aquifer response to typical pumping operations. The drawdown associated with the constant rate pump test can be seen beginning 2/18/15 and the data from 2/19/15 to 2/23/15 show the well recovery data following the test (Figure 6). Water levels in the sump were relatively constant throughout the observation period and did not show a response to pumping at Well #2 (Figure 5).

The water level data for the aquifer test on Well #2 was detrended in order to remove the background trend of increasing water levels and establish a time/drawdown relationship solely

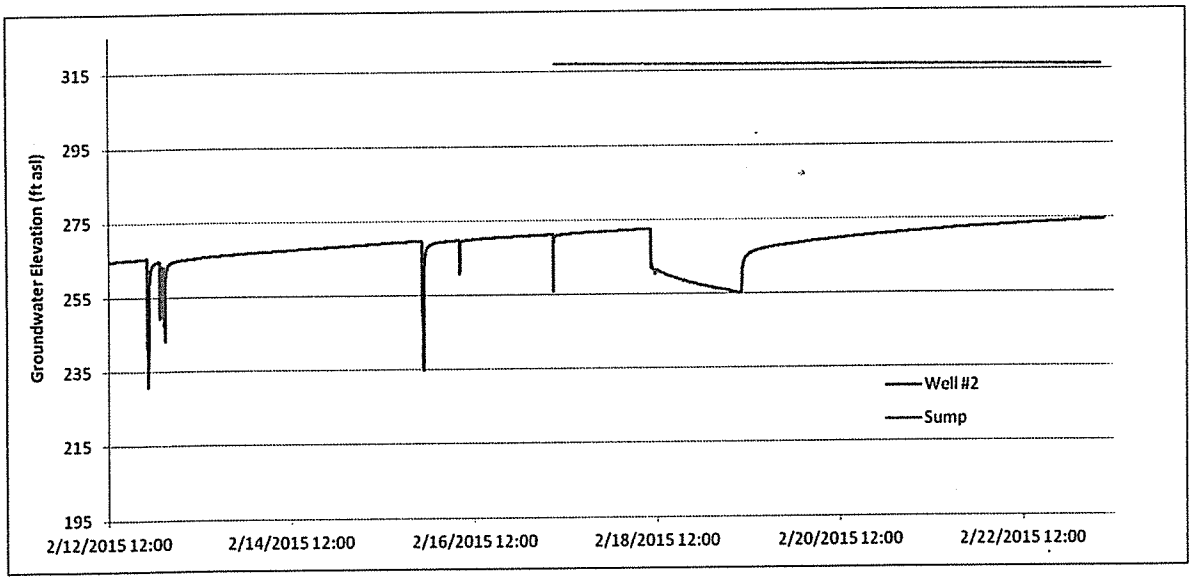


Figure 6: Hydrographs of groundwater elevations at Well #2 and the sump for the 2/12/2015 to 2/23/2015 observation period.

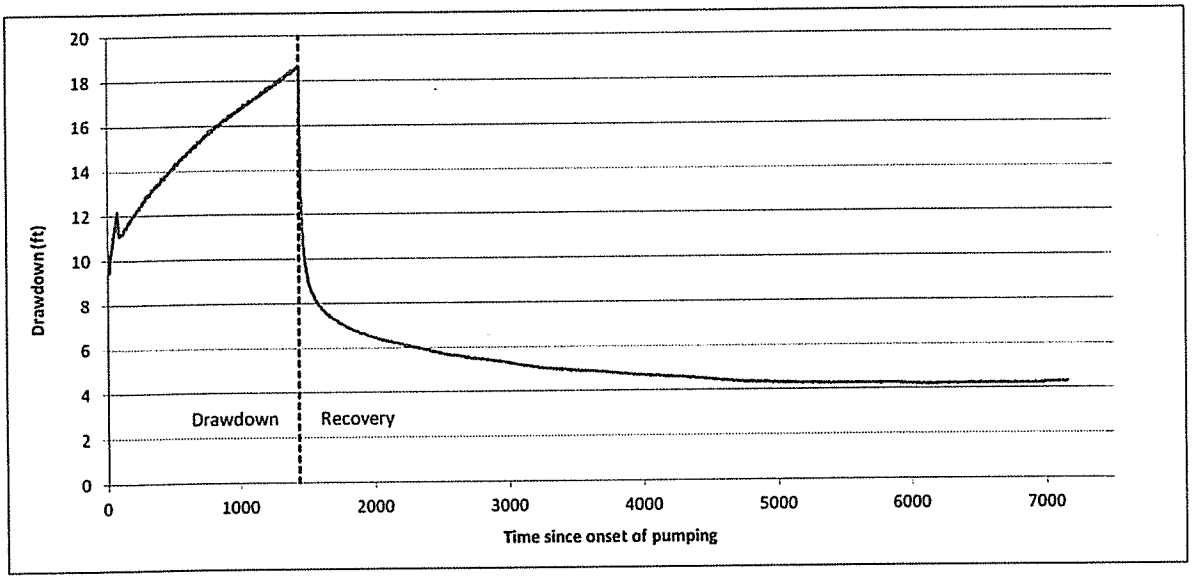


Figure 7: Time/drawdown data for the aquifer test conducted at Well #2.

representative of the drawdown due to pumping (Figure 7). The aquifer test data were analyzed using AQTESOLV and a type curve matching approach was used to analyze the aquifer test data and estimate aquifer properties. Four mathematical solutions were applied, the Theis (1935), Cooper-Jacob (1946), and Papadopulos-Cooper (1967) methods for confined aquifers and the Hantush-Jacob (1955) method for a leaky confined aquifer. No previous estimates of the Storage Coefficient for the Sonoma Volcanics in the Calistoga area are available, however Johnson (1977) estimated that the Storage Coefficient (S) was between 0.0001 and 0.001 for the tuffaceous units of the Sonoma Volcanics in the MST groundwater basin. Each solution was employed to estimate Transmisivity (T) for both the low and high end reported S values.

The T estimates resulting from the aquifer test analyses range from 25.9 to 105.1 ft^2/day with a median value of 73.2 ft^2/day (Table 10). The median estimate of S and T and Equation 1 (Driscoll, 1995) were used to estimate the location and extent of the cone of depression resulting from 24-hours of continuous pumping at Well #2 at a constant pumping rate of 5.37 gal/min:

$$S = 2.25Tt / r_0^2 \quad \text{(Equation 1)}$$

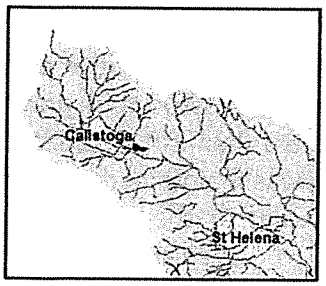
where S is the Storage Coefficient, T is Transmisivity (ft^2/day), t is time, and r_0 is the distance (ft). Maximum drawdown at Well #2 was 18.7 ft which diminished quickly with distance from the well to less than 5-ft at a radius of 60-ft, less than 1-ft at a radius of 404-ft, and zero at a radius of 547-ft (Figure 8). Although an aquifer test was not performed on the Clos Pegase well, the well is completed to a similar depth in the same aquifer material so the results from the aquifer test at the Girard well can reasonably be applied to both project wells.

Equation 1 can also be solved to estimate the duration of continuous pumping that would be necessary for the associated cone of depression to reach various points of interest. The location of wells on neighboring properties is unknown. Wells are often located close to the residences they serve so the distance from each project well to the five closest residences was tabulated and the duration of pumping that would result in the cone of depression reaching each residence was calculated (Tables 11 and 12). This exercise reveals that between 1.0 and 3.5 days of continuous pumping would be required for the cone of depression associated with the Clos Pegase well to reach neighboring residences. At the Girard well between 1.9 and 11.6 days of pumping would be required (Table 12). Continuous pumping of 7.2 and 7.7 days from the Clos Pegase and Girard wells respectively would be required for drawdown to intersect the Napa River (Tables 11 and 12).

Table 10: Results of the aquifer test conducted at Well #2.

Solution	Transmisivity ft^2/d (T)	Storage Coefficient (S)	Notes
Theis	64.3	0.001	Drawdown and Recovery
Theis	77.6	0.0001	Drawdown and Recovery
Hantush-Jacob	65.0	0.001	Drawdown and Recovery
Hantush-Jacob	78.5	0.0001	Drawdown and Recovery
Papadopulos-Cooper	25.9	0.001	Drawdown and Recovery
Papadopulos-Cooper	35.9	0.0001	Drawdown and Recovery
Cooper_Jacob	68.8	0.001	Drawdown Only
Cooper_Jacob	82.2	0.0001	Drawdown Only
Cooper_Jacob	88.6	0.001	Recovery Only
Cooper_Jacob	105.1	0.0001	Recovery Only
MEDIAN	**73.2**	**0.00055**	





500 250 0 500 Feet

Project Wells

Project Parcels

Drawdown < 1ft

Drawdown 1 - 5 ft

Drawdown 5 - 10 ft

Drawdown > 10 ft

N

Figure 8: Drawdown resulting from 24 hours of continuous pumping at Well #2 at 5.47 gpm.

Table 11: Estimated duration of pumping required at Well #1 for the cone of depression to reach neighboring residences and the Napa River.

Location	Distance from Well (ft)	Time (days)
APN 020-150-046	541	1.0
APN 020-150-028	772	2.0
APN 020-150-031	957	3.1
APN 020-150-011	998	3.3
APN 020-150-027	1,018	3.5
Napa River	1,470	7.2

Table 12: Estimated duration of pumping required at Well #2 for the cone of depression to reach neighboring residences and the Napa River.

Location	Distance from Well (ft)	Time (days)
APN 020-150-053	747	1.9
APN 020-150-052	912	2.8
APN 020-150-025	1,306	5.7
APN 020-150-046	1,480	7.3
APN 020-150-028	1,867	11.6
Napa River	1,515	7.7

The results of the aquifer test indicate that the magnitude of drawdown associated with pumping the Girard well diminishes quickly with distance away from the well. Pumping durations in excess of one day are not necessary or recommended but for illustrative purposes if one assumes 10 days of continuous pumping at 5.37 gal/min, the associated drawdown would be less than 5-ft at a distance of 186-ft from the well and less than 2-ft at a distance of 740-ft. This hypothetical exercise illustrates that even if pumping was maintained long enough for the cone of depression to reach one or more neighboring wells or the Napa River, the magnitudes of drawdown would be minimal. It is also important to recognize that many wells in the area extract water from the over-lying alluvium in addition to or instead of from the underlying tuffaceous aquifer. The hypothetical drawdown discussed above represents conditions in the tuffaceous aquifer and given the lack of hydraulic connection observed between the Girard Well and the nearby sump it is unlikely that drawdown in the tuffaceous aquifer would have any direct or significant influence on groundwater elevations in the overlying alluvial aquifer.

cone of depressions associated with the proposed pumping relative to the separation between the project wells and the river all suggest that it is highly unlikely that the proposed pumping could influence baseflow conditions in the Napa River.

The time/drawdown plots presented in the Tom Meyers study greatly over-state the expected drawdown. The value of Transmisivity (T) used to produce these plots is significantly higher than the actual T as determined by the aquifer test at the Girard Well. Additionally, the durations shown in the plots are extremely large relative to the durations that are required to meet the peak project demands. As discussed above under Water Supply Sufficiency, pumping durations are never expected to exceed one day.

Elevated concentrations of arsenic and boron have been documented at wells located north of the project parcels and concerns have been raised that the proposed pumping could results in contaminant migration. These elevated concentrations do not appear to extend as far south as the project parcels as evidenced by the water quality analyses available for the Clos Pegase well and reported by Luhdorff and Scalmanini (2011) for nearby wells. If the proposed pumping were to result in a significant long-term lowering of groundwater elevations extending for some distance beyond the project parcels it is possible that this could affect water quality conditions and contaminant migration. Our findings indicate, however, that the proposed pumping is significantly less that the mean annual recharge and that long-term reductions in groundwater elevations are unlikely to occur as a result of the project pumping. Even short-term reductions in elevations associated with pumping do not extend far enough away from the project wells to intersect areas documented as having elevated concentrations of arsenic and boron. Given the limited effects of pumping on groundwater elevations it is highly unlikely that the proposed pumping would affect contaminant migration or water quality.

Conclusions

The proposed Girard Winery and the existing Clos Pegase Winery are expected to have an annual water demand of approximately 8.2 ac-ft/yr. These demand represents only 24% of the parcel-based mean annual groundwater recharge and only ~0.3% of the total recharge to the tuffaceous aquifer up-gradient of the project parcels. Given that mean annual recharge is significantly higher than the proposed demand, it is highly unlikely that the proposed pumping would result in long-term declines in groundwater elevations or depletion of groundwater resources.

The expected magnitudes of drawdown associated with the proposed pumping are reasonably small and the spheres of influence associated with pumping at the required rates and durations needed to meet demands do not extend far enough away from the project wells to intersect neighboring wells or the Napa River. These findings coupled with the fact that the project wells draw water from the tuffaceous rocks of the Sonoma Volcanics rather than from the alluvial aquifer (the primary aquifer providing water to many of the wells in the area and the material responsible for baseflow discharge to the Napa River) indicate that the proposed pumping is highly unlikely to result in interference to neighboring wells or impacts to river baseflows.

Water Supply Sufficiency

The total proposed demand for both parcels is approximately 8.23 ac-ft/yr and the peak daily demand is on the order of 12,608 gal/day. At the pumping rate of 5.37 gal/min used during the aquifer test, it would require that both project wells operate ~20 hrs/day in order to meet the peak daily demand. In order to avoid long-duration pumping and provide time for recovery it would be preferable to pump at a higher rate for a shorter duration. If a pumping rate of 10 gal/min were used, a schedule of 10.5 hours on and 13.5 hours off could be employed for both wells in order to meet the peak daily demand.

Evaluation of the drawdown associated with this pumping schedule reveals that the maximum drawdown at the well would be on the order of 29.4-ft diminishing to less than 5-ft at a distance of 125-ft and less than 2-ft at a distance of 280-ft. Longer recovery periods could be incorporated by buffering the demand using the available storage from the two (one existing and one proposed) 58,000 gallon storage tanks. This could be accomplished by pumping at somewhat higher rates or longer durations to fill the tanks and then relying on these stored water to provide water during recovery periods.

Response to Concerns

Several concerns about the potential impacts of the project were raised in a recent Technical Memorandum prepared by Tom Meyers. The first concern suggests that the proposed pumping could unacceptably lower groundwater levels because actual recharge is less than the assumed value of 12 inches per year used by Napa County in Phase I Water Availability Analyses to determine allotments for the Napa Valley Floor. Our findings confirm that actual recharge is likely lower than 12 inches per year and is probably closer to 8.8 inches per year on a mean annual basis. The proposed water use for the project, however, is equivalent to only ~24% of the mean annual recharge computed using a parcel-based approach and only 0.3% of the total mean annual recharge to the tuffaceous aquifer up-gradient of the project site. Given that the proposed water use is significantly less than recharge it is highly unlikely that the proposed pumping would significantly lower groundwater levels on a long-term basis.

Another concern raised is that the proposed pumping could affect baseflow discharges in the Napa River. A comparison between groundwater elevations in the project wells and the elevations of the thalweg of the Napa River reveals that groundwater elevations in the tuffaceous aquifer at the project wells are some 15 to 20-ft below the riverbed (Figure 2). This separation suggests that the Napa River is not directly connected to the groundwater system within the Sonoma Volcanics. As evidenced by the lack of response in the alluvial aquifer at the sump during the pump test, withdrawals from the tuffaceous aquifer do not directly affect water levels in the overlying alluvial aquifer which would be the only mechanism for potential impacts to the river. Additionally, the project wells are located some 1,470 to 1,515-ft away from the river and the extent of the cone of depression associated with the proposed pumping only extends some 387 to 547-ft away from the wells. The vertical separation between groundwater elevations in the Sonoma Volcanics and riverbed elevations, the lack of response of the alluvial aquifer to pumping the underlying volcanic aquifer, and the limited extent of the

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Project: Girard Winery Use Permit Application
Phase 1 Water Availability – Process Water Use Clarification
APN: 020-150-017

Dear Wyntress,

As requested, this letter is provided to clarify the process water use assumptions and associated groundwater use requirements for the proposed Girard Winery and existing Clos Pegase Winery located on Dunaweal Lane in Calistoga, Napa County.

When the Clos Pegase property was for sale, Summit Engineering was engaged to prepare the *Due Diligence Report for Clos Pegase Winery, 1060 Dunaweal Lane, Calistoga, Ca 94515*, dated November 7, 2011. In that document, it states, "Between 2009-2011, the amount of annual water use averaged 4.6 gallons of water per gallon of wine produced, which is slightly lower than the standard of 6 gallons of water per gallon. Based on this water use rate at a production level of 107,100 gallons of wine per year, the average monthly water use was estimated to be 41,000 gallons per month," and, "Average Process Wastewater generation from 2009-2011 was 512,000 gallons per year (41,000 gallon per month average)."

Although the *Due Diligence* report states a water use rate of 4.6 gallons Process water (PW) per gallon of wine produced, actual calculations using 512,000 gallons of PW and 107,100 gallons of wine produced indicates a generation rate of 4.78 gallons PW per gallon of wine. This value is used to project ultimate water use at 200,000 gallons of wine production for Clos Pegase on page 5 of the Phase 1 Water Availability Analysis dated March 26, 2015, prepared by Always Engineering.

To evaluate the proposed water use from the Girard Winery, water use data from the existing production operations for Girard at a warehouse in the Town of Sonoma were reviewed. For the peak harvest month of October 2013, process water use averaged 4,999 gallons per day with a monthly total of 154,969 gallons. The production for 2013 at Girard's Sonoma operation was 1,584 tons which equates to a production of 237,600 gallons of wine for the vintage of 2013 (150 gal finished wine per ton).

Based on water use data averaged from multiple wineries, it is determined that approximately 30% of the annual process water use occurs during the peak processing period of September and

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October. Approximately 16.5% of the annual water use occurs in the peak month. Therefore, using the Clos Pegase values of 4.78 gal PW/gal wine and a production of 200,000 gallons, the average flow of the peak month at Clos Pegase ultimate production is estimated as follows:

200,000 gallons wine x 4.78 gal pw/gal wine x 16.5%= 157,740 gallons/peak month

The average for this month is determined by dividing by 31 days of processing for an average flow of the peak month of 5,088 gallons PW per day. Because at ultimate production levels, the peak monthly water use for Girard is within 1.8% of the peak monthly water use from Clos Pegase, and the existing Girard water use is actually less for a greater production, it is assumed that process water use for the two site will be the same to err on the side of conservatism. Because of this, the same 4.78 gallons PW per gallon of wine water use rate is also applied to the proposed Girard operations, as stated on Page 2 and 3 of the Girard Winery Phase 1 Water Availability Analysis.

We trust that this letter sufficiently explains the basis of the winery process water use estimates provided in the Phase 1 Water Availability Analysis. Please feel free to contact me if there are additional questions.

Sincerely,

Ben Monroe, P.E., QSD/QSP
PROJECT MANAGER
Always Engineering, Inc.

REGISTERED PROFESSIONAL ENGINEER
BENJAMIN W. MONROE
No. 70012
Exp.
CIVIL
STATE OF CALIFORNIA

cc: Pat Roney (Vintage Wine Estates)

Phase 1 Water Availability Analysis
12530_Girard Winery
February 18, 2014
Revised: March 26, 2015

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John McDowell
Deputy Planning Director
Napa County Department of Planning, Building,
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1195 3rd Street, Room 210
Napa, Ca 94559

Project: Girard Winery
Use Permit Application
Phase 1 Water Availability
APN: 020-150-017 (Girard Winery Use Permit)
APN: 020-150-012 (Clos Pegase Winery)

Dear Mr. McDowell,

This correspondence is provided to clarify and supplement the Phase One Groundwater Water Availability prepared and originally submitted with the Girard Winery Use Permit. As required by the Napa County Department of Public Works, this letter provides the Phase 1 Water Availability Analysis as a supplement to the Girard Winery Use Permit application. The following information is provided to meet this requirement.

SITE PLAN

The Use Permit Site Plan has been provided and is attached. This site plan provides the existing and proposed site conditions for Girard winery. The site consists of existing vineyards, open space, waste water treatment ponds, an agricultural building, and infrastructure. Also provided is a portion of the USGS quad map indicating location of the project parcel and approximate well locations. There is also included two additional site plans; one displaying the existing groundwater supply system components, and one displaying the existing vineyards associated with the two parcels.

PROJECT DESCRIPTION

Girard Winery, located at 1077 Dunaweal Ln, Calistoga, California (APN 020-150-017) is applying for a use permit to construct a new winery on this parcel.

It is proposed to construct a new winery with a production of 200,000 gallons of wine per year. Also includes associated site improvements, tasting room, and hospitality events.

On the project parcel, there is an existing well which currently serves the Clos Pegase Winery, which is located across the street at 1060 Dunaweal Lane, Calistoga (APN: 020-150-012). This analysis will take into account both parcels' water use. There is a second well, located on the Clos Pegase parcel also

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supplies water for the permitted public water system. Groundwater for the project will be supplied by both wells.

GIRARD ALLOWABLE WATER ALLOTMENT

The proposed parcel is 26.53 acres and located in the valley floor

Parcel acreage	=	26.53 acres
Parcel Location Factor	=	1.0 ac-ft/ac-yr (Valley Floor)
Allowable Water Allotment	=	26.53 ac-ft/yr

Based on Step #2 of the Water Availability Study, the allowable water allotment for the site is 26.53 ac-ft/yr.

GIRARD WATER CONSUMPTION

Presented below, and in the attached spreadsheets, are the calculations used to complete the Phase One Study with the assumed Napa County values.

Girard Vineyard Use

14.53 acres x 0.5 ac-ft/ac-yr (irrigation)	=	7.265 ac-ft/yr
14.53 acres x 0.25 ac-ft/ac-yr (frost protection)	=	3.6325 ac-ft/yr
14.53 acres x 0.0 ac-ft/ac-yr (heat protection)	=	0 ac-ft/yr
Total Vineyard Use	=	**10.8975 ac-ft/yr**

The total amount of vineyard water use on the Girard parcel is estimated to be 10.8975 ac-ft/yr using the Napa County Public Works values. It should be noted that this value includes irrigation and frost protection. No heat protection occurs at this site. It should also be noted that all vineyard irrigation is supplied by the irrigation reservoir on the Girard parcel. This pond is filled solely with rainwater, vineyard subdrain water, and treated winery process wastewater. This pond is the sole source of irrigation for all vineyards and landscape on the Girard and Clos Pegase parcels. Vineyard irrigation demand has been included in this analysis to show that the use is below the County threshold, should well water be required in an extremely dry year, which has not been needed to date.

Girard Winery Process Use

Process water demand is estimated using the factors in the Napa County Phase One form.

200,000 gallons wine/yr x 2.15 ac-ft/100,000 gallons wine = 4.3 ac-ft/yr

Additionally, water use data for the existing Clos Pegase and Girard process operations was reviewed for the wastewater feasibility study preparation and also during Due Diligence of the property acquisition. In that analysis, it was estimated that approximately 4.78 gallons of water were used per

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CLOS PEGASE ALLOWABLE WATER ALLOTMENT

The existing Clos Pegase Winery parcel (APN 020-150-012) is 20.39 acres and located in the valley floor

Parcel acreage	=	20.39 acres
Parcel Location Factor	=	1.0 ac-ft/ac-yr (Valley Floor)
Allowable Water Allotment	=	20.39 ac-ft/yr

Based on Step #2 of the Water Availability Study, the allowable water allotment for Clos Pegase Winery is 20.39 ac-ft/yr. however, potable water for the site is provided by a well on the Girard Winery parcel and will be reviewed later in this document under the combined analysis. In addition, all of the landscape and vineyard irrigation on the Clos Pegase parcel is provide by the irrigation reservoir on the Girard parcel. That reservoir is filled solely with vineyard subdrain water, rain water, and treated process wastewater and therefore should not present a demand on groundwater.

CLOS PEGASE WATER CONSUMPTION

Presented below are the calculations used to complete the Phase One Study with the assumed Napa County values.

Clos Pegase Vineyard Use

4.0 acres x 0.5 ac-ft/ac-yr (irrigation)	=	2.0 ac-ft/yr
4.0 acres x 0.25 ac-ft/ac-yr (frost protection)	=	1.0 ac-ft/yr
4.0 acres x 0 ac-ft/ac-yr (heat protection)	=	0 ac-ft/yr
Total Vineyard Use	=	**3.0 ac-ft/yr**

The total amount of vineyard water use on the Clos Pegase parcel is estimated to be 3.0 ac-ft/yr using the Napa County Public Works values. As noted above, this value includes irrigation and frost protection. No heat protection occurs at this site. Also noted above is that all vineyard irrigation is supplied by the irrigation reservoir on the Girard parcel. This pond is filled solely with rainwater, vineyard subdrain water, and treated winery process wastewater. This pond is the sole source of irrigation for all vineyards and landscape on the Girard and Clos Pegase parcels. Because no groundwater is used for vineyard irrigation, it is not addressed any further in this groundwater analysis.

Clos Pegase Winery Process Use

Process water demand is estimated using the factors in the Napa County Phase One form.

200,000 gallons wine/yr x 2.15 ac-ft/100,000 gallons wine = 4.30 ac-ft/yr

Additionally, water use data for the existing Clos Pegase and Girard process operations was reviewed for the wastewater feasibility study preparation and also during Due Diligence of the property

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gallon of wine produced. Projecting to ultimate production levels, the water use is estimated as follows:

200,000 gallons wine produced x 4.78 gallons water/gal wine = 956,000 gallons

956,000 gallons x 1 ac-ft/325,851 gallons = 2.93 ac-ft/yr.

Therefore, it is estimated that approximately 2.93 ac-ft/yr will be required for processing of wine.

Girard Winery Domestic Use

In the attached spreadsheets, domestic water use for the site has been estimated. This estimate has been prepared using peak and average employee, tasting visitor, and event use numbers for the site. Detailed calculations are shown in the spreadsheets with a summary below:

Employee Use	=	0.184 ac-ft/yr
Tasting Visitor Use	=	0.287 ac-ft/yr
Event Use	=	0.025 ac-ft/yr
Total Domestic Use	=	0.496 ac-ft/yr

A total of 0.496 ac-f/yr is estimated for domestic uses. This value assumes that employees will be onsite 7 days a week and 52 weeks a year. It also assumes maximum tasting room weekday and weekend visitation and therefore is likely conservative in the value generated.

Girard Winery Landscape Use

Landscape irrigation for the Girard project will be provided entirely by water from the irrigation pond, which does not receive groundwater supplies. Therefore, landscape use is not accounted for in this groundwater analysis.

Total Girard Winery Use

Process Use	=	2.93 ac-ft/yr
Domestic Use	=	0.496 ac-ft/yr
Total Winery Use	=	**3.43 ac-ft/yr**

The total Girard Winery water use is estimated to be 3.43 ac-ft/yr.

Total Girard Water Use

The **total estimated water demand** from the project is the sum of all the winery uses and is estimated as **3.43 ac-ft/yr.** This is less than the parcel threshold of 26.53 ac-ft per year and represents approximately 13% of the threshold for additional analysis.

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acquisition. In that analysis, it was estimated that approximately 4.78 gallons of water were used per gallon of wine produced. Projecting to ultimate production levels, the water use is estimated as follows:

200,000 gallons wine produced x 4.78 gallons water/gal wine = 956,000 gallons

956,000 gallons x 1 ac-ft/325,851 gallons = 2.93 ac-ft/yr.

Therefore, it is estimated that approximately 2.93 ac-ft/yr will be required for processing of wine.

Winery Domestic Use

In the attached spreadsheets, domestic water use for the site has been estimated. This estimate has been prepared using peak and average employee, tasting visitor, and event use numbers for the site. Detailed calculations are shown in the spreadsheets with a summary below:

Employee Use	=	0.251 ac-ft/yr
Tasting Visitor Use	=	0.347 ac-ft/yr
Event Use	=	0.0552 ac-ft/yr
Total Domestic Use	=	0.6537 ac-ft/yr

A total of 0.6537 ac-f/yr is estimated for domestic uses. This value assumes that employees will be onsite 7 days a week and 52 weeks a year. It also assumes maximum tasting room weekday and weekend visitation and therefore is likely conservative in the value generated.

Clos Pegase Winery Landscape Use

Landscape irrigation for the existing Clos Pegase landscape is provided entirely by water from the irrigation pond, which does not receive groundwater supplies. Therefore, landscape use is not accounted for in this groundwater analysis.

Clos Pegase Residential Use

The Close Pegase Parcel has an existing residence onsite. A residence water use is estimated as follows:

Primary Residence x 0.75 ac-ft/yr = 0.75 ac-ft/yr

In addition to the residence domestic uses, there is a pool which is assigned 0.1 ac-ft/yr for evaporation and approximately 0.15 acres of landscaping. Based on the California Irrigation Management and Information System (CIMIS), reference evapotranspirtation rate (ETo) data for the Oakville field station projects approximately 0.36 ac-ft/yr for landscape demand. The total residential demand is estimated by summing these values for a total demand of 1.21 ac-ft/yr.

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Total Clos Pegase Parcel Use

Process Use	=	2.93 ac-ft/yr
Domestic Use	=	0.6537 ac-ft/yr
Residential Use	=	1.21 ac-ft/yr.
Total Winery Use	=	**4.79 ac-ft/yr**

The total winery water use is estimated to be 4.79 ac-ft/yr.

Total Clos Pegase Water Use

The total estimated water demand from the project is the sum of the winery use (3.58 ac-ft/yr), and residence use (1.21 ac-ft/yr) and is estimated to be 4.79 ac-ft/yr. This value is approximately 23% of the parcel's threshold.

COMBINED ALLOWABLE WATER ALLOTMENT

The combined acreage of the parcel is 46.92 acres and located in the valley floor. Combined allowable threshold is calculated as follows:

Parcel acreage	=	46.92 acres
Parcel Location Factor	=	1.0 ac-ft/ac-yr (Valley Floor)
Allowable Water Allotment	=	46.92 ac-ft/yr

Based on Step #2 of the Water Availability Study, the allowable water allotment for the combined parcels is 46.92 ac-ft/yr.

COMBINED WATER CONSUMPTION/DEMAND

Presented below is a summary of the groundwater demands estimated in previous sections of this report and used to complete the Phase One Study.

Girard Winery Total Demand	=	3.43 ac-ft/yr
Clos Pegase Winery Total Demand	=	4.79 ac-ft/yr.
Total Combined Water Demand	=	8.22 ac-ft/yr.

A summary of these demands is presented in a comparison table in the summary and conclusions below.

EXISTING WATER SUPPLY SYSTEM

The existing potable water system consists of the onsite wells and treatment which also serves Clos Pegase Winery, under the same ownership across Duvaweal Ln. There is a storage tank on the Clos

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Pegase parcel. A new tank will be provided for Girard Winery. All vineyard and landscape irrigation is provided with the onsite reservoir which is supplied by rain, vineyard subdrain water, and treated process wastewater only.

CURRENT GROUNDWATER CONDITIONS

The report titled, *Napa County Groundwater Conditions and Groundwater Monitoring Recommendations,* dated February 2011 by Luhdorf & Scalmanini Consulting Engineers was obtained and reviewed in light of current groundwater conditions, specifically in the project vicinity. Appendix A of the report provides groundwater hydrographs showing historical groundwater depth for the wells on record. Copies of the groundwater depth graphs for the Calistoga area has been attached to this report. With the exception of the late 1970s (historical drought) and few well readings circa 2004, groundwater elevations in the Calistoga area are typically between 5 and 20 feet below existing grade. The existing well for the site had static water levels at approximately 25 feet deep in June of 1991. This is deeper than the wells on record, but should be assumed to be consistent with the groundwater table in the area. Therefore, sufficient supply appears to be available. There is no record of a depleted groundwater table in the project vicinity.

Additionally, on March 3, 2015, Luhdorff & Scalmanini Consulting Engineers issued the *Napa County Comprehensive Groundwater Monitoring Program 2014 Annual Report and CASGEM Update.* On page 35, section 5.1.1 of this report, it presents Groundwater Level Trends and Flow Directions for the Calistoga and St. Helena Subareas. In light of data review from 1970 to present, the professional opinion of L&S is that "Groundwater levels have been generally stable over time in the Calistoga Subarea...Minor seasonal declines of about 10 feet occur in the fall....However, in every year since 1970, including 2014, groundwater levels returned to within 10 feet of the ground surface." Coupled with the historical trouble-free operation of the onsite water supply system, this statement suggests that the project should not have problem providing water for the project without impacting groundwater levels outside the project area.

A Phase 2 Water Availability Analysis was also performed on Well #2 by O'Conner Environmental which was also submitted in support of the Use Permit application. The findings of that report also indicate that there is more than sufficient groundwater available to supply the project.

SUMMARY AND CONCLUSIONS

As presented above, the overall water use for the proposed Girard Winery and existing Clos Pegase Winery is expected to be 8.22 ac-ft/yr combined, which presents approximately 31% of the Girard parcel allotment, 40% of the Clos Peagse parcel allotement, and 17.5% of the allotment for both parcels combined. Therefore, the Phase 1 study should be sufficient to satisfy the requirements of the Public Works Department.

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PARCEL	ALLOTMENT (AC-FT/YR)	DEMAND (AC-FT/YR) (without irrigation)	IS DEMAND GREATER THAN ALLOTMENT?
GIRARD WINERY APN: 020-150-017	26.53	3.43	NO
CLOS PEGASE WINERY APN: 020-150-012	20.39	4.79	NO
COMBINED APN: 020-150-017 & 020-150-012	46.92	8.22	NO

It should be reiterated that all of the vineyard and landscape irrigation needs will be met by reusing treated process waste effluent from the wastewater pond system as well as the collection of vineyard subdrain water and rain water in the irrigation reservoir.

In summary, this project should not pose a burden to groundwater supplies and should be approved for the following reasons:

- The Girard Winery project does not exceed the groundwater threshold for the parcel it is proposed on.
- The combined Girard Winery and Close Pegase Winery projects do not exceed the groundwater threshold for the Girard parcel, nor the Clos Pegase Parcel and are substantially below the combined threshold of both parcels.

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If there are questions regarding that presented, please feel free to contact me.

Sincerely,

Ben Monroe, P.E.
Always Engineering, Inc.

cc: Heather McCollister



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Donald G. Ridenhour, P.E.
Director

WATER AVAILABILITY ANALYSIS - PHASE ONE STUDY

Introduction: As an applicant for a permit with Napa County, It has been determined that Chapter 13.15 of the Napa County Code is applicable to approval of your permit. One step of the permit process is to adequately evaluate the amount of water your project will use and the potential impact your application might have on the static groundwater levels within your neighborhood. The public works department requires that a Phase 1 Water Availability Analysis (WAA) be included with your application. The purpose of this form is to assist you in the preparation of this analysis. You may present the analysis in an alternative form so long as it substantially includes the information required below. Please include any calculations you may have to support your estimates.

The reason for the WAA is for you, the applicant, to inform us, to the best of your ability, what changes in water use will occur on your property as a result of an approval of your permit application. By examining the attached guidelines and filling in the blanks, you will provide the information we require to evaluate potential impacts to static water levels of neighboring wells.

Step #1:

Provide a map and site plan of your parcel(s). The map should be an 8-1/2"x11" reproduction of a USGS quad sheet (1:24,000 scale) with your parcel outlined on the map. Include on the map the nearest neighboring well. The site plan should be an 8-1/2"x11" site plan of your parcel(s) with the locations of all structures, gardens, vineyards, etc in which well water will be used. If more than one water source is available, indicate the interconnecting piping from the subject well to the areas of use. Attach these two sheets to your application. If multiple parcels are involved, clearly show the parcels from which the fair share calculation will be based and properly identify the assessor's parcel numbers for these parcels. Identify all existing or proposed wells

Step #2: Determine total parcel acreage and water allotment factor. If your project spans multiple parcels, please fill a separate form for each parcel.

Determine the allowable water allotment for your parcels:

Parcel Location Factors

The allowable allotment of water is based on the location of your parcel. There are 3 different location classifications. Valley floor areas include all locations that are within the Napa Valley, Pope Valley and Carneros Region, except for areas specified as groundwater deficient areas. Groundwater deficient areas are areas that have been determined by the public works department as having a history of problems with groundwater. All other areas are classified as Mountain Areas.

Please underline your location classification below (Public Works can assist you in determining your classification if necessary):

Valley Floor	**1.0 acre feet per acre per year**
Mountain Areas	**0.5 acre feet per acre per year**
MST Groundwater Deficient Area	**0.3 acre feet per acre per year**

Assessor's Parcel Number(s)	Parcel Size (A)	Parcel Location Factor (B)	Allowable Water Allotment (A) X (B)
020-150-017	26.53	1.0	1.0 AC-FT/AC-YR

Step #3:

Using the guidelines in Attachment A, tabulate the existing and projected future water usage on the parcel(s) in acre-feet per year (af/yr). Transfer the information from the guidelines to the table below.

EXISTING USE:		PROPOSED USE:	
Residential	0 af/yr	Residential	0 af/yr
Farm Labor Dwelling	0 af/yr	Farm Labor Dwelling	0 af/yr
Winery	0 af/yr	Winery	3.43 af/yr
Commercial	0 af/yr	Commercial	0 f/yr
Vineyard*	0 af/yr	Vineyard*	0 af/yr
Other Agriculture	0 af/yr	Other Agriculture	0 af/yr
Landscaping	0 af/yr	Landscaping	0 af/yr
Other Usage (List Separately):		Other Usage (List Separately):	
_____	_____ af/yr	_____	0 af/yr
_____	_____ af/yr	_____	0 af/yr
_____	_____ af/yr	_____	0 af/yr
TOTAL:	0 af/yr	TOTAL:	3.43 af/yr TOTAL:
	0 gallons**	TOTAL:	1,117,669 gallons**

Is the proposed use less than the existing usage? [ ] Yes [X] No [ ] Equal

Step #4:

Provide any other information that may be significant to this analysis. For example, any calculations supporting your estimates, well test information including draw down over time, historical water data, visual observations of water levels, well drilling information, changes in neighboring land uses, the usage if other water sources such as city water or reservoirs, the timing of the development, etc. Use additional sheets if necessary.

SEE ATTACHED REPORT

Conclusion: Congratulations! Just sign the form and you are done! Public works staff will now compare your projected future water usage with a threshold of use as determined for your parcel(s) size, location, topography, rainfall, soil types, historical water data for your area, and other hydrogeologic information. They will use the above information to evaluate if your proposed project will have a detrimental effect on groundwater levels and/or neighboring well levels. Should that evaluation result in a determination that your project may adversely impact neighboring water levels, a phase two water analysis may be required. You will be advised of such a decision.

Signature: _____ Date: 3/26/15 Phone: 707-542-8795 X 17

Attachment A: Estimated Water Use Guidelines

Typical Water Use Guidelines:

Primary Residence	0.5 to 0.75 acre-feet per year (includes some landscaping)
Secondary Residence	0.20 to 0.30 acre-feet per year
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year

Non-Residential Guidelines:

Agricultural:

Vineyards	
Irrigation only	0.2 to 0.5 acre-feet per acre per year
Heat Protection	0.25 acre feet per acre per year
Frost Protection	0.25 acre feet per acre per year
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year
Irrigated Pasture	4.0 acre-feet per acre per year
Orchards	4.0 acre-feet per acre per year
Livestock (sheep or cows)	0.01 acre-feet per acre per year

Winery:

Process Water	2.15 acre-feet per 100,000 gal. of wine
Domestic and Landscaping	0.50 acre-feet per 100,000 gal. of wine

Industrial:

Food Processing	31.0 acre-feet per employee per year
Printing/Publishing	0.60 acre-feet per employee per year

Commercial:

Office Space	0.01 acre-feet per employee per year
Warehouse	0.05 acre-feet per employee per year

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WATER AVAILABILITY ANALYSIS - PHASE ONE STUDY

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The reason for the WAA is for you, the applicant, to inform us, to the best of your ability, what changes in water use will occur on your property as a result of an approval of your permit application. By examining the attached guidelines and filling in the blanks, you will provide the information we require to evaluate potential impacts to static water levels of neighboring wells.

Step #1:

Provide a map and site plan of your parcel(s). The map should be an 8-1/2"x11" reproduction of a USGS quad sheet (1:24,000 scale) with your parcel outlined on the map. Include on the map the nearest neighboring well. The site plan should be an 8-1/2"x11" site plan of your parcel(s) with the locations of all structures, gardens, vineyards, etc in which well water will be used. If more than one water source is available, indicate the interconnecting piping from the subject well to the areas of use. Attach these two sheets to your application. If multiple parcels are involved, clearly show the parcels from which the fair share calculation will be based and properly identify the assessor's parcel numbers for these parcels. Identify all existing or proposed wells

Step #2: Determine total parcel acreage and water allotment factor. If your project spans multiple parcels, please fill a separate form for each parcel.

Determine the allowable water allotment for your parcels:

Parcel Location Factors

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Please underline your location classification below (Public Works can assist you in determining your classification if necessary):

Valley Floor	**1.0 acre feet per acre per year**
Mountain Areas	**0.5 acre feet per acre per year**
MST Groundwater Deficient Area	**0.3 acre feet per acre per year**

Assessor's Parcel Number(s)	Parcel Size (A)	Parcel Location Factor (B)	Allowable Water Allotment (A) X (B)
020-150-012	20.39	1.0	20.39 AC-FT/YR

Step #3:

Using the guidelines in Attachment A, tabulate the existing and projected future water usage on the parcel(s) in acre-feet per year (af/yr). Transfer the information from the guidelines to the table below.

EXISTING USE:		PROPOSED USE:	
Residential	1.21 af/yr	Residential	1.21 af/yr
Farm Labor Dwelling	0 af/yr	Farm Labor Dwelling	0 af/yr
Winery	3.58 af/yr	Winery	3.58 af/yr
Commercial	0 af/yr	Commercial	0 f/yr
Vineyard*	0 af/yr	Vineyard*	0 af/yr
Other Agriculture	0 af/yr	Other Agriculture	0 af/yr
Landscaping	0 af/yr	Landscaping	0 af/yr
Other Usage (List Separately):		Other Usage (List Separately):	
_____	_____ af/yr	_____	_____ af/yr
_____	_____ af/yr	_____	_____ af/yr
_____	_____ af/yr	_____	_____ af/yr
TOTAL:	4.79 af/yr	TOTAL:	4.79 af/yr TOTAL:
	1,560,826 gallons**	TOTAL:	1,560,826 gallons**

Is the proposed use less than the existing usage? [ ] Yes [ ] No [X] Equal

Step #4:

Provide any other information that may be significant to this analysis. For example, any calculations supporting your estimates, well test information including draw down over time, historical water data, visual observations of water levels, well drilling information, changes in neighboring land uses, the usage if other water sources such as city water or reservoirs, the timing of the development, etc. Use additional sheets if necessary.

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Conclusion: Congratulations! Just sign the form and you are done! Public works staff will now compare your projected future water usage with a threshold of use as determined for your parcel(s) size, location, topography, rainfall, soil types, historical water data for your area, and other hydrogeologic information. They will use the above information to evaluate if your proposed project will have a detrimental effect on groundwater levels and/or neighboring well levels. Should that evaluation result in a determination that your project may adversely impact neighboring water levels, a phase two water analysis may be required. You will be advised of such a decision.

Signature: _____ Date: 3/26/15 Phone: 707-542-8795 X 17

Attachment A: Estimated Water Use Guidelines

Typical Water Use Guidelines:

Primary Residence	0.5 to 0.75 acre-feet per year (includes some landscaping)
Secondary Residence	0.20 to 0.30 acre-feet per year
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year

Non-Residential Guidelines:

Agricultural:

Vineyards	
Irrigation only	0.2 to 0.5 acre-feet per acre per year
Heat Protection	0.25 acre feet per acre per year
Frost Protection	0.25 acre feet per acre per year
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year
Irrigated Pasture	4.0 acre-feet per acre per year
Orchards	4.0 acre-feet per acre per year
Livestock (sheep or cows)	0.01 acre-feet per acre per year

Winery:

Process Water	2.15 acre-feet per 100,000 gal. of wine
Domestic and Landscaping	0.50 acre-feet per 100,000 gal. of wine

Industrial:

Food Processing	31.0 acre-feet per employee per year
Printing/Publishing	0.60 acre-feet per employee per year

Commercial:

Office Space	0.01 acre-feet per employee per year
Warehouse	0.05 acre-feet per employee per year

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WATER AVAILABILITY ANALYSIS - PHASE ONE STUDY

Introduction: As an applicant for a permit with Napa County, It has been determined that Chapter 13.15 of the Napa County Code is applicable to approval of your permit. One step of the permit process is to adequately evaluate the amount of water your project will use and the potential impact your application might have on the static groundwater levels within your neighborhood. The public works department requires that a Phase 1 Water Availability Analysis (WAA) be included with your application. The purpose of this form is to assist you in the preparation of this analysis. You may present the analysis in an alternative form so long as it substantially includes the information required below. Please include any calculations you may have to support your estimates.

The reason for the WAA is for you, the applicant, to inform us, to the best of your ability, what changes in water use will occur on your property as a result of an approval of your permit application. By examining the attached guidelines and filling in the blanks, you will provide the information we require to evaluate potential impacts to static water levels of neighboring wells.

Step #1:

Provide a map and site plan of your parcel(s). The map should be an 8-1/2"x11" reproduction of a USGS quad sheet (1:24,000 scale) with your parcel outlined on the map. Include on the map the nearest neighboring well. The site plan should be an 8-1/2"x11" site plan of your parcel(s) with the locations of all structures, gardens, vineyards, etc in which well water will be used. If more than one water source is available, indicate the interconnecting piping from the subject well to the areas of use. Attach these two sheets to your application. If multiple parcels are involved, clearly show the parcels from which the fair share calculation will be based and properly identify the assessor's parcel numbers for these parcels. Identify all existing or proposed wells

Step #2: Determine total parcel acreage and water allotment factor. If your project spans multiple parcels, please fill a separate form for each parcel.

Determine the allowable water allotment for your parcels:

Parcel Location Factors

The allowable allotment of water is based on the location of your parcel. There are 3 different location classifications. Valley floor areas include all locations that are within the Napa Valley, Pope Valley and Carneros Region, except for areas specified as groundwater deficient areas. Groundwater deficient areas are areas that have been determined by the public works department as having a history of problems with groundwater. All other areas are classified as Mountain Areas.

Please underline your location classification below (Public Works can assist you in determining your classification if necessary):

Valley Floor	**1.0 acre feet per acre per year**
Mountain Areas	**0.5 acre feet per acre per year**
MST Groundwater Deficient Area	**0.3 acre feet per acre per year**

Assessor's Parcel Number(s)	Parcel Size (A)	Parcel Location Factor (B)	Allowable Water Allotment (A) X (B)
020-150-017 & 020-150-012	46.92	1.0	46.92 AC-FT/YR.

Step #3:

Using the guidelines in Attachment A, tabulate the existing and projected future water usage on the parcel(s) in acre-feet per year (af/yr). Transfer the information from the guidelines to the table below.

EXISTING USE:		PROPOSED USE:	
Residential	1.21 af/yr	Residential	1.21 af/yr
Farm Labor Dwelling	0 af/yr	Farm Labor Dwelling	0 af/yr
Winery	3.58 af/yr	Winery	7.01 af/yr
Commercial	0 af/yr	Commercial	0 f/yr
Vineyard*	0 af/yr	Vineyard*	0 af/yr
Other Agriculture	0 af/yr	Other Agriculture	0 af/yr
Landscaping	0 af/yr	Landscaping	0 af/yr
Other Usage (List Separately):		Other Usage (List Separately):	
_____	_____ af/yr	_____	_____ af/yr
_____	_____ af/yr	_____	_____ af/yr
_____	_____ af/yr	_____	_____ af/yr
TOTAL:	4.79 af/yr	TOTAL:	8.22 af/yr TOTAL:
	1,560,826 gallons"	TOTAL:	2,678,495 gallons"

Is the proposed use less than the existing usage? [ ] Yes [X] No [ ] Equal

Step #4:

Provide any other information that may be significant to this analysis. For example, any calculations supporting your estimates, well test information including draw down over time, historical water data, visual observations of water levels, well drilling information, changes in neighboring land uses, the usage if other water sources such as city water or reservoirs, the timing of the development, etc. Use additional sheets if necessary.

SEE ATTACHED REPORT

Conclusion: Congratulations! Just sign the form and you are done! Public works staff will now compare your projected future water usage with a threshold of use as determined for your parcel(s) size, location, topography, rainfall, soil types, historical water data for your area, and other hydrogeologic information. They will use the above information to evaluate if your proposed project will have a detrimental effect on groundwater levels and/or neighboring well levels. Should that evaluation result in a determination that your project may adversely impact neighboring water levels, a phase two water analysis may be required. You will be advised of such a decision.

Signature: _____ Date: 3/26/15 Phone: 707-542-8795 X 17

Attachment A: Estimated Water Use Guidelines

Typical Water Use Guidelines:

Primary Residence	0.5 to 0.75 acre-feet per year (includes some landscaping)
Secondary Residence	0.20 to 0.30 acre-feet per year
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year

Non-Residential Guidelines:

Agricultural:

Vineyards	
Irrigation only	0.2 to 0.5 acre-feet per acre per year
Heat Protection	0.25 acre feet per acre per year
Frost Protection	0.25 acre feet per acre per year
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year
Irrigated Pasture	4.0 acre-feet per acre per year
Orchards	4.0 acre-feet per acre per year
Livestock (sheep or cows)	0.01 acre-feet per acre per year

Winery:

Process Water	2.15 acre-feet per 100,000 gal. of wine
Domestic and Landscaping	0.50 acre-feet per 100,000 gal. of wine

Industrial:

Food Processing	31.0 acre-feet per employee per year
Printing/Publishing	0.60 acre-feet per employee per year

Commercial:

Office Space	0.01 acre-feet per employee per year
Warehouse	0.05 acre-feet per employee per year

PHASE ONE WATER AVAILABILITY
GIRARD WINERY USE PERMIT
Date: 11/24/2014
Revised: 03/26/2015

GROUNDWATER ALLOTMENT

GIRARD WINERY (APN 020-150-017)		
PARCEL SIZE	26.53 ACRES	
PARCEL LOCATION FACTOR	1 AC-FT/AC-YR	(VALLEY FLOOR)
GROUNDWATER ALLOWABLE WATER ALLOTMENT	**26.53 AC-FT/YR**	

CLOS PEGASE WINERY (APN 020-150-012)		
PARCEL SIZE	20.39 ACRES	
PARCEL LOCATION FACTOR	1 AC-FT/AC-YR	(VALLEY FLOOR)
GROUNDWATER ALLOWABLE WATER ALLOTMENT	**20.39 AC-FT/YR**	

GROUNDWATER DEMAND

GIRARD WINERY (APN 020-150-017)	
GROUNDWATER USE	DEMAND (AC-FT/YR.)
WINERY PROCESS USE	2.9300
DOMESTIC USE	0.4961
RESIDENCE	0.0000
TOTAL CALCULATED DEMAND	3.4261

CLOS PEGASE WINERY (APN 020-150-012)	
GROUNDWATER USE	DEMAND (AC-FT/YR.)
WINERY PROCESS USE	2.9300
DOMESTIC USE	0.6537
RESIDENCE (DOMESTIC, LANDSCAPE, & POOL)	1.2100
TOTAL CALCULATED DEMAND	4.7937

1. Currently, all vineyard irrigation is provided using the irrigation pond. The existing irrigation pond is filled with rainwater, vineyard subdrain collection water, and treated process wastewater. No well has been used to irrigate the existing vineyards and landscape at the site.

PHASE ONE WATER AVAILABILITY - DEMAND/ALLOTMENT SUMMARY (WITHOUT VINEYARD IRRIGATION)

PARCEL	ALLOTMENT (AC-FT/YR)	DEMAND ON GIRARD PARCEL (AC-FT/YR)	DEMAND ON CLOS PEGASE PARCEL (AC-FT/YR)
GIRARD WINERY (APN: 020-150-017)	26.53	3.4261	3.4261
CLOS PEGASE WINERY (020-150-012)	20.39	4.7937	4.7937
COMBINED (APN: 020-150-018 & 020-150-012)	46.92	8.2198	8.2198

PHASE ONE WATER AVAILABILITY
GIRARD WINERY USE PERMIT
Date: 11/24/2014
Revised: 03/26/2015

GIRARD DOMESTIC USE

EVENTS

EVENT SIZE	# OF EVENT VISITORS	FLOW PER VISITOR	DAYS PER YEAR OCURRED	WATER USE PER YEAR (GAL/YEAR)	(AC-FT/YR)
LARGE	500	5	1	2,500	0.0077
MEDIUM	200	5	4	4,000	0.0123
SMALL	75	5	4	1,500	0.0046
			SUTOTAL	8,000	0.0246

TASTING VISITORS

DAY	# OF EVENT VISITORS	FLOW PER VISITOR	DAYS PER WEEK	WEEKS PER YEAR	WATER USE PER YEAR (GAL/YEAR)	(AC-FT/YR)
WEEKDAY	75	3	4	52	46,800	0.1436
WEEKEND	100	3	3	52	46,800	0.1436
				SUTOTAL	93,600	0.2872

EMPLOYEES

TIME PERIOD	# OF EMPLOYEES	FLOW PER EMPLOYEE	DAYS PER WEEK	WEEKS PER YEAR	WATER USE PER YEAR (GAL/YEAR)	(AC-FT/YR)
HARVEST FULL-TIME)	12	15	7	13	16,380	0.0503
HARVEST (PART-TIME)	7	7.5	7	13	4,778	0.0147
NON-HARVEST (FULL-TIME)	8	15	7	39	32,760	0.1005
NON-HARVEST (PART-TIME)	3	7.5	7	39	6,143	0.0189
				SUTOTAL	60,060	0.1843

GIRARD DOMESTIC TOTAL	**161,660**	**0.4961**

PHASE ONE WATER AVAILABILITY
GIRARD WINERY USE PERMIT
Date: 11/24/2014
Revised: 03/26/2015

CLOS PEGASE DOMEESTIC USE

EVENTS

EVENT SIZE	# OF EVENT VISITORS	FLOW PER VISITOR	DAYS PER YEAR OCURRED	WATER USE PER YEAR (GAL/YEAR)	(AC-FT/YR)
AVERAGE	150	5	24	18,000	0.0552
			SUTOTAL	18,000	0.0552

TASTING VISITORS

DAY	# OF EVENT VISITORS	FLOW PER VISITOR	WEEKS PER YEAR	WATER USE PER YEAR (GAL/YEAR)	(AC-FT/YR)
PEAK WEEK	725	3	52	113,100	0.3471
			SUTOTAL	113,100	0.3471

EMPLOYEES

TIME PERIOD	# OF EMPLOYEES	FLOW PER EMPLOYEE	DAYS PER WEEK	WEEKS PER YEAR	WATER USE PER YEAR (GAL/YEAR)	(AC-FT/YR)
HARVEST FULL-TIME)	30	15	7	13	40,950	0.1257
HARVEST (PART-TIME)	0	7.5	7	13	0	0.0000
NON-HARVEST (FULL-TIME)	10	15	7	39	40,950	0.1257
NON-HARVEST (PART-TIME)	0	7.5	7	39	0	0.0000
				SUTOTAL	81,900	0.2513

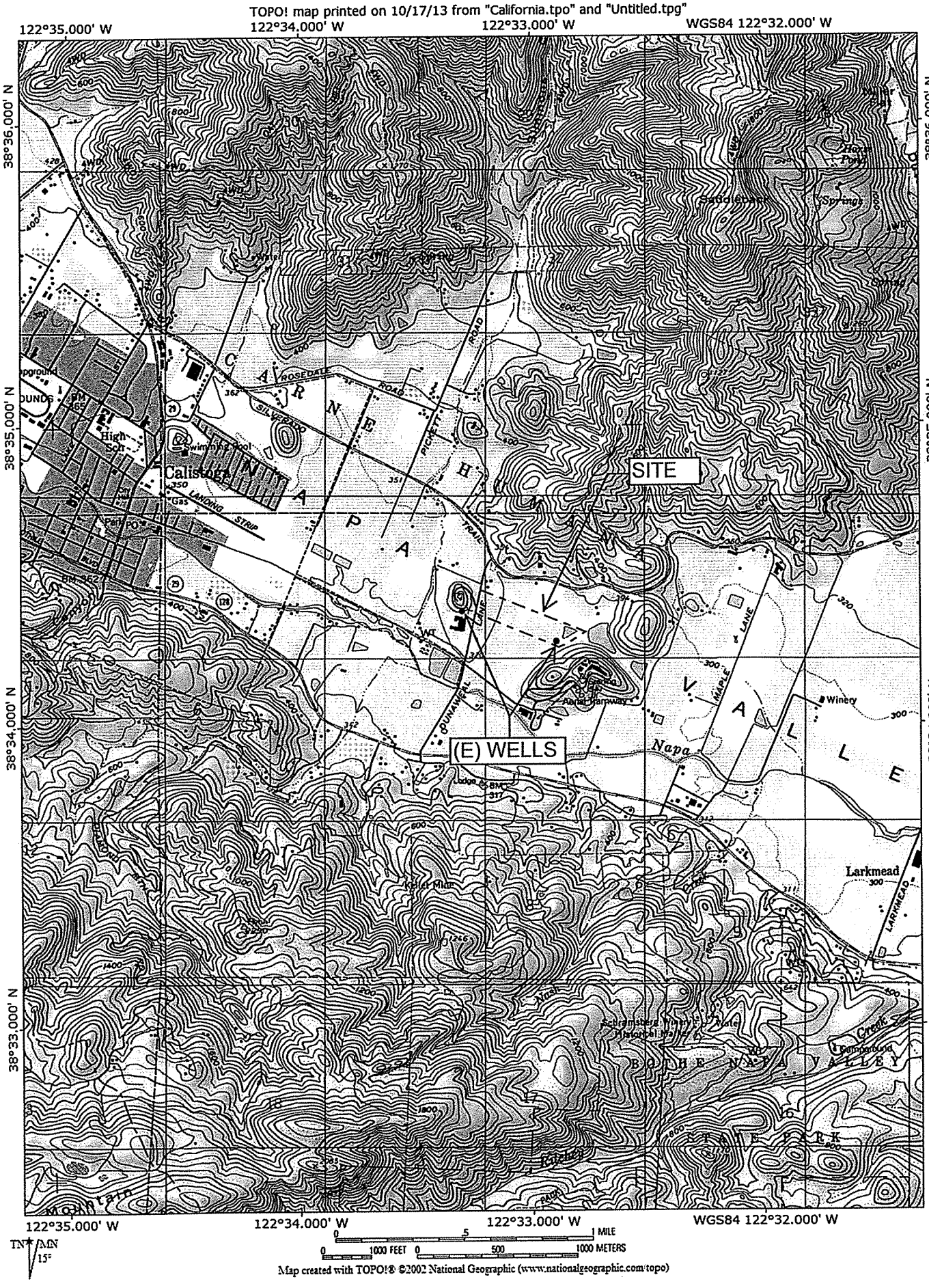
CLOS PEGASE DOMESTIC TOTAL 213,000 0.6537

PHASE ONE WATER AVAILABILITY
GIRARD WINERY USE PERMIT
Date: 11/24/2014
Revised: 03/26/2015

WINERY PROCESSING
GROUNDWATER USE

GIRARD WINERY			
PRODUCTION	=	200,000	GALLONS WINE PER YEAR
PHASE 1 WAA WATER USE RATE	=	2.15	AC-FT/YR PER 100,000 GALLONS WINE PRODUCED
PHASE 1 WAA PROCESS USE	=	4.3	AC-FT/YEAR
PROJECTED PROCESS USE	=	**2.93**	**AC-FT/YR.** (BASED ON WATER USE AT EXISTING GIRARD OPERATION) (NUMBER CONSISTENT WITH WASTEWATER FEASIBLITY STUDY)

CLOS PEGASE WINERY			
PRODUCTION	=	200,000	GALLONS WINE PER YEAR
PHASE 1 WAA WATER USE RATE	=	2.15	AC-FT/YR PER 100,000 GALLONS WINE PRODUCED
PHASE 1 WAA PROCESS USE	=	4.3	AC-FT/YEAR
PROJECTED PROCESS USE	=	**2.93**	**AC-FT/YR.** (BASED ON WATER USE AT EXISTING CLOS PEGASE OPERATION) (NUMBER CONSISTENT WITH WASTEWATER FEASIBLITY STUDY)


TOPO! map printed on 10/17/13 from "California.tpo" and "Untitled.tpg"
122°35.000' W
122°34.000' W
122°33.000' W
WGS84 122°32.000' W
38°36.000' N
38°35.000' N
38°34.000' N
38°33.000' N
SITE
(E) WELLS
Calistoga
High Sch
Swimming Pool
Fair PO
Gas
Aerial Tramway
Winery
Larkmead
Napa
Ridge
Mountain
MILE
1000 FEET
500
1000 METERS
TN
MN
15°
Map created with TOPO!® ©2002 National Geographic (www.nationalgeographic.com/topo)

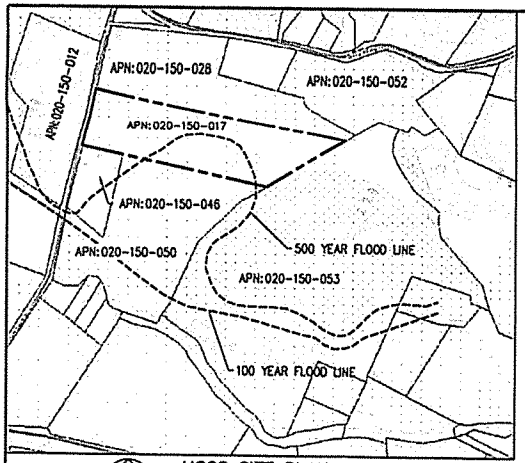
GIRARD WINERY

1077 Dunaweal Ln.

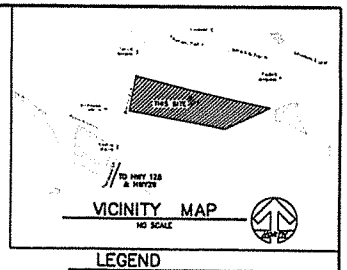
Calistoga, California 94515

APN 022-150-017

USE PERMIT APPLICATION



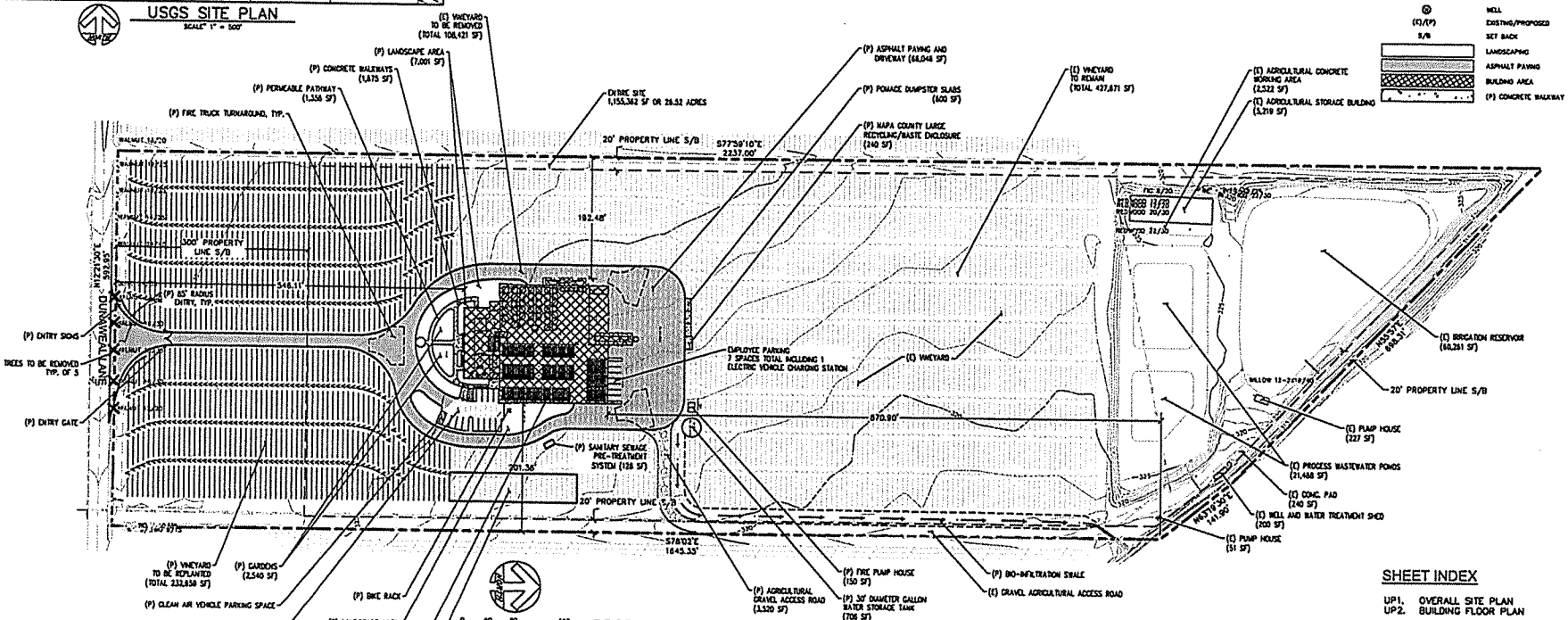
USGS SITE PLAN
SCALE: 1" = 500'



VICINITY MAP
NO SCALE

LEGEND

- APPROXIMATE PROPERTY LINE
- FENCE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL DRIVEWAY
- DRAINAGE COURSE FLOWLINE
- WINDROW
- OVERHEAD UTILITIES
- SETBACK
- 100 YEAR FLOOD PLAIN
- 500 YEAR FLOOD PLAIN
- 5 FOOT INDEX 1' INTERVAL CONTOURS
- WELL
- (E)/(P) EXISTING/PROPOSED
- S/B SET BACK
- LANDSCAPING
- ASPHALT PAVING
- BUILDING AREA
- (P) CONCRETE WALKWAY



PROPOSED OVERALL SITE PLAN
SCALED 1" = 80'

OWNER/APPLICANT
VINTAGE WINE ESTATES
205 CONCOURSE BLVD.
SANTA ROSA, CA 95403
CONTACT: PAT ROney
PH. (877) 288-9463

ARCHITECT
DEL STARRETT ARCHITECT
181 CONCOURSE BLVD., SUITE A
SANTA ROSA, CA 95403
CONTACT: DEL STARRETT
PH. (707) 528-8643

LANDSCAPE ARCHITECT
PARKER SMITH LANDSCAPE ARCHITECT
1845 PIMER RD. #23
SANTA ROSA, CA 95403
PH. (707) 477-7502

ARCHITECT
ALWAYS ENGINEERING INC.
131 STONY CIRCLE, SUITE 1000
SANTA ROSA, CA 95401
CONTACT: BEN MONROE
PH. (707) 542-8795

Grading Quantities:
Site Grading is based upon subgrade to existing grade. No account has been taken for stripping, expansion or contraction. Volumes should be verified and determined independently by the Contractor.

	CUT:	ENGINEERED FILL:	NET:
TOTAL EARTHWORK:	2,172 CY	4,034 CY	1,863 CY (FILL)

TOTAL DISTURBED AREA = 3.59 ACRES

Note: Excess spoils will be disposed of in a county approved site or spread in onsite vineyards. Temporary grading spoils will be stockpiled onsite in the unplanted vineyard area until ready for use.

SHEET INDEX

UP1. OVERALL SITE PLAN
UP2. BUILDING FLOOR PLAN

REGISTERED PROFESSIONAL ENGINEER BENJAMIN MONROE No. 084428 STATE OF CALIFORNIA CIVIL

NO.	REVISION	DESCRIPTION	BY	DATE

Always Engineering, Inc.
Civil Engineering & Topographic Surveying
131 Stony Circle, Suite 1000
Santa Rosa, CA 95401
Ph. (707) 542-8795
www.alwaysengr.com JasonH@Alwaysengr.com

Prepared for: GIRARD WINERY
1077 DUNAWEAL LN., CALISTOGA, CA

Prepared on: February 13, 2014

USE PERMIT
OVERALL SITE PLAN
1077 DUNAWEAL LN., CALISTOGA, CA
APN:020-150-017

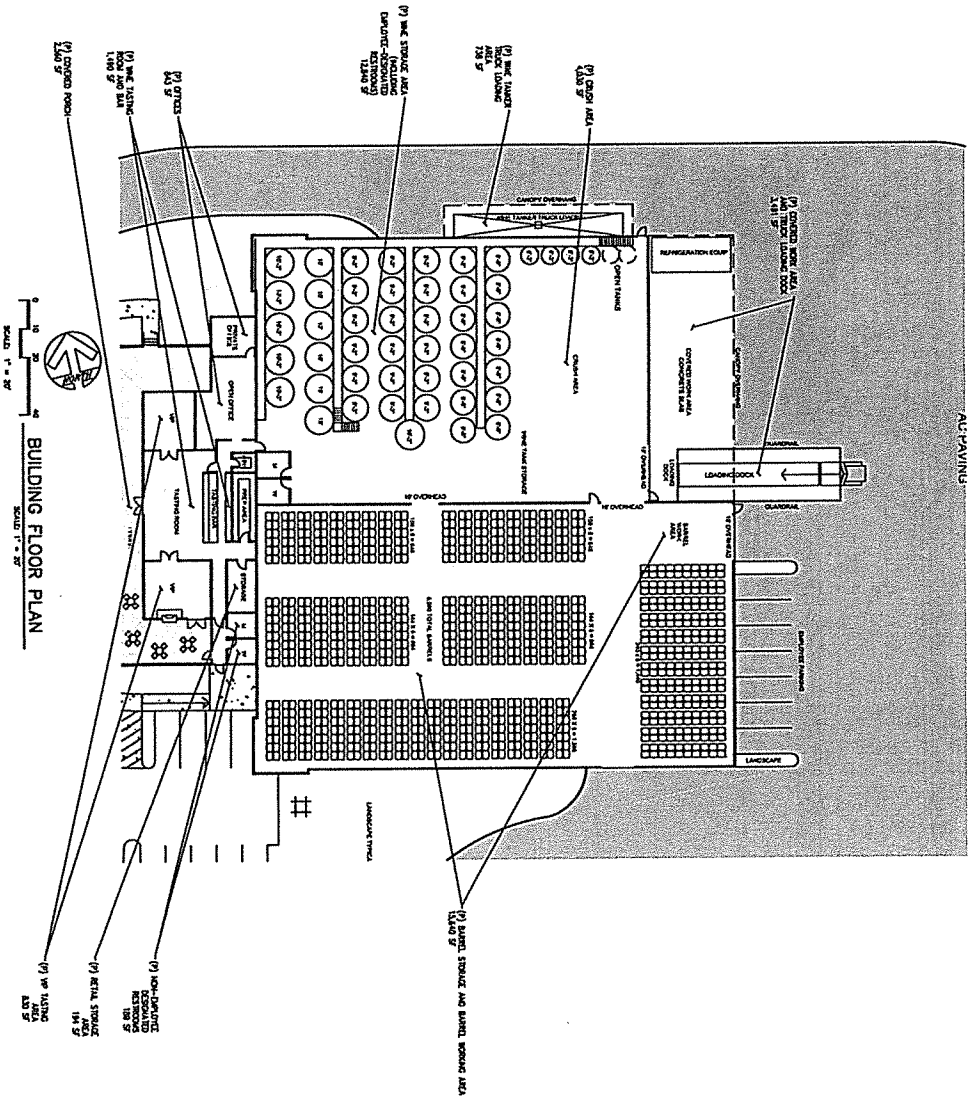
JOB# 13530

SHEET UP1 OF UP2

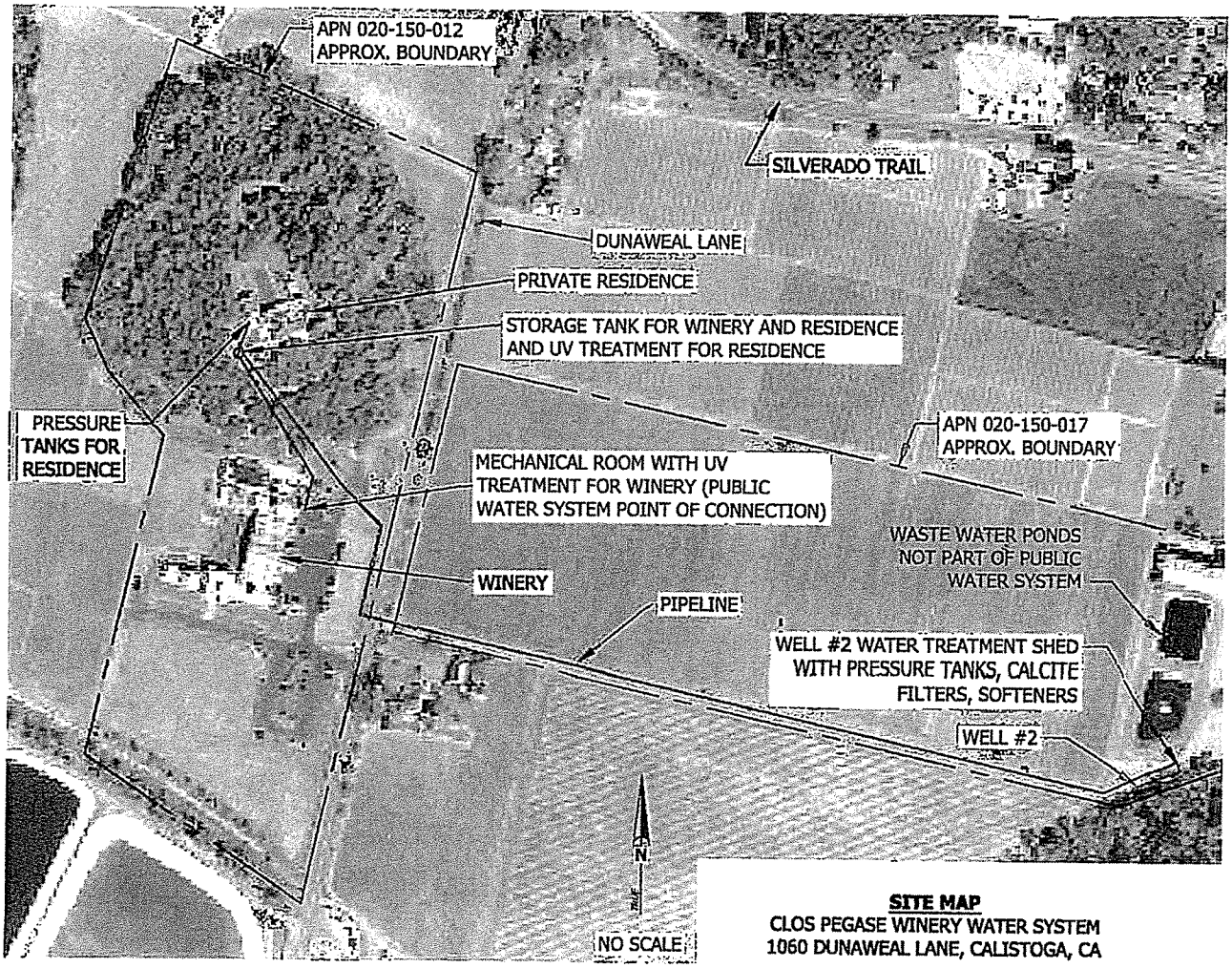
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Plotted: Feb 13, 2014 - 1:32:48PM By: jasonh File: UP-130212.dwg

COPYRIGHT © 2007 ALWAYS ENGINEERING, INC. When printed: Feb 13, 2014 – 1:32:16PM File=UP-140122.dwg



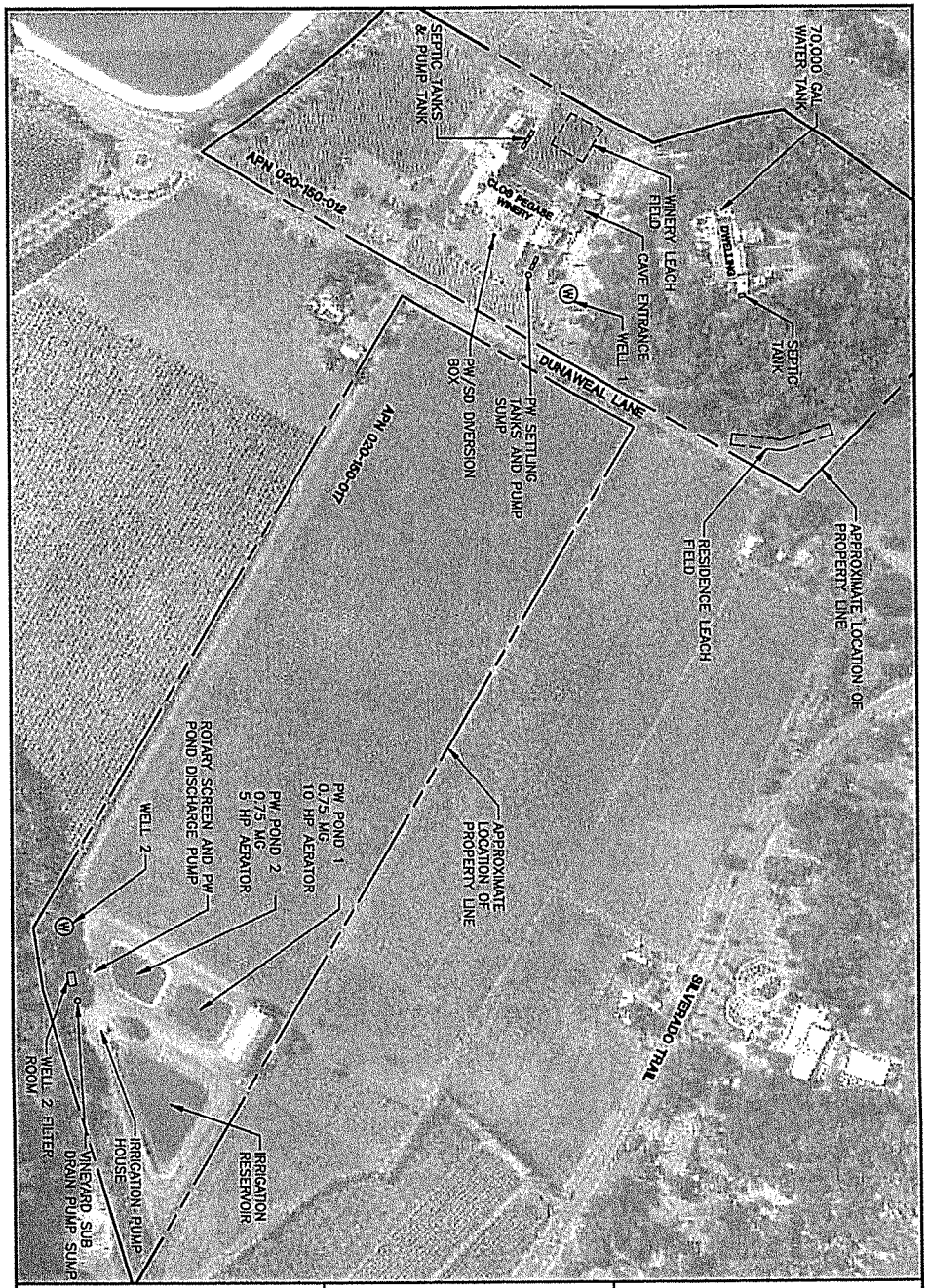
SHEET UP2 OF UP2	USE PERMIT BUILDING FLOOR PLAN 1077 DUNAWEAL LN., CALISTOGA, CA APN:020-150-017	Prepared for: GIRARD WINERY 1077 DUNAWEAL LN., CALISTOGA, CA Prepared on: February 13, 2014	Always Engineering, Inc. Civil Engineering & Topographic Surveying 131 Stony Circle, Suite 1000 (707) 542-8795 Santa Rosa, CA 95401 Fax (707) 542-8798 www.alwayseng.com JasonH@alwayseng.com	REVISION / DESCRIPTION / BY / DATE	



SITE MAP
CLOS PEGASE WINERY WATER SYSTEM
1060 DUNAWEAL LANE, CALISTOGA, CA

PLOTTED ON: 11/7/2011 2:59 PM

P:\PROJECT\2011\2011136 CLOS PEGASE WINERY-- DUE DILIGENCE\CAD\WWWATER\OVERALL SITE PLAN.DWG



CLOS PEGASE WINERY **1060 DUNAWEAL LANE** **CALISTOGA, CA 94515** **APN: 020-150-012, 017**	**OVERALL SITE PLAN** PROJECT NO 2011136 DATE 11-07-2011 BY KQ CHK AS SHT NO 1 OF 1	SUMMIT ENGINEERING INC. 463 AVIATION BLVD. STE 200 SANTA ROSA, CA 95403 www.summit-er.com • 707.527.0775

FEE 120
RECEIPT NO. 28489
BY PB

A.P.# 20-150-17
RECORD # 3328

NAPA COUNTY
DEPT. OF ENVIRONMENTAL MANAGEMENT
APPLICATION & PERMIT TO CONSTRUCT A WATER WELL

NAME Clos Pegase Winery (Owner) ADDRESS 1060 Dunaweal (Job Location)

NAME Pulliam Well Drilling (Well Driller) PHONE # 224 9396 ADDRESS

TYPE OF WORK
New Class I PERMIT ____ Test Hole Date Called In 4/30/91 /5/7/91
New Class II PERMIT X U.S.G.S. Map Received
Well Reconstruction ____ Well Deepening ____ Horizontal Well ____
Well Destruction ____ High Hazard ____ Low Hazard ____ Hand Dug ____

PROPOSED USE
DOMESTIC ____ IRRIGATION ____ INDUSTRIAL X (MW) MUNICIPAL ____
TEST WELL ____ HOT WATER ____ (D.O.G. Clearance ____) OTHER ____

Sewage Disposal System (existing or proposed) Public ____ Individual ____ Private X
Distance from well to any part of nearest sewage disposal system Septic System Location Determined By: Well Driver - Ponte 150 LF feet.
Plot plan of well location received Yes County road setback 210 ft. from centerline.

WORKER'S COMPENSATION COVERAGE: (Check one of the following)
____ A certificate of current Worker's Compensation Insurance coverage is presently on file with this office.
I A certificate of current Worker's Compensation Insurance is being filed with this application.
____ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws in California.

****

TERMS OF PERMIT

) Call at least 24 hours in advance to schedule an inspection.
) Prior to receiving a Final Clearance on the well, a copy of the Department of Water Resources "Water Well Drillers Report" (DWR-188) must be returned to our Department.
ld Wells to be Destroyed:
ther Remarks:

Bret Pulliam
Signature of Applicant

Date

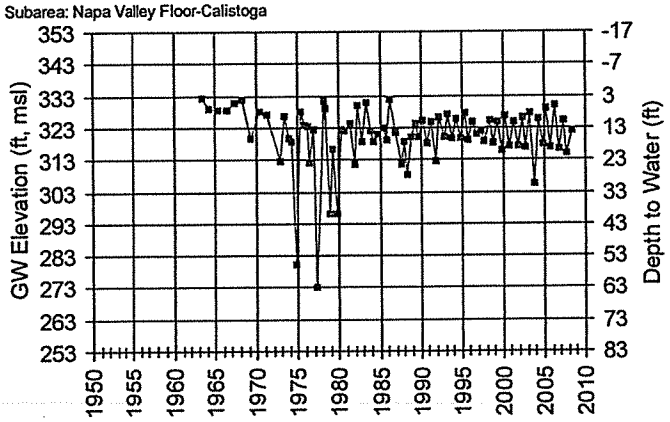
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FOR OFFICE USE ONLY

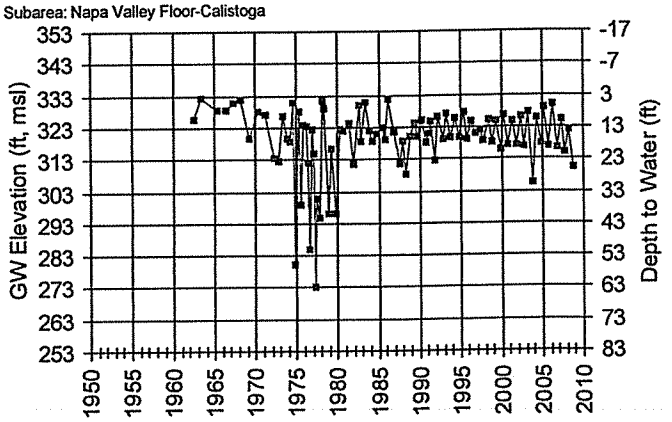
	Date	By	Remarks
City Clearance			
Pub. Works Clearance			
Pre-Inspection			
Class II Approval	5/2/91		See attached Cat. Exemption from Planning
Permit Issued	5/7/91		"
Const. Insp.	5/10/91		Completed 12" hole, 5" casing. Seal to 54.3' OK annular seal
Well Log Rec.			
Final Insp.			

White-Office Yellow-Owner Pink-Contractor
EHM Form Letter#6 / 12-14-88

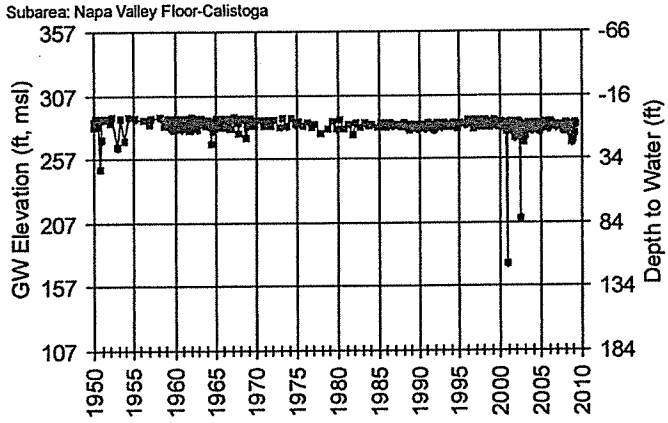
WellID: 08N06W06L004M RPE: 336 ft, msl
SWN: 008N006W06L004M Source: DWR
Subarea: Napa Valley Floor-Calistoga



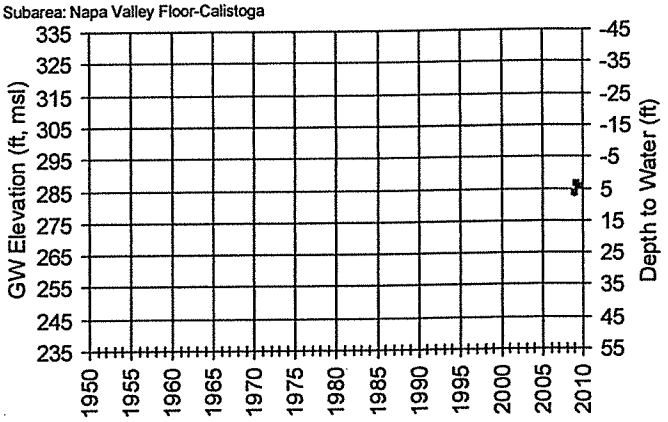
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SWN: 008N006W06L004M Source: NapaCounty
Subarea: Napa Valley Floor-Calistoga



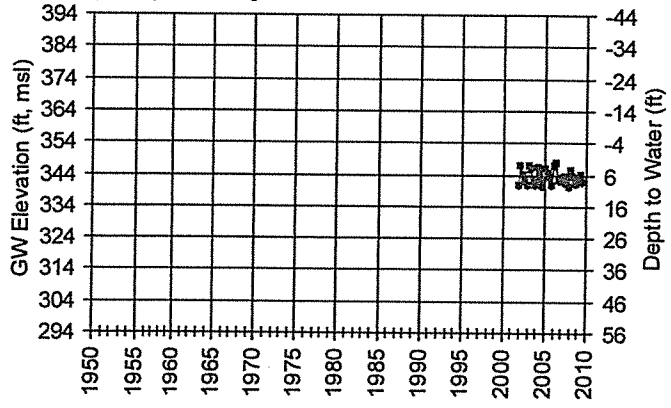
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SWN: 008N006W10Q001M Source: DWR
Subarea: Napa Valley Floor-Calistoga



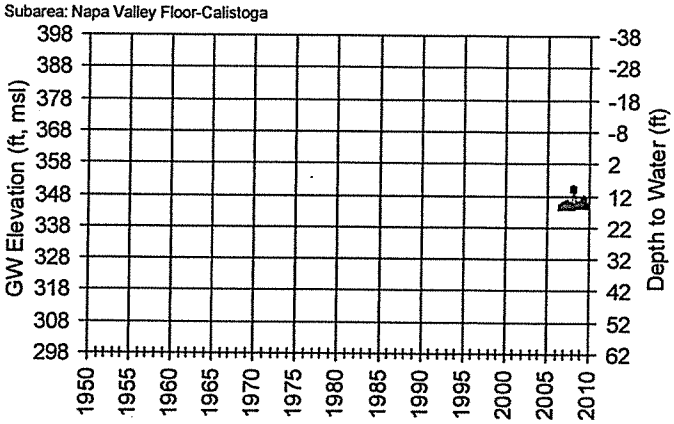
WellID: T0605500272MW-2 RPE: 289.79 ft, msl
SWN: Unknown Source: Geotracker
Subarea: Napa Valley Floor-Calistoga



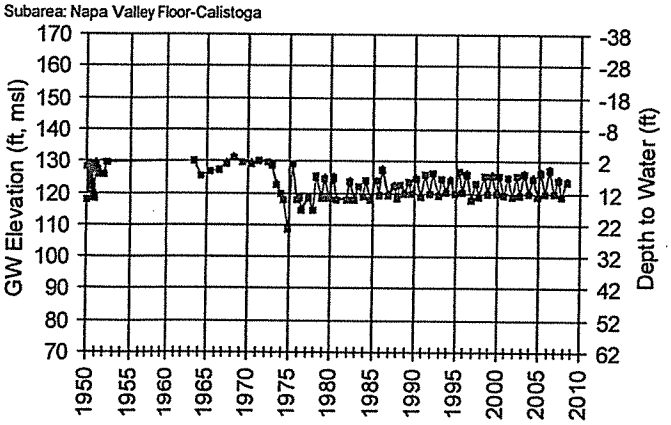
WellID: T0605500136MW-10 RPE: 349.54 ft, msl
SWN: Unknown Source: Geotracker
Subarea: Napa Valley Floor-Calistoga



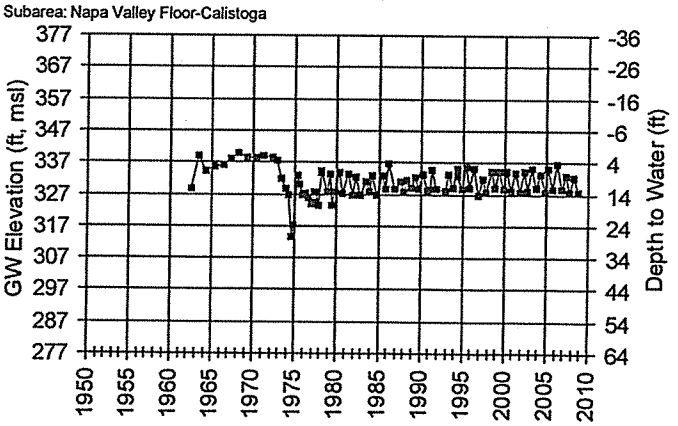
WellID: T0605500250MW-6 RPE: 360.46 ft, msl
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Subarea: Napa Valley Floor-Calistoga



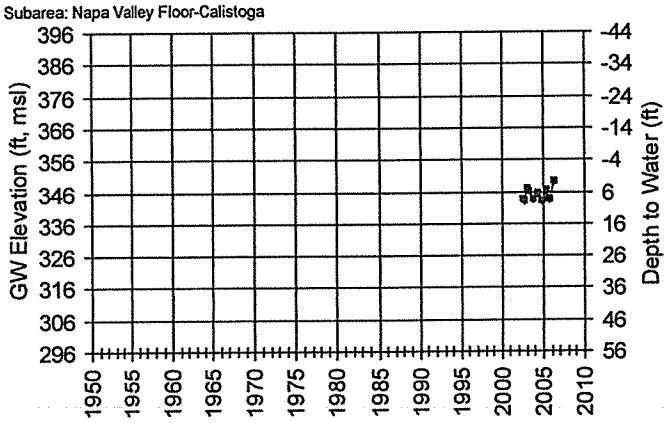
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Subarea: Napa Valley Floor-Calistoga



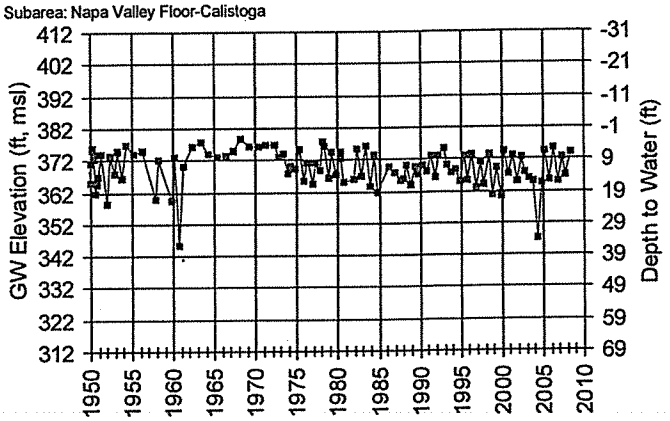
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Subarea: Napa Valley Floor-Calistoga



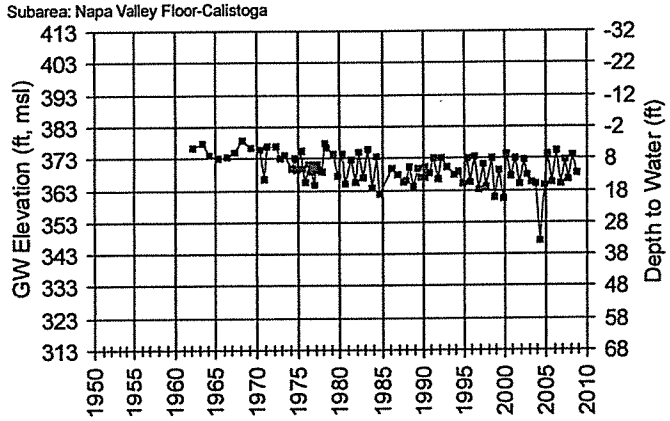
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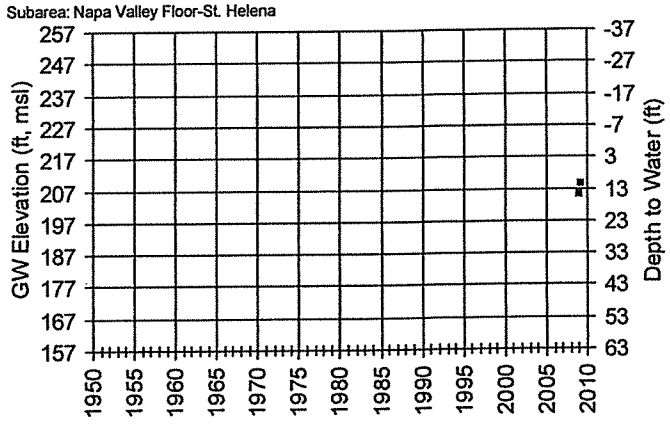
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SWN: 009N007W25N001M Source: DWR
Subarea: Napa Valley Floor-Calistoga



WellID: NapaCounty-127 RPE: 381 ft, msl
SWN: 009N007W25N001M Source: NapaCounty
Subarea: Napa Valley Floor-Calistoga



WellID: SL0605506371MW-4 RPE: 219.87 ft, msl
SWN: Unknown Source: Geotracker
Subarea: Napa Valley Floor-St. Helena



13530.0 Girard Winery
Winery Use Permit
Water System Feasibility
February 21, 2014
Revised: March 26, 2015

Always Engineering, Inc.
Civil Engineering & Topographic Surveying
131 Stony Circle, Suite 1000 (707) 542-8795
Santa Rosa, CA 95401 Fax (707) 542-8798
www.alwayseng.com JasonH@alwayseng.com

Stacey Harrington
Napa County Planning, Building, and Environmental Services
Department of Environmental Management
1195 3rd St. Room 101
Napa, Ca

Project: Girard Winery – New Winery and Tasting Room Use Permit
Water System Feasibility
1077 Dunaweal Lane
Calistoga, CA 94515
APN: 020-150-017

Stacey,

This letter is provided in support of the Girard Winery Use Permit application to construct a new onsite winery and tasting room. Specifically, this letter shall provide preliminary information with respect to the Technical, Managerial and Financial Capacity of the winery to operate the proposed system.

PROJECT AND SITE BACKGROUND

Vintage Wine Estates owns and operates the existing "Clos Pegase" water system (ID # 28-01007) located at 1060 Dunaweal Ln in Calistoga, Ca (APN: 020-150-017). The system is currently regulated as a Transient Non-Community water system. Attached please find the cover page of the most recent water system permit application dated February 3, 2014.

Vintage Wine Estates is applying for a Use Permit to construct a new winery and tasting room onsite; the Girard Winery. With the Use Permit, it is proposed to also serve water to the proposed Girard Winery using the same system. A new supply main, storage tank, booster pump, and distribution system will be required.

The existing water system permit will need to be updated to include additional piping and service connections for the Girard Winery, as well as any additional documents which must be updated as a result.

WATER SYSTEM NAME

The water system shall be known as:

The Clos Pegase and Girard Wineries Water System

REPORT PREPARATION

Always Engineering, Inc.
Civil Engineering & Topographic Surveying
131 Stony Circle, Suite 1000 (707) 542-8795
Santa Rosa, CA 95401 Fax (707) 542-8798
www.alwayseng.com JasonH@alwayseng.com

This report was prepared for Girard Winery by Ben Monroe, P.E. of Always Engineering, Inc. Questions or comments regarding the content of this report should be directed to:

Ben Monroe
Always Engineering, Inc.
131 Stony Circle, Suite 1000
Santa Rosa, Ca 95401
Office: (707) 542-8795 x17
Cell: (707) 318-7099
BenM@alwayseng.com

TECHNICAL CAPACITY

A. System Description

The existing water system for Clos Pegase Winery consists of the following features; one active onsite well on the Girard parcel (Well #2), and one active well on the Cls Pegase parcel (Well #1), pressure tanks, sediment filter, softeners, 58,000 gallon storage tank, pressure tanks, ultraviolet disinfection, and potable use. Well #2 is located on 1077 Dunaweal Lane, Calistoga (APN: 020-150-012). Well #1 is located on 1060 Dunaweal Lane, Calistoga (APN 020-150-017). Both wells supply the currently permitted water system.

A water system schematic is attached.

B. Source Adequacy Assessment and Evaluation

The Clos Pegase and Girard Wineries Water System is sized for ultimate build-out of the parcel and therefore the supply and demand, and infrastructure is expected to be sufficient for at least the next 10 to 20 years. In order to determine the adequacy of the water system, the volume of supply from each source and demand from each use is estimated and evaluated on the following pages:

a. Supply Capacity Assessment

The proposed source for the Water System is as follows:

- Source 1: Well #2
- Source 2: Well #1

Well #2 produces approximately 23 gpm per the well logs, but the current pump supplies 18 gpm. Well #1 produces approximately 5 gpm. A copy of the well log are on file with the County and can be provided upon request. There is one additional onsite well which is not used. No surface water is used in the system and therefore the Surface Water Treatment Rule does not apply.

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131 Stony Circle, Suite 1000 (707) 542-8795
Santa Rosa, CA 95401 Fax (707) 542-8798
www.alwayseng.com JasonH@alwayseng.com

Therefore, the current available supply for the domestic uses onsite is approximately 23 gpm. Evaluating just Well #2, an 18 gpm supply is sufficient to supply 1,080 gallons an hour which is sufficient to supply 8,640 gallons over 8 hours or 25,920 gallons operating for 24 hours a day. This is capable of producing 9,460,800 gallons when operating for 24 hours a day, for 365 days a year.

b. *Demand Assessment*

Onsite water use demand from the system is from the following uses:

Clos Pegase and Girard Wineries

- Winery Processing
- Winery Employees
- Wine Tasting
- Wine Events

All vineyard irrigation is provided by the onsite reservoir pond. Wells No.1 and No. 2 are dedicated to potable uses only.

Demand from each winery is presented below:

Clos Pegase

Winery Process Amended Permit Application

Annual Use	=	920,000 gal/year
Peak Harvest Day	=	5,759 gpd

Winery and Residence Domestic Use

Annual Use (assumes peak day 365 days/year)	=	651,702 gal/year
Peak Day	=	1,785 gpd

Therefore the total water demand for the Clos Pegase is calculated:

Peak Daily Demand

Winery PW + Winery Domestic + Residence	=	7,544 gpd

Annual Demand

Winery PW + Winery Domestic + Residence	=	1,517,702 gal

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Civil Engineering & Topographic Surveying
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Santa Rosa, CA 95401 Fax (707) 542-8798
www.alwayseng.com JasonH@alwayseng.com

Girard Winery

Winery Process

Annual Use	=	920,000 gal/year
Peak Harvest Day	=	5,759 gpd

Winery Domestic

Peak Day	=	1,675 gpd
Annual Use	=	611,375 gal/year

Therefore the total water demand for the Girard Winery is calculated:

Peak Daily Demand		
Winery PW + Winery Domestic	=	7,434 gpd
Annual Demand		
Winery PW + Winery Domestic	=	2,183,077 gal

Landscape Irrigation

Landscape Irrigation is provided by irrigation reservoir which is supplied by treated process wastewater, rainwater, and vineyard sub drain water, and therefore does not impact the public water system demands.

TOTAL WATER DEMAND

For the purposes of simplifying this analysis, all peak water uses are assumed to occur on the same day. This is not the case, as peak winery use only occurs during the months of harvest (Sept – Oct) and typically does not overlap with events. Given the above water demands, the peak water use for the Clos Pegase and Girard Wineries is estimated as follows:

Peak Daily Water Demand

Peak flows are estimated as follows:

Peak Daily Demand for Clos Pegase + Peak Daily Demand for Girard =

7,544 gpd	+	7,434 gpd	=	14,978 gpd

As demonstrated above, the Well No. 2 can produce 25,920 gpd alone and is more than sufficient to supply water to meet the peak onsite daily uses. The well will only have to operate for 832 minutes (13.8 hours) to provide this volume of water for the peak day. A storage tank

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Santa Rosa, CA 95401 Fax (707) 542-8798
www.alwayseng.com JasonH@alwayseng.com

of sufficient volume will be provided for the proposed Girard Winery. A booster pump system will meet the peak hourly use from this tank.

Annual Water Demand

Annual demand for the Clos Pegase and Girard Wineries is the summation of all onsite annual average use and is calculated as follows:

Winery PW + Winery Domestic +Residential	=	
1,840,000 gal + 1,263,077 gal + 325,851 gal	=	3,428,928 gal

The well only needs to operate for a period of approximately 125 days (3,020 hours) in order to supply water for the entire year.

This analysis assumes winery peak domestic uses occur 365 days a year, which will not be the case.

c. Water Quality Assessment

Previous testing indicates that the water is of good quality. Sediment filters, pH adjustment, water softening, and Ultraviolet disinfection are the only treatment components provided. The existing Wells have been sampled and only requires treatment to remove hardness. If required, a current sample will be collected and submitted for testing.

A review of all parcels within 500' of the property line has been done to identify any potential hazardous spills. A map is provided to demonstrate this. There are no spills within 500' on any adjacent parcels

d. Consolidation Feasibility

It is proposed to connect to the Clos Pegase Winery to supply Girard Winery, as described in this report.

MANAGERIAL CAPACITY

A. Ownership

The parcel and water system is owned by a Vintage Wine Estates, with Pat Roney being the corporate officer. A copy of the Deed of Trust for the parcel can be submitted to the County to document this. Vintage Wine Estates also owns and operates the existing public water system

Always Engineering, Inc.
Civil Engineering & Topographic Surveying
131 Stony Circle, Suite 1000 (707) 542-8795
Santa Rosa, CA 95401 Fax (707) 542-8798
www.alwayseng.com JasonH@alwayseng.com

for Clos Pegase Winery, Cosentino Winery, Viansa Winery, and Ray's Station Winery among others.

B. Organization

The Clos Pegase and Girard Wineries Water System will be operated by Eric Pilotti, the Clos Pegase Water System Manager. Mr. Pilotti reports directly to the Clos Pegase General Manager, Samantha Rudd. Ms. Rudd reports directly to Mr. Roney. Mr. Pilotti has experience operating the water system at the Clos Pegase water system for 28 years. In the event that Mr. Pilotti is not available during a water system emergency, Glen Hugo the Girard winemaker shall be responsible for water system operation. Vintage Wine Estates will contract out for all legal, engineering, and maintenance of the water system.

C. Water Rights

The Owner's water rights to the groundwater sources have been demonstrated by a copy of the Deed of Trust for the Parcel on file at the County. The parcel is not located within a groundwater basin that has been classified as being in overdraft, or subject to groundwater adjudication procedures.

D. Emergency/Disaster Response Plan

A complete Emergency/Disaster Response Plan has been submitted to the Napa County office of Environmental Management (NCEM) for the Clos Pegase Winery Water System. An updated plan will be generated when the Girard Winery Water System is designed

FINANCIAL CAPACITY

A. Budget Projection

Vintage Wine Estates, Clos Pegase, and Girard Wineries are not currently encumbered by any judgments, liens, or other financial liability that would prevent operation of the Clos Pegase and Girard Wineries Water System. The majority of the system components are already installed with the exception of the new storage tank, booster pump, and distribution to Girard. Purchase and installation of these components for the system is projected to cost approximately $50,000. Replacement of the entire treatment system is also expected to cost approximately $15,000. Approximately $6,000 per year and $30,000 for the first five years will be required for operation of the Clos Pegase and Girard Wineries Water System. The costs of system maintenance and replacement will be covered by wholesale and retail wine sales.

We trust that this letter and attachments is sufficient to allow processing of the Girard Winery Use Permit for a new winery and tasting room. Please feel free to contact us with any additional questions, comments, or requirements.

Always Engineering, Inc.
Civil Engineering & Topographic Surveying
131 Stony Circle, Suite 1000 (707) 542-8795
Santa Rosa, CA 95401 Fax (707) 542-8798
www.alwayseng.com JasonH@alwayseng.com

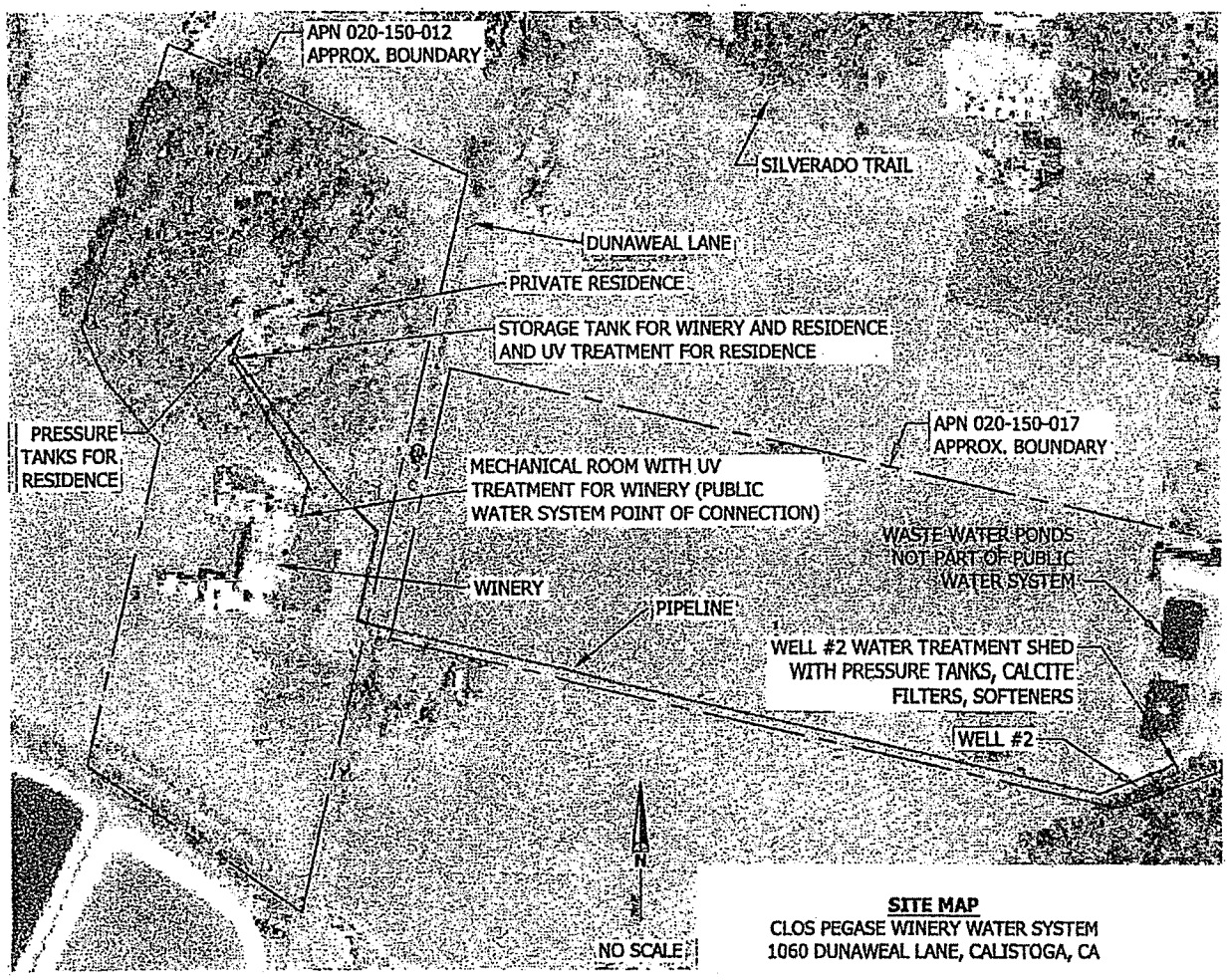
Sincerely,

Ben Monroe, P.E., QSD/QSP
ALWAYS ENGINEERING, INC.
Project Manager



Enclosures

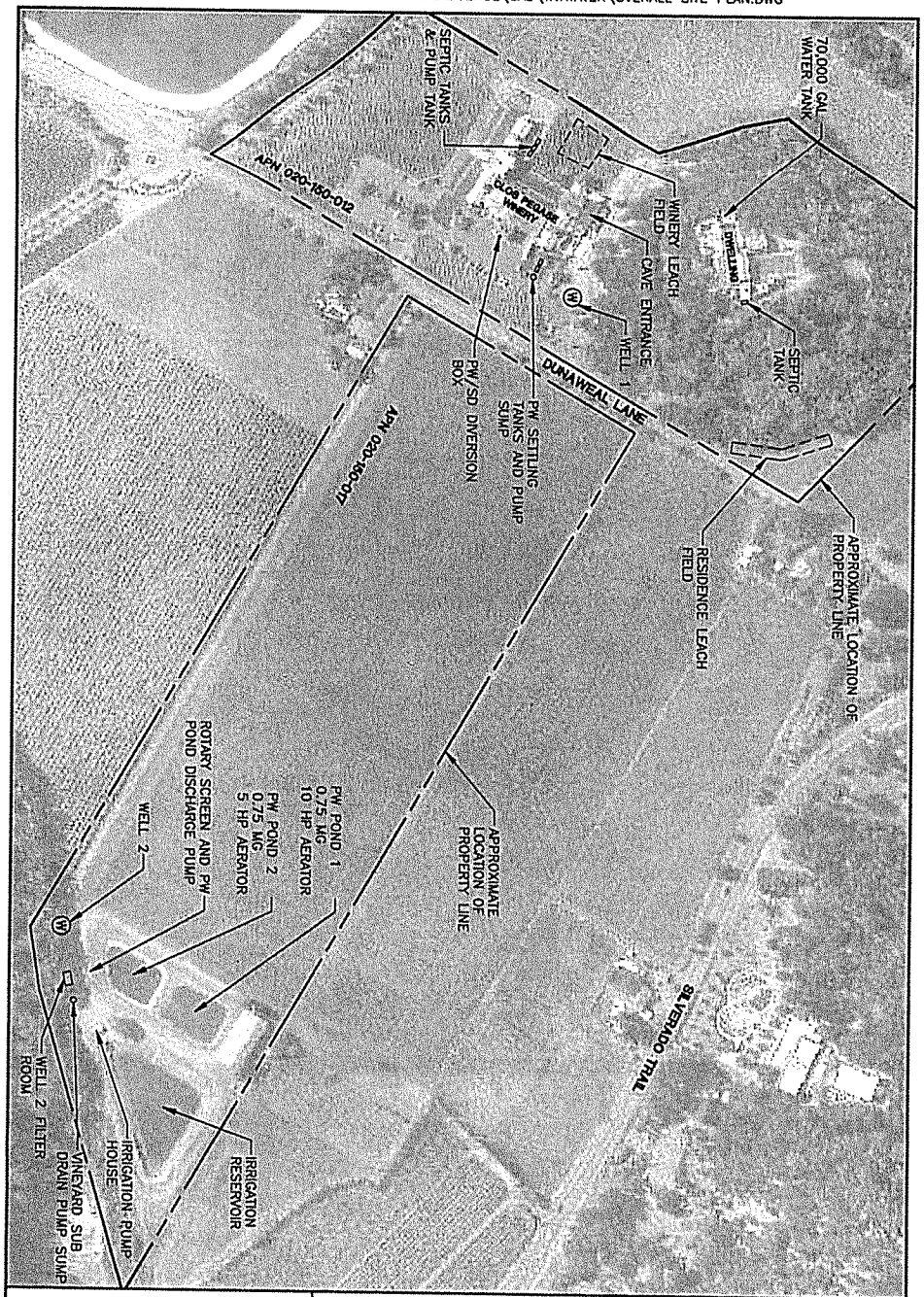
cc: Heather McCollister
Pat Roney (Vintage Wine Estates)



SITE MAP
CLOS PEGASE WINERY WATER SYSTEM
1060 DUNAWEAL LANE, CALISTOGA, CA

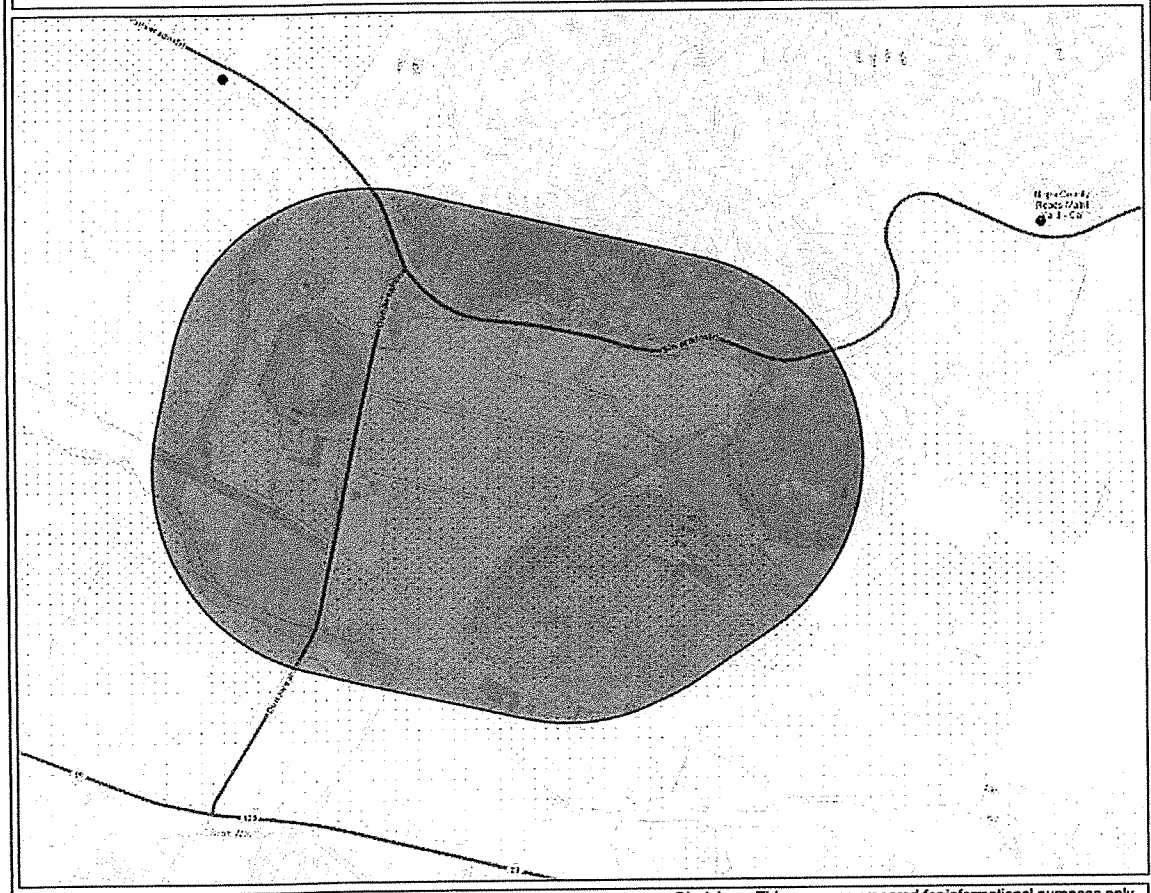
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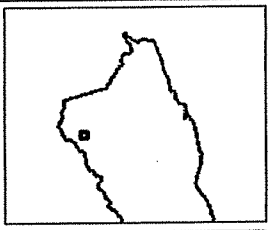
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CLOS PEGASE WINERY **1060 DUNAWEAL LANE** **CALISTOGA, CA 94515** **APN: 020-150-012, 017**	**OVERALL SITE PLAN** PROJECT NO. 2011136 DATE 11-07-2011 BY KO CHK AS SHT NO 1 OF 1	SUMMIT ENGINEERING INC. 463 AVIATION BLVD. STE 200 SANTA ROSA, CA 95403 www.summit-er.com • 707.527.0775

County of Napa GIS





Legend

- HazMat Spills (LOP)
- HazMat Spills (Non-LOP)
- Corner Records
- County Boundary

2,572.3 0 1,286.15 2,572.3 Feet

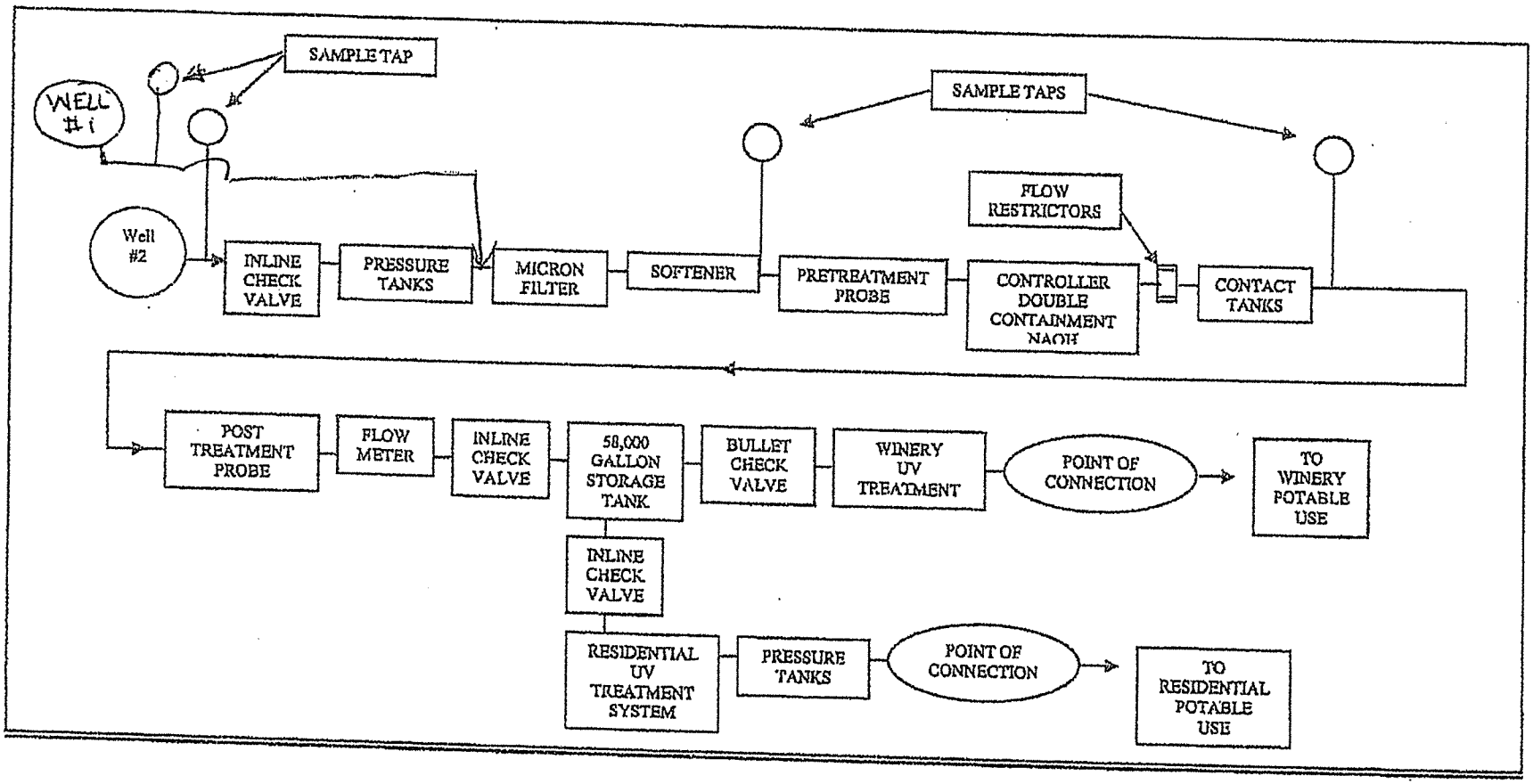
Disclaimer: This map was prepared for informational purposes only.
No liability is assumed for the accuracy of the data delineated hereon.

This map was printed on 11/6/2013

Notes

CLOS PEGASE WINERY WATER SYSTEM

SYSTEM SCHEMATIC



Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

Hillary Gitelman
Director

A Tradition of Stewardship
A Commitment to Service

March 22, 2013

CLOS PEGASE WINERY
JASON DUVAL
1060 DUNAWEAL LANE
CALISTOGA, CA 94515

Dear Water Purveyor,

Subject: Clos Pegase Water System Amendment (WS/484/PMT)

On March 7, 2013 an application was submitted for an amendment to the Clos Pegase Winery Water System located at 1060 Dunaweal Lane, Calistoga, CA 94515. At this time the application has been ***approved***. The permit to operate has been attached, please read the permit in its entirety and note that this permit amendment is an addendum to the previously issued permit and all conditions noted therein.

Please feel free to contact me if you have questions or comments regarding this notice at (707)251-1072.

Regards,

Jahniah McGill
Registered Environmental Health Specialist

STATE OF *CALIFORNIA*

DOMESTIC WATER SUPPLY PERMIT

Issued To

Clos Pegase Winery

28-01007

By

The Environmental Health Division of Planning, Building, and Environmental Services

PERMIT NO.: *484*

EFFECTIVE DATE: *3/21/2013*

WHEREAS:

1. ***Jason Duval*** on behalf of ***Clos Pegase Winery Water System*** submitted an application to the Division of Environmental Health on *3/7/ 2013* for an amendment to the Domestic Water Supply Permit issued to the ***Clos Pegase Winery Water System.***

2. The purpose of the amendment, as stated in the application, is to allow the ***Clos Pegase Winery Water System*** to make the following modifications to the public water system:

   *a) **Add sodium hydroxide injection for pH adjustment***
   *b) **Remove the Calcite filters***
   *c) **And a kinetic softener***

3. The ***Clos Pegase Winery Water System*** has submitted all of the supporting information required to evaluate the application.

4. The Division of Environmental Health has evaluated the application and the supporting material and has determined that the proposed modifications comply with all applicable State drinking water requirements.

THEREFORE:

1. The Napa County Department of Environmental Management hereby approves the application submitted by the ***Clos Pegase Winery Water System*** for a permit amendment. The Domestic Water Supply Permit issued to the ***Clos Pegase Winery Water System*** is hereby amended as follows:

   a) Sodium Hydroxide injection is approved for pH adjustment.

2. This permit amendment is subject to the following conditions:

   a) The only sources approved for potable water supply is as follows:

Source	PS Code	Status	Capacity	Comments
001	2801007-001	Disconnected	unknown	Well 1
003	2801007-003	Active	23 gpm	Well 2

Two-40 gallon Sanitron Ultra Violet water purifiers, both with 40 gpm flow restrictors, and an additional 40 gpm ultraviolet unit with a 20 gpm flow restrictor are approved as *precautionary* treatment for this water system. Replacement bulbs must be stored onsite at all times and an employee must be trained to replace the bulbs.

One sodium hydroxide injection unit using the filter cases for contact time to assist with pH adjustment

One Kinetico Softener is approved for the removal of iron and manganese.

A 58,000-gallon tank which is lined with a COOLPRO Polypropylene PP78 sanitary liner is approved for water storage.

b) Bacteriological and chemical tests shall be performed in compliance with the requirements of the California Drinking Water Standards, and the water system shall comply with all reporting requirements. See attached chemical testing schedules

Quarterly bacteriological reports from an approved lab must be submitted to this office no later than the 10th day following the end of the sampling period. The bacteriological samples shall be collected from the location specified on the Bacteriological Sample Siting Plan. The source chemical monitoring sampling must be completed as shown on the attached chemical testing schedule

c) The application states that the backwashing filter is plumbed to a sump which disposes to the processed wastewater ponds. This connection must be via an air gap to provide adequate backflow prevention.

d) The system is required to contact their local Pollution Prevention team and update the Hazardous Materials Business Plan (HMBP).

e) A pH sample must be submitted prior to treatment and post treatment to ensure that the pH levels are no longer corrosive in the distribution system.

f) No changes, additions, or modifications shall be made to the sources or treatment unless an amended water permit has first been obtained from the Department.

g) The **Clos Pegase Winery Water System** is operated and maintained in compliance with the California Safe Drinking Water Act.

h) This permit may be revoked or suspended for failure to comply with the California State Health and Safety Code, California Code of Regulations and Title 13 of the Napa County Code Relating to Wells and Water Supply Systems.

This permit supersedes all previous domestic water supply permits issued for this public water system and shall remain in effect unless and until it is amended, revised, reissued, or declared to be null and void by the Division of Environmental Health. This permit is non-transferable. Should the ***Clos Pegase Winery Water System*** undergo a change of ownership, the new owner must apply for and receive a new domestic water supply permit.

Any change in the source of water for the water system, any modification of the method of treatment as described in the Permit Report, or any addition of distribution system storage reservoirs shall not be made unless an application for such change is submitted to the Division of Environmental Health.

FOR THE Division of Environmental Health

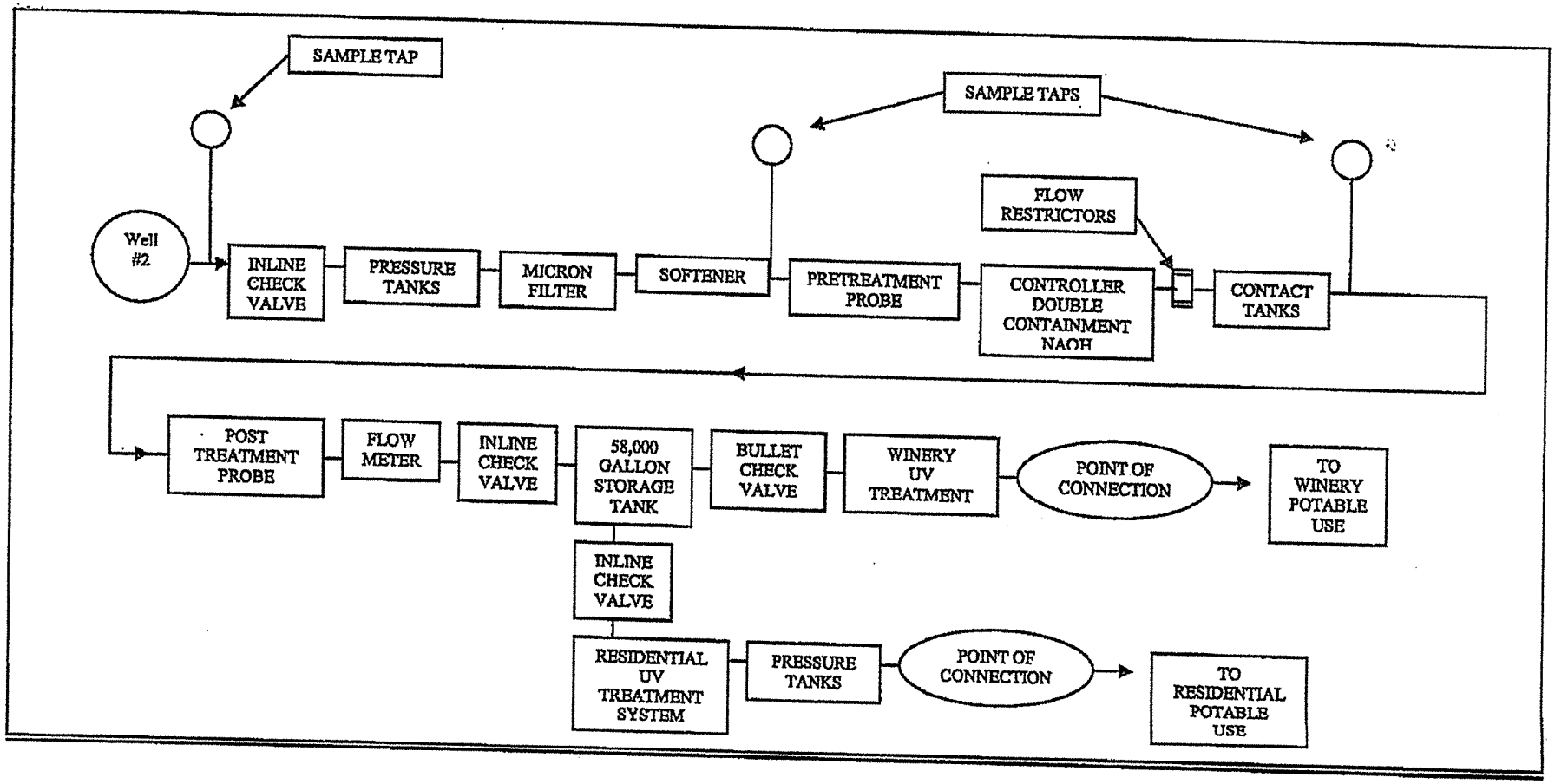
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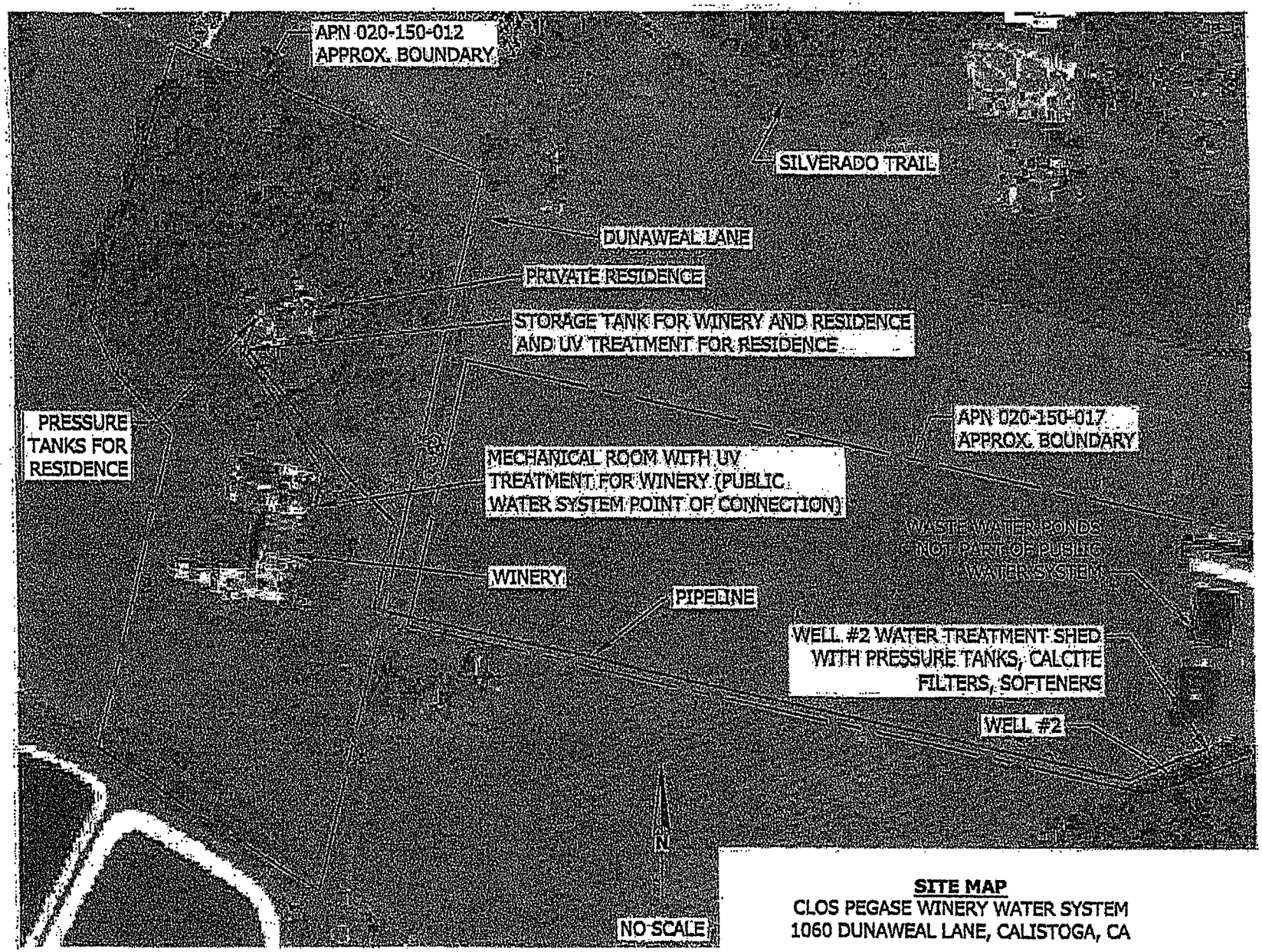
Date

Jahniah McGill, R.E.H.S.

CLOS PEGASE WINERY WATER SYSTEM

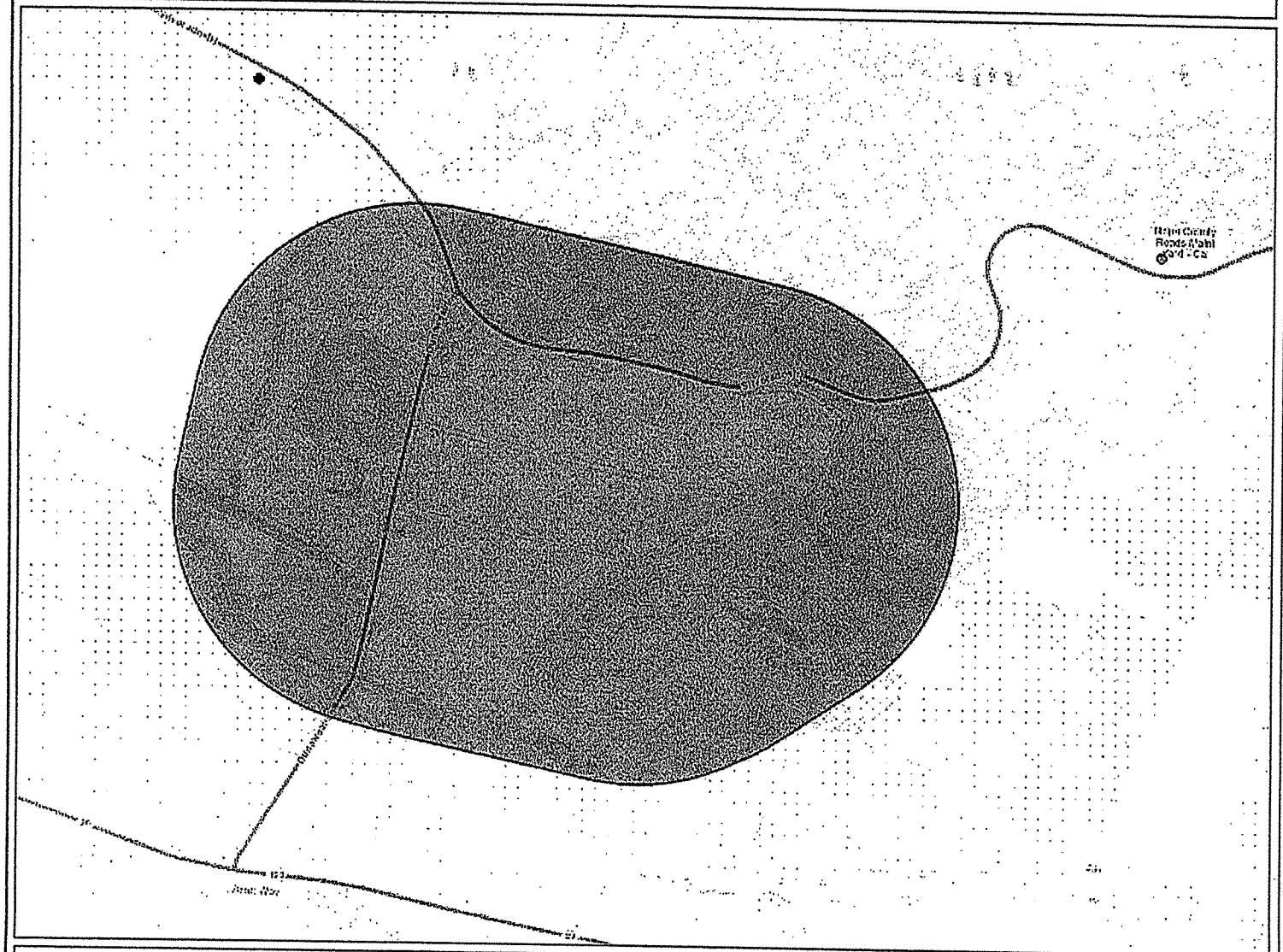
SYSTEM SCHEMATIC

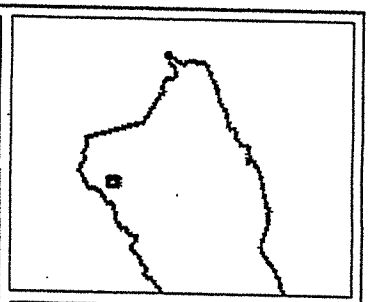




SITE MAP
CLOS PEGASE WINERY WATER SYSTEM
1060 DUNAWEAL LANE, CALISTOGA, CA

County of Napa GIS





Legend

- HazMat Spills (LOP)
- HazMat Spills (Non-LOP)
- Corner Records
- County Boundary

2,572.3 0 1,286.15 2,572.3 Feet

Disclaimer: This map was prepared for informational purposes only.
No liability is assumed for the accuracy of the data delineated hereon.

This map was printed on 11/6/2013

Notes

RECEIVED
MAY 07 2014
Napa County Planning, Building & Environmental Services

DECLARATION

(Nontransient-Noncommunity)

I, PATRICK ROWE, declare that I understand the definition of a public
(name of owner or legally authorized representative)
water system, as defined in the California Health and Safety Code (CH&SC), Division 104, Part 12, Chapter 4 (California Safe Drinking Water Act), Article 1, Section 116275(h), to mean that a **public** water system is "a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year."

Furthermore, I understand the definition of a nontransient-noncommunity water system, as defined in Section 116275(k), to mean "a public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year."

Furthermore, I declare that I understand that Section 116275(e) defines human consumption as "the use of water for drinking, bathing or showering, hand washing, or oral hygiene."

Furthermore, I declare that I understand that Section 116725 of the CH&SC states that "Any person who knowingly makes any false statement or representation in any application, record, report, or other document submitted, maintained, or used for purposes or compliance with this chapter (California Safe Drinking Water Act (AB 2995)), may be liable for a civil penalty not to exceed five thousand ($5,000) for each separate violation or, for continuing violations, for each day that violation continues." In addition, Section 116730 of the CH&SC states that violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than $25,000 for each day of violation, or by imprisonment in the county jail not to exceed one year, or by both the fine and imprisonment.

In recognition of the above, declaring that I understand the definition of a public water system and the penalty for giving false information, I declare that my facility, Clos Pegase and Girard Wineries Water System, does not meet the definition of a nontransient noncommunity water system because ***it does not serve more than 24 people more than 6 months out of the year.***

5/2/14
Date

Signature

A Tradition of Stewardship
A Commitment to Service

Department of Public Works

1195 Third Street, Suite 101
Napa, CA 94559-3092
www.countyofnapa.org/publicworks

Main: (707) 253-4351
Fax: (707) 253-4627

Steven Lederer
Director

MEMORANDUM

To:	PBES Staff	From:	Rick Marshall Deputy Director of Public Works
Date:	June 3, 2015	Re:	Girard Winery P14-00053

Thank you for the opportunity to review the subject permit application. I have reviewed the *Traffic Impact Study for the Girard Winery Project,* by W-Trans, dated December 18, 2014; the Initial Study prepared by your office; the letter from Ellison Folk and Laurel Impett, Shute Mihaly & Weinberger, dated January 20, 2015; and the response to the Folk & Impett letter by W-Trans, dated April 9, 2015.

I generally concur with the methods used, assumptions made, and conclusions reached by W-Trans in their original study and in their response to the Folk & Impett letter. I offer the following comments and recommendations:

Study area evaluated. The study area evaluated is appropriate for the proposed project, and is consistent with other project reviews conducted in the County of Napa. Traffic from the proposed project beyond the area studied in this analysis would be greatly diluted as it spreads throughout the roadway network and mixes with other traffic from the area.

Peak hour appropriate for analysis. I concur with W-Trans response that the scenarios evaluated in their analysis, weekday PM peak hour and weekend midday peak hour, are appropriate for this type of study, and this is consistent with other project reviews conducted in the County of Napa.

Thresholds of significance. W-Trans correctly identifies that the proposed project will add traffic to nearby roads and intersections which will operate at unacceptable levels of service under future conditions. However, they incorrectly conclude that because the Napa County General Plan includes a policy restricting the addition of traffic lanes, that this does not constitute a significant impact. In reality, it <u>does</u> constitute a significant cumulative impact, but evaluation of each project must consider alternatives other than just adding lanes in order to determine whether this impact can be mitigated to a less-than-significant level.

A recommendation that the project contribute to a traffic impact fee program would be appropriate if the County had one in place at this time. Since such a program is not yet developed, in order to move forward this proposed development must incorporate some other type of measure which could be found to adequately mitigate this impact, or else prepare an Environmental Impact Report to enable the adoption of overriding findings. It is my recommendation that the applicant modify their proposal so that the number of weekday afternoon or weekend midday peak hour trips generated by the project do not increase volumes on SR 29 or Silverado Trail by more than 1%. This is a threshold which is supported by other recent approvals in this County.

In order to reduce the number of peak hour trips added, the applicant could implement a Transportation Demand Management (TDM) plan such as is mentioned in W-Trans reports. In order to determine whether the TDM plan will adequately mitigate the cumulative impact as noted above, the traffic study should quantify the resulting number of trips which would be added to the impacted facilities, to demonstrate to decision makers whether the project would add more or less than a 1% increase with these measures in place.

Specific to the proposed TDM plan as described so far, I concur with Folk & Impett that the project applicant must provide more details about the proposed shuttle service. We need this information to determine whether there will be any secondary traffic or parking impacts at the location where visitors will gather to catch the shuttles.

Evaluation of special events. I concur with W-Trans position that the evaluation of weekday and weekend peaks, during regular operations, is what is appropriate for this analysis. It is the standard practice of our industry to assume that a small number of periods each year will have volumes which exceed these levels, and are not appropriate for analysis or design of facilities.

Left-Turn Lane not required. I concur with the determination by W-Trans that a left-turn lane at the project access location on Dunaweal Lane is not warranted.

Cumulative Impacts. By evaluating the volumes obtained from the countywide traffic forecasting model, the study has effectively included all recent approved projects and more. I do not recommend that further analysis along this line is needed.

Please contact me at Rick.Marshall@countyofnapa.org or call (707) 259-8381 if you have questions or need additional information.

w-trans

Whitlock & Weinberger
Transportation, Inc.
490 Mendocino Avenue
Suite 201
Santa Rosa, CA 95401
voice 707.542.9500
fax 707.542.9590
web www.w-trans.com

December 18, 2014

Ms. Heather McCollister
1512 D Street
Napa, CA 94559

Traffic Impact Study for the Girard Winery Project

Dear Ms. McCollister;

Whitlock & Weinberger Transportation, Inc. (W-Trans) has completed a focused traffic analysis addressing potential traffic impacts and access needs for the proposed new winery to be located at 1077 Dunaweal Lane in the County of Napa. The traffic study was completed in accordance with the criteria established by the County of Napa, and is consistent with standard traffic engineering techniques. Comments from County staff have been addressed in preparing this final study.

Study Area

The project site is located on the east side of Dunaweal Lane between Silverado Trail and State Route (SR) 29, and is currently vacant. Dunaweal Lane is a two-lane roadway that runs north-south, and is designated as a local roadway. The posted speed limit on Dunaweal Lane is 45 miles per hour (mph).

Two intersections were identified by County staff for analysis.

Silverado Trail/Dunaweal Lane is a tee intersection with stop controls and flared right-turn lane on the northbound terminating Dunaweal Lane approach.

SR 29/Dunaweal Lane is stop-controlled with flared right-turn lanes on both the northbound and southbound Dunaweal Lane approaches.

Project Description

The proposed project would allow production of up to 200,000 gallons of wine annually, and operation of a tasting room for an average of 52 visitors on a weekday and 62 visitors on a weekend (or maximums of 75 and 90 visitors on a peak day, respectively. The project would have eight full-time employees and three part time employees on-site during weekdays as well as two full-time employees and four part-time employees on weekends. Vehicular access to the project site would be provided via a full access driveway on Dunaweal Lane. The most recent site plan, dated February 4, 2014 is enclosed.

Existing Volumes

Mechanical tube counts were collected on Dunaweal Lane near the project site on three consecutive days in March 2014 (Thursday through Saturday). Intersection counts were taken during the p.m. peak period in September 2014 at Silverado Trail/Dunaweal Lane and SR 29/Dunaweal Lane. The existing traffic volumes on Dunaweal Lane are summarized in Table 1. The volume of traffic ranged from 1,484 on Thursday to 1,691 vehicles on Saturday; this would be considered relatively low and reflects the volumes that would be generated by a residential subdivision having fewer than 20 homes.

Table 1
Existing Traffic Volumes

Study Segment	Friday		Saturday	
	Daily Trips NB/SB	PM Peak NB/SB	Daily Trips NB/SB	Midday Peak NB/SB
Dunaweal Ln	828/746	68/90	880/811	101/77
Total (NB+SB)	**1,574**	**158**	**1,691**	**178**

Existing Conditions

Intersections

Using the turning movement data collected at the two study intersections together with the current configurations, existing operating conditions at each intersection were evaluated. As shown in Table 2, both intersections are currently operating at LOS A or B overall and on all approaches. Copies of the calculations for all scenarios are enclosed.

Table 2
Existing PM Peak Hour Intersection Levels of Service

Study Intersection *Approach*	Existing Conditions		Existing plus Project	
	Delay	LOS	Delay	LOS
1. Silverado Trail/Dunaweal Ln	1.8	A	1.8	A
Westbound (Silverado) Left-turn	*7.6*	*A*	*7.6*	*A*
Northbound (Dunaweal) Approach	*8.9*	*A*	*8.9*	*A*
2. SR 29/Dunaweal Ln	0.9	A	0.9	A
Northbound (Dunaweal) Approach	*9.7*	*A*	*9.7*	*A*
Southbound (Dunaweal) Approach	*11.6*	*B*	*11.6*	*B*
Eastbound (SR 29) Left-turn	*8.9*	*A*	*8.9*	*A*
Westbound (SR 29) Left-turn	*8.1*	*A*	*8.1*	*A*

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

According to Policy CIR-16 of the *Napa County General Plan*, 2008, "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." For analysis purposes it was assumed that the impact would be significant if project-added traffic caused operation to fall to LOS E or F on an approach for which the Peak Hour Volume Signal Warrant is met.

With all approaches at LOS A or B, the current operation of both intersections would be considered acceptable. While weekend operation was not evaluated, given the similarity of volumes on a weekday versus a weekend day together with the very low average delays currently being encountered, it appears reasonable to conclude that operation during the weekend peak period is also low and therefore acceptable.

Roadways

Information in the *Napa County General Plan Update Draft Environmental Impact Report*, February 2007 (GPUDEIR), indicates that under 2003 volumes SR 29 was operating at LOS D between Lodi Lane and Deer Park Road (this is the nearest segment included in the analysis). Silverado Trail is identified in the same document as operating at LOS C under 2003 volumes.

Policy CIR-16 of the Napa County General Plan also provides guidance for roadways, indicating that, "The County shall seek to maintain an arterial Level of Service D or better on all county roadways, except where maintaining this desired level of service would require the installation of more travel lanes than shown on the Circulation Map." Both SR 29 and Silverado Trail are shown as 2-lane Rural Collectors on the Circulation Map (Figure CIR-1). As a result, the LOS D standard does not apply and operation is therefore considered acceptable regardless of the service level.

Collision History

The collision history along Dunaweal Lane between Silverado Trail and SR 29 was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on the collision data available from the California Highway Patrol as published in their *Statewide Integrated Traffic Records System* (SWITRS) reports during a five-year period between January 1, 2007, and December 31, 2011. The calculated collision rate for the study segment was compared to the average collision rate for similar facilities statewide, as indicated in *2010 Collision Data on California State Highways*, California Department of Transportation (Caltrans).

The statewide average collision rate for a rural two-lane, flat road with a speed limit of 55 mph or less is 1.05 collisions/million vehicle miles (c/mvm). Over the five-year study period, seven collisions were reported on Dunaweal Lane between Silverado Trail and SR 29, for a calculated collision rate of 0.90 c/mvm, which is lower than the statewide average for similar facilities. Further, no injuries or fatalities were reported during the five-year study period. The collision rate calculation spreadsheet is enclosed.

Future Volumes

Future projected traffic volumes were obtained from the Solano Transportation Authority (STA) who maintains the joint Napa County/Solano County 2010-2030 Travel Demand Forecasting Model. The data used included directional segment volumes along SR 29 and Silverado Trail for the p.m. peak hour. Using the 2030 and 2010 model volumes a growth factor of 1.45 was determined for SR 29. This growth factor was applied to turning movements to and from Dunaweal Lane and the remainder of the future increase was added to the volumes for the through movements. It is noted that the 78 vehicle trips added to Dunaweal Lane during the p.m. peak hour would adequately represent increases associated with three new wineries or expansions to existing wineries along Dunaweal Lane.

Future Conditions

Intersections

Based on these projected future volumes, the two study intersections are expected to operate acceptably overall, though the northbound Dunaweal approach to Silverado Trail is expected to operate at LOS E and the southbound Dunaweal Lane approach to SR 29 is expected to operate at LOS F. These results are shown in Table 3.

Table 3
Future PM Peak Hour Intersection Levels of Service

Study Intersection *Approach*	Future Conditions		Future plus Project	
	Delay	LOS	Delay	LOS
1. Silverado Trail/Dunaweal Ln	3.9	A	4.9	A
Westbound (Silverado) Left-turn	*9.5*	*A*	*9.6*	*A*
Northbound (Dunaweal) Approach	*38.7*	*E*	*45.7*	*E*
2. SR 29/Dunaweal Ln	9.6	A	12.4	B
Northbound (Dunaweal) Approach	*20.3*	*C*	*20.7*	*C*
Southbound (Dunaweal) Approach	**	*F*	**	*F*
Eastbound (SR 29) Left-turn	*11.4*	*B*	*11.4*	*B*
Westbound (SR 29) Left-turn	*8.7*	*A*	*8.7*	*A*

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; ** = delay greater than 120 seconds

Roadways

According to the GPUDEIR, under projected 2030 volumes SR 29 is expected to operate at LOS F in the study area and, despite substantial increases in traffic, Silverado Trail is expected to continue operating at LOS C. As previously noted, the County has exempted both of these roads from their operational standard, so the projected operation is considered acceptable.

Trip Generation

The anticipated trip generation for a proposed project is typically estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 9th Edition, 2012. However, the publication contains no such information for a winery. Therefore, the County of Napa's Winery Traffic Information/Trip Generation Sheet was used to determine the anticipated traffic that would be generated by the proposed tasting room. A copy of this worksheet is enclosed.

Employee-related trips will be minimized by scheduling employee shifts that reduce the number of trips generated during the p.m. peak period. Production employees will work Monday through Friday from 7 a.m. to 3 p.m., hospitality and/or tasting room employees will work seven days per week from 9 a.m. to 6 p.m. and administrative employees will work Monday through Friday from 8 a.m. to 5 p.m. The resulting weekday p.m. peak hour trips will be associated with administrative employees and tasting visitors only.

The County of Napa's Winery Traffic Information/Trip Generation Sheet does not include guidance on inbound versus outbound trips, so it was assumed that 75 percent of trips at the winery would be outbound during the weekday p.m. peak hour since most of the trips would be associated with employees and customers leaving at closure of the winery. For the weekend midday peak hour it was assumed that inbound and outbound trips would be evenly split. A summary of the project's trip generation potential is provided in Table 4.

Table 4
Project Trip Generation

Land Use	Daily Trips		Weekday PM Peak			Weekend Midday Peak		
	Weekday	Weekend	Trips	In	Out	Trips	In	Out
Proposed Project								
Winery plus Tasting Room	74	58	26	6	20	29	15	14
Total Trips on Driveway	**74**	**58**	**26**	**6**	**20**	**29**	**15**	**14**

Trip Distribution

The pattern used to allocate new project trips to the street network was determined by reviewing existing average daily traffic volumes on Dunaweal Lane. It is understood that the winery will direct employees to take SR 29 when their origin/destination is the north and take Silverado Trail when their origin/destination is the south. This results in right-turns from Dunaweal Lane to the regional network, further reducing impacts at the study intersections due to project-related trips. It is recommended that clear signage that directs tasting room visitors in the same fashion be installed at the project driveway for exiting vehicles and similar directions be posted on the winery's website.

Visitor traffic accessing the site from the north via Silverado Trail and from the south via SR 29 was assumed to have an even split, while all employee trips from the north take SR 29 and from the south were assumed to take Silverado Trail. Evening peak hour counts recently obtained at Dunaweal Lane together with the anticipated travel pattern specific to this project were used to estimate the splits at SR 29 and Silverado Trail. The resulting trip distribution is shown in Table 4.

Table 4
Trip Distribution Assumptions and Project-Added Trips

Origin/Destination	Percent of Trips	Daily/Weekend Trips	PM Peak Trips	Weekend Peak Trips
SR 29 south of Dunaweal				
Employee Trips	0	0/0	0	0
Visitor & Truck Trips	15	7/7	2	4
SR 29 north of Dunaweal				
Employee Trips	70	21/10	7	3
Visitor & Truck Trips	35	15/15	6	9
Silverado Trail south of Dunaweal				
Employee Trips	0	0/0	0	0
Visitor & Truck Trips	35	15/15	6	9
Silverado Trail north of Dunaweal				
Employee Trips	30	9/4	3	1
Visitor & Truck Trips	15	7/7	2	4
TOTAL		**74/58**	**26**	**30***

Note: * Value does not equal trip generation exactly due to rounding

Plus Project Conditions

Intersections

Upon adding project-generated trips to existing volumes, both study intersections are expected to continue operating at LOS A or B overall as well as on all approaches. Because operation will remain acceptable, the impact is considered less-than-significant.

Under Future plus Project conditions both study intersections are projected to continue operating at the same levels of service both overall and on individual approaches except that the overall operation at SR 29/ Dunaweal Lane changes from LOS A to LOS B.

Roadways

The additional traffic that the project would generate would reasonably be expected to be included in the growth projected by the County's traffic model. Further, since both study roadways are exempt from the County's operational standard, the added trips can be considered to have a less-than-significant impact.

Recommendation: Steps should be taken to direct winery traffic in such a way as to minimize impacts and support efforts to maintain LOS D operation on the SR 29 study intersection and roadway segments.

Site Access

Left-Turn Lane Warrants

The need for a left-turn lane on Dunaweal Lane at the proposed project driveway was evaluated based on criteria contained in the *Napa County Road and Street Standards*, 2011. Because future average daily traffic volumes on Dunaweal Lane are not available, recently obtained counts for both the weekday and weekend were used for this analysis.

Using the County's criteria, for the daily Friday traffic volume of 1575 vehicles and 1875 vehicles on a weekend, a left-turn lane would not be warranted for the projected driveway ADT of 74 vehicles on a weekday and 60 vehicles or more on a weekend. The proposed project would generate a weekday average of 74 trips and weekend average of 58 trips. Based on these traffic levels, a left-turn lane would not be warranted at the project driveway. The left-turn lane warrant graphs are enclosed for reference.

Sight Distance

At driveways, a substantially clear line of sight should be maintained between the driver of a vehicle waiting on the driveway and the driver of an approaching vehicle. Adequate time must be provided for the waiting vehicle to either cross, turn left, or turn right, without requiring the through traffic to radically alter their speed.

Sight distance along Dunaweal Lane at the proposed driveway was evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance for minor street approaches that are driveways is based on stopping sight distance, with the approach travel speeds as the basis for determining the recommended sight distance. For a 45-mph posted speed limit on Dunaweal Lane, the recommended stopping sight distance for a private driveway is 360 feet.

Dunaweal Lane is relatively flat and straight on both sides of the proposed driveway. Based on a review of the site plan, proposed driveway and Google Earth, sight lines are more than adequate and meet the recommended distance for the prevailing travel speeds.

Conclusions and Recommendations

- The proposed project would generate an average of 74 new daily trips, including 26 weekday p.m. peak hour trips and 29 weekend p.m. peak hour trips.
- The calculated collision rate for the study segment was lower than the statewide average for similar facilities.
- The study intersections and roadways are operating acceptably under existing volumes, and are expected to continue to do so with project trips added.
- Under projected future volumes the study intersections are expected to continue operating acceptably overall, though due to excessive delays anticipated at SR 29/Dunaweal Lane signalization may be warranted.
- SR 29 and Silverado Trail will continue to operate acceptably based on the applicable standards under projected Future volumes.
- It is recommended that the schedule for employee shifts be set to minimize the amount of traffic generated during the weekday p.m. peak hour.
- Clear signage that directs visitors to use SR 29 when destined to the north and Silverado Trail when destined to the south should be placed at the driveway. Similar information should be provided on the winery's website as well.
- A left-turn lane is not warranted at the project driveway based on Napa County's Left-Turn Lane Warrant criterion.
- Acceptable clear sight lines are available in both directions along Dunaweal Lane from the proposed driveway.
- The applicant should take steps to minimize traffic impacts and support efforts to maintain LOS D operation on SR 29 and its intersection with Dunaweal Lane.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,

Dalene J. Whitlock, PE, PTOE
Principal



DJW/djw/NAX077.L2

Enclosures: Site Plan
Level of Service Calculations
Collision Rate Calculation Spreadsheet
Winery Traffic Information/Trip Generation Sheet
Napa County Left-Turn Lane Warrant

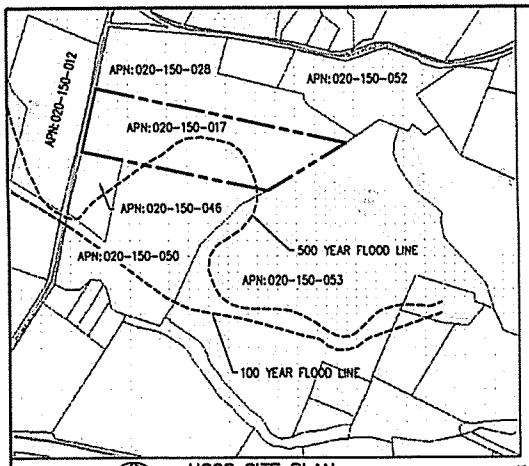
GIRARD WINERY

1077 Dunaweal Ln.

Calistoga, California 94515

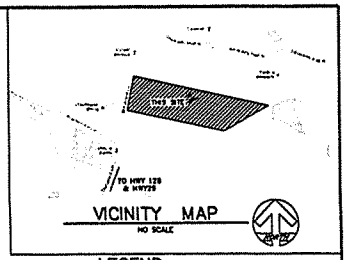
APN 022-150-017

USE PERMIT APPLICATION



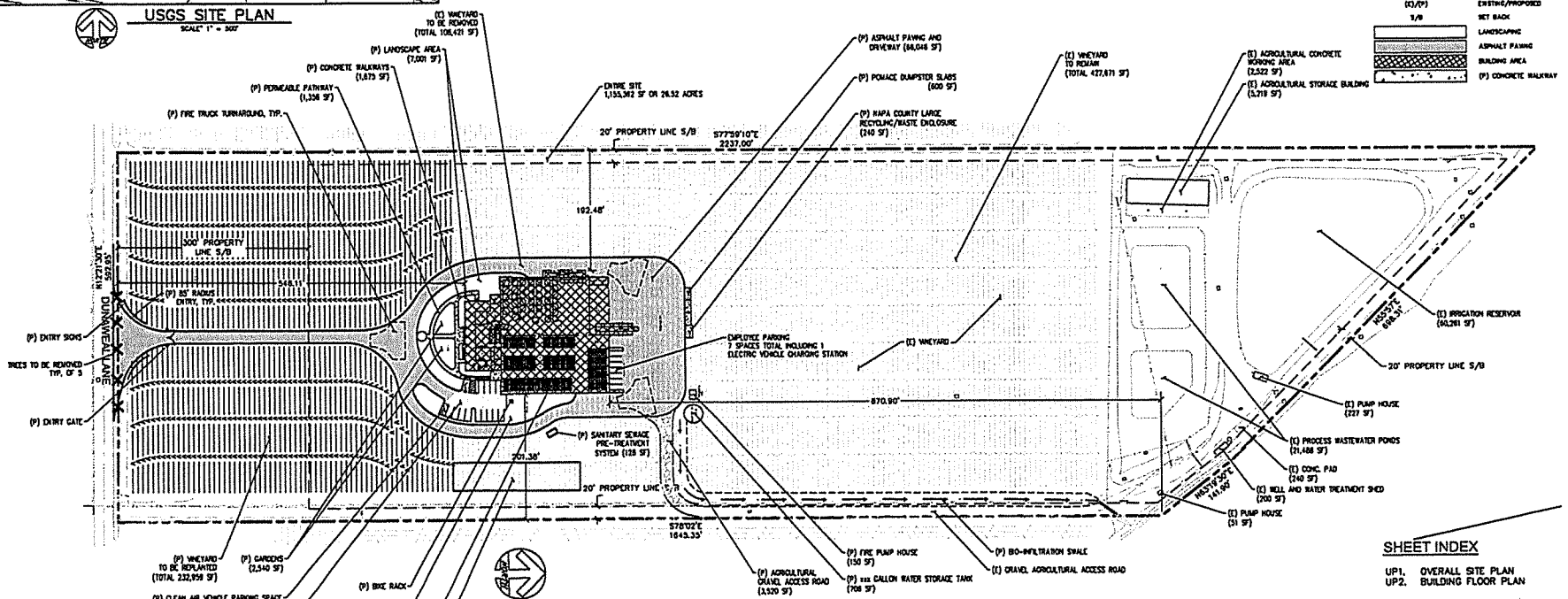
USGS SITE PLAN

SCALE: 1" = 500'



LEGEND

- APPROXIMATE PROPERTY LINE
- FENCE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL DRIVEWAY
- DRAINAGE COURSE FLOWLINE
- VINEROW
- OVERHEAD UTILITIES
- SETBACK
- 100 YEAR FLOOD PLAIN
- 500 YEAR FLOOD PLAIN
- 5 FOOT INDEX 1' INTERVAL CONTOURS
- WELL
- (E)/(P) EXISTING/PROPOSED SET BACK
- LANDSCAPING
- ASPHALT PAVING
- BUILDING AREA
- (P) CONCRETE WALKWAY



PROPOSED OVERALL SITE PLAN

SCALE: 1" = 80'

OWNER/APPLICANT
VINTAGE WINE ESTATES
205 CONCOURSE BLVD.
SANTA ROSA, CA 95403
CONTACT: PAT MONEY
PH. (877) 299-9463

ARCHITECT
DEL STARRETT ARCHITECT
181 CONCOURSE BLVD., SUITE A
SANTA ROSA, CA 95403
CONTACT: DEL STARRETT
PH. (707) 526-9445

LANDSCAPE ARCHITECT
PARKER SHEN LANDSCAPE ARCHITECT
1815 PACIFIC AVE. #23
SANTA ROSA, CA 95403
PH. (707) 477-7502

ARCHITECT
ALWAYS ENGINEERING INC.
121 STORY CIRCLE, SUITE 1000
SANTA ROSA, CA 95401
CONTACT: RON MONROE
PH. (707) 542-8795

Grading Quantities:
Site Grading is based upon subgrade to existing grade. No account has been taken for stripping, expansion or contraction. Volumes should be verified and determined independently by the Contractor.

	CUT:	ENGINEERED FILL:	NET:
TOTAL EARTHWORK:	2,172 CY	4,834 CY	1,942 CY (FILL)

TOTAL DISTURBED AREA = 3.59 ACRES

Note: Excess spoils will be disposed of in a county approved site or spread in onsite vineyards. Temporary grading spoils will be stockpiled onsite in the unplanted vineyard area until ready for use.

SHEET INDEX

UP1. OVERALL SITE PLAN
UP2. BUILDING FLOOR PLAN

Always Engineering, Inc.
Civil Engineering & Topographic Surveying
2360 Professional Drive (707) 542-8795
Santa Rosa, CA 95403 Fax (707) 542-6147
www.alwaysengr.com

Prepared for: GIRARD WINERY
1077 DUNAWEAL LN., CALISTOGA, CA

Prepared on: February 4, 2014

USE PERMIT
OVERALL SITE PLAN
1077 DUNAWEAL LN., CALISTOGA, CA
APN:020-150-017

JOB # 13530
SHEET
UP1 OF UP2

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Winery Traffic Information / Trip Generation Sheet

Traffic during a Typical Weekday

Number of FT employees: 8 x 3.05 one-way trips per employee = 24 daily trips.

Number of PT employees: 3 x 1.90 one-way trips per employee = 6 daily trips.

Average number of weekday visitors: 52 / 2.6 visitors per vehicle x 2 one-way trips = 40 daily trips.

Gallons of production: 200,000 / 1,000 x .009 truck trips daily[3] x 2 one-way trips = 4 daily trips.

Total = 74 **daily trips.**

(№ of FT employees) + (№ of PT employees/2) + (sum of visitor and truck trips x .38) = 26 **PM peak trips.**

Traffic during a Typical Saturday

Number of FT employees (on Saturdays): 2 x 3.05 one-way trips per employee = 6 daily trips.

Number of PT employees (on Saturdays): 4 x 1.90 one-way trips per employee = 8 daily trips.

Average number of Saturday visitors: 62 / 2. 8 visitors per vehicle x 2 one-way trips = 44 daily trips.

Total = 58 **daily trips.**

(№ of FT employees) + (№ of PT employees/2) + (visitor trips x .57) = 29 **PM peak trips.**

Traffic during a Crush Saturday

Number of FT employees (during crush): 20 x 3.05 one-way trips per employee = 61 daily trips.

Number of PT employees (during crush): 10 x 1.90 one-way trips per employee = 19 daily trips.

Average number of Saturday visitors: 62 / 2. 8 visitors per vehicle x 2 one-way trips = 44 daily trips.

Gallons of production: 200,000 / 1,000 x .009 truck trips daily x 2 one-way trips = 4 daily trips.

Avg. annual tons of grape on-haul: 1,000 / 144 truck trips daily [4] x 2 one-way trips = 14 daily trips.

Total = 142 **daily trips.**

Largest Marketing Event- Additional Traffic

Number of event staff (largest event): 30 x 2 one-way trips per staff person = 60 trips.

Number of visitors (largest event): 500 / 2.8 visitors per vehicle x 2 one-way trips = 357 trips.

Number of special event truck trips (largest event): 10 x 2 one-way trips = 20 trips.

[3] Assumes 1.47 materials & supplies trips + 0.8 case goods trips per 1,000 gallons of production / 250 days per year (see *Traffic Information Sheet Addendum* for reference).

[4] Assumes 4 tons per trip / 36 crush days per year (see *Traffic Information Sheet Addendum* for reference).

SEGMENT COLLISION RATE CALCULATIONS

Vintage Wine Estates Project

Location: 1077 Dunaweal Lane

Date of Count: Thursday, March 06, 2014
ADT: 1,500

Number of Collisions: 2
Number of Injuries: 0
Number of Fatalities: 0
Start Date: January 1, 2007
End Date: December 31, 2011
Number of Years: 5

Highway Type: Conventional 2 lanes or less
Area: Rural
Design Speed: ≤55
Terrain: Flat

Segment Length: 0.8 miles
Direction: North/South

$$\frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Segment Length x Number of Years}}$$

$$\frac{2 \times 1{,}000{,}000}{1{,}500 \times 365 \times 0.81 \times 5}$$

	Collision Rate		Fatality Rate	Injury Rate
Study Segment	**0.90**	**c/mvm**	**0.0%**	**0.0%**
Statewide Average*	**1.05**	**c/mvm**	**2.4%**	**40.1%**

ADT = average daily traffic volume
c/mvm = collisions per million vehicle miles
* 2010 Collision Data on California State Highways, Caltrans

PM Peak Hour - Existing Conditions
Vintage Wine Estates TIS
County of Napa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Silverado Trail/Dunaweal Ln

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: A[8.9]

Street Name:	Dunaweal Ln						Silverado Trail					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 1!	0 0	0	0 0 0	0	0	0 0 1	0	0	1 0 0	0
Volume Module: >> Count Date: 17 Sep 2014 << 4:45 - 5:45 pm												
Base Vol:	16	0	84	0	0	0	0	167	27	15	248	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	0	84	0	0	0	0	167	27	15	248	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	17	0	89	0	0	0	0	177	29	16	264	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	17	0	89	0	0	0	0	177	29	16	264	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	487	487	192	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	206	xxxx	xxxxx
Potent Cap.:	543	484	855	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1377	xxxx	xxxxx
Move Cap.:	538	478	855	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1377	xxxx	xxxxx
Volume/Cap:	0.03	0.00	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	1018	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	8.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:		8.9			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		A			*			*			*	

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Existing Conditions
Vintage Wine Estates TIS
County of Napa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 SR 29/Dunaweal Ln

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[11.6]

Street Name:	Dunaweal Ln						SR 29					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 1!	0 0	0	0 1!	0 0	1	0 0 1	0	1	0 0 1	0
Volume Module: >> Count Date: 16 Sep 2014 << 4:00 - 5:00 pm												
Base Vol:	2	0	2	47	0	25	14	382	2	2	558	64
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	2	47	0	25	14	382	2	2	558	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	2	0	2	51	0	27	15	412	2	2	601	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	0	2	51	0	27	15	412	2	2	601	69
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1096	1117	413	1084	1084	636	670	xxxx	xxxxx	414	xxxx	xxxxx
Potent Cap.:	192	209	644	196	219	482	930	xxxx	xxxxx	1156	xxxx	xxxxx
Move Cap.:	179	205	644	193	215	482	930	xxxx	xxxxx	1156	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.00	0.26	0.00	0.06	0.02	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	769	xxxxx	xxxx	624	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	9.7	xxxxx	xxxxx	11.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	B	*	*	*	*	*	*	*
ApproachDel:		9.7			11.6			xxxxxx			xxxxxx	
ApproachLOS:		A			B			*			*	

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Existing plus Project Conditions
Vintage Wine Estates TIS
County of Napa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Silverado Trail/Dunaweal Ln

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: A[8.9]

Street Name:	Dunaweal Ln						Silverado Trail					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0 0	0 0	0 1	0	0 1	0 0	0
Volume Module: >> Count Date: 17 Sep 2014 << 4:45 - 5:45 pm												
Base Vol:	16	0	84	0	0	0	0	167	27	15	248	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	0	84	0	0	0	0	167	27	15	248	0
Added Vol:	3	0	7	0	0	0	0	0	1	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	0	91	0	0	0	0	167	28	17	248	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	20	0	97	0	0	0	0	177	30	18	264	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	0	97	0	0	0	0	177	30	18	264	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	4.1	xxxx	xxxx
FollowUpTim:	3.5	4.0	3.3	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	2.2	xxxx	xxxx
Capacity Module:												
Cnflict Vol:	492	492	192	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	207	xxxx	xxxx
Potent Cap.:	540	481	854	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1376	xxxx	xxxx
Move Cap.:	534	474	854	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1376	xxxx	xxxx
Volume/Cap:	0.04	0.00	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	1033	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	8.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:		8.9			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		A			*			*			*	

Note: Queue reported is the number of cars per lane.

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to W-TRANS, Santa Rosa, CA

PM Peak Hour - Existing plus Project Conditions
Vintage Wine Estates TIS
County of Napa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 SR 29/Dunaweal Ln

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[11.3]

Street Name:	Dunaweal Ln						SR 29					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 16 Sep 2014 << 4:00 - 5:00 pm												
Base Vol:	2	0	2	47	0	25	14	382	2	2	558	64
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	2	47	0	25	14	382	2	2	558	64
Added Vol:	0	0	0	3	0	7	2	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	2	50	0	32	16	382	2	2	558	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	2	0	2	54	0	34	17	412	2	2	601	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	0	2	54	0	34	17	412	2	2	601	70
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1105	1123	413	1089	1089	636	671	xxxx	xxxxx	414	xxxx	xxxxx
Potent Cap.:	190	207	644	195	217	481	929	xxxx	xxxxx	1156	xxxx	xxxxx
Move Cap.:	173	203	644	191	213	481	929	xxxx	xxxxx	1156	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.00	0.28	0.00	0.07	0.02	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	753	xxxxx	xxxx	662	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	9.8	xxxxx	xxxxx	11.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	B	*	*	*	*	*	*	*
ApproachDel:		9.8			11.3			xxxxxx			xxxxxx	
ApproachLOS:		A			B			*			*	

Note: Queue reported is the number of cars per lane.

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PM Peak Hour - Future Conditions
Vintage Wine Estates TIS
County of Napa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Silverado Trail/Dunaweal Ln

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: E[38.7]

Street Name:	Dunaweal Ln						Silverado Trail					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 0 0 0			0 0 0 1 0			0 1 0 0 0		
Volume Module:												
Base Vol:	122	0	23	0	0	0	0	786	39	22	494	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	122	0	23	0	0	0	0	786	39	22	494	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	0	23	0	0	0	0	786	39	22	494	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	122	0	23	0	0	0	0	786	39	22	494	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1344	1344	806	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	825	xxxx	xxxxx
Potent Cap.:	169	153	385	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	814	xxxx	xxxxx
Move Cap.:	166	149	385	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	814	xxxx	xxxxx
Volume/Cap:	0.74	0.00	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	246	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	3.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd ConDel:	xxxxx	38.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
Shared LOS:	*	E	*	*	*	*	*	*	*	A	*	*
ApproachDel:		38.7		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		E		*			*			*		

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Future Conditions
Vintage Wine Estates TIS
County of Napa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 SR 29/Dunaweal Ln

Average Delay (sec/veh): 9.6 Worst Case Level Of Service: F[177.3]

Street Name:	Dunaweal Ln						SR 29					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 0 1 0			1 0 0 1 0		
Volume Module:												
Base Vol:	2	0	2	68	0	36	20	613	2	2	1113	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	2	68	0	36	20	613	2	2	1113	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	2	68	0	36	20	613	2	2	1113	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	0	2	68	0	36	20	613	2	2	1113	93
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1836	1864	614	1819	1819	1160	1206	xxxx	xxxxx	615	xxxx	xxxxx
Potent Cap.:	59	74	496	61	79	240	586	xxxx	xxxxx	974	xxxx	xxxxx
Move Cap.:	49	71	496	59	76	240	586	xxxx	xxxxx	974	xxxx	xxxxx
Volume/Cap:	0.04	0.00	0.00	1.16	0.00	0.15	0.03	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.4	xxxx	xxxxx	8.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	240	xxxxx	xxxx	101	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	6.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	20.3	xxxxx	xxxxx	177	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	F	*	*	*	*	*	*	*
ApproachDel:		20.3			177.3		xxxxxx			xxxxxx		
ApproachLOS:		C			F		*			*		

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Future plus Project Conditions
Vintage Wine Estates TIS
County of Napa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Silverado Trail/Dunaweal Ln

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: E[45.7]

Street Name:	Dunaweal Ln						Silverado Trail					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	122	0	23	0	0	0	0	786	39	22	494	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	122	0	23	0	0	0	0	786	39	22	494	0
Added Vol:	3	0	7	0	0	0	0	0	1	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	125	0	30	0	0	0	0	786	40	24	494	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	0	30	0	0	0	0	786	40	24	494	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	125	0	30	0	0	0	0	786	40	24	494	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1348	1348	806	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	826	xxxx	xxxxx
Potent Cap.:	168	152	385	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	813	xxxx	xxxxx
Move Cap.:	164	148	385	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	813	xxxx	xxxxx
Volume/Cap:	0.76	0.00	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	235	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	4.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd ConDel:	xxxxx	45.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx	xxxxx
Shared LOS:	*	E	*	*	*	*	*	*	*	A	*	*
ApproachDel:		45.7			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		E			*			*			*	

Note: Queue reported is the number of cars per lane.

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PM Peak Hour - Future plus Project Conditions
Vintage Wine Estates TIS
County of Napa

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 SR 29/Dunaweal Ln

Average Delay (sec/veh): 12.4 Worst Case Level Of Service: F[209.8]

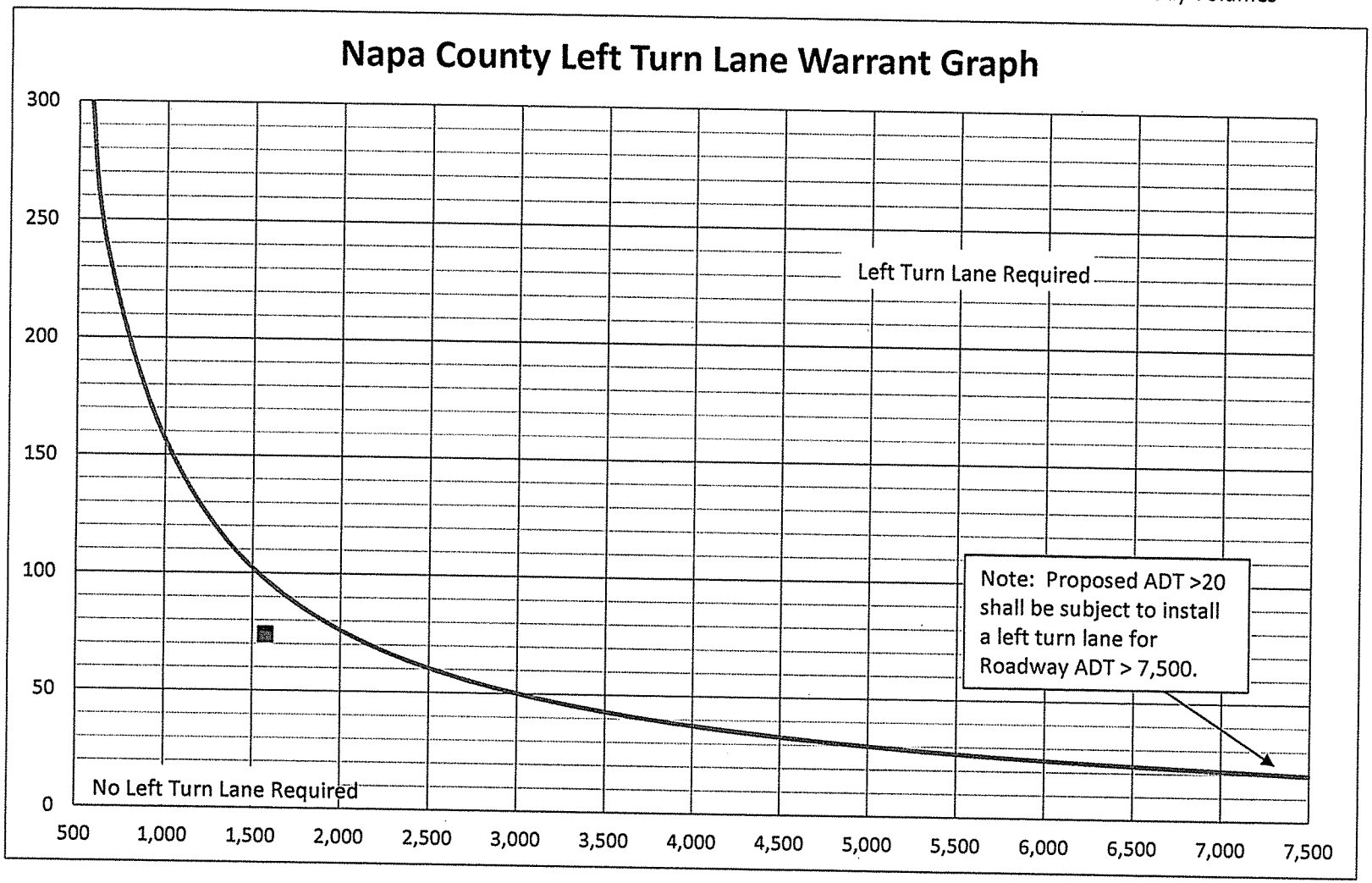
Street Name:	Dunaweal Ln						SR 29					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	0	2	68	0	36	20	613	2	2	1113	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	2	68	0	36	20	613	2	2	1113	93
Added Vol:	0	0	0	3	0	7	2	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	2	71	0	43	22	613	2	2	1113	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	2	71	0	43	22	613	2	2	1113	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	0	2	71	0	43	22	613	2	2	1113	94
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1844	1869	614	1823	1823	1160	1207	xxxx	xxxxx	615	xxxx	xxxxx
Potent Cap.:	58	73	496	60	78	240	585	xxxx	xxxxx	974	xxxx	xxxxx
Move Cap.:	46	70	496	58	75	240	585	xxxx	xxxxx	974	xxxx	xxxxx
Volume/Cap:	0.04	0.00	0.00	1.22	0.00	0.18	0.04	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.4	xxxx	xxxxx	8.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	233	xxxxx	xxxx	100	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	7.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	20.7	xxxxx	xxxxx	210	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	F	*	*	*	*	*	*	*
ApproachDel:		20.7			209.8			xxxxxx			xxxxxx	
ApproachLOS:		C			F			*			*	

Note: Queue reported is the number of cars per lane.

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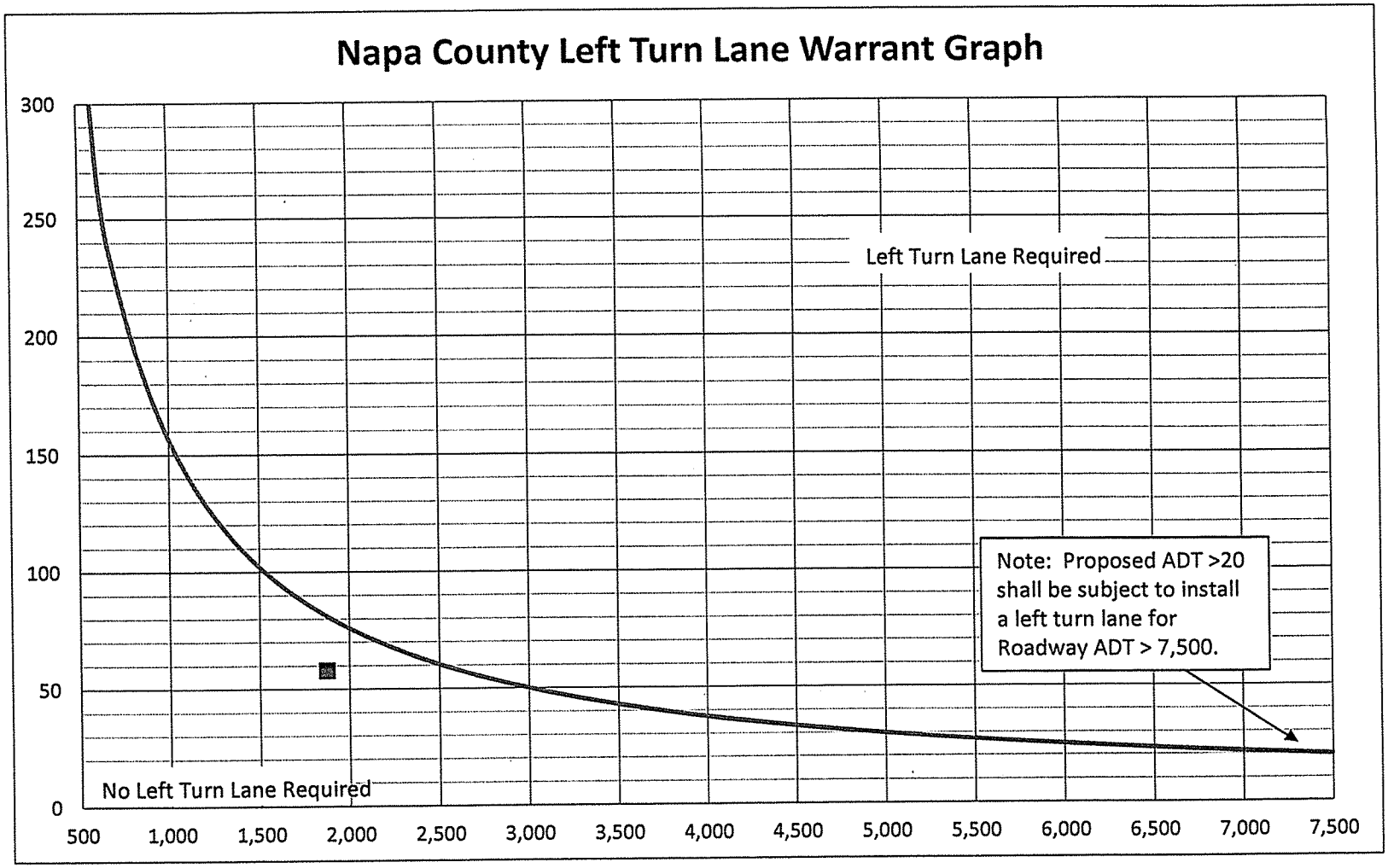
Project Name: Girard Winery

Scenario: Weekday Volumes



Project Name: Girard Winery

Scenario: Weekend Volumes



April 9, 2015

Mr. Pat Roney
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Response to Comments on the "Traffic Impact Study for the Girard Winery Project"

Dear Mr. Roney;

As requested, Whitlock & Weinberger Transportation, Inc. (W-Trans) has reviewed comments relative to the "Traffic Study for the Girard Winery Project" as contained in a letter dated January 20, 2015, to David Morrison from Ellison Folk and Laurel L. Impett. These comments are found in Sections D and E of the letter. The comments are paraphrased and shown in *italics*, followed by our responses.

The IS concedes that the Project will have significant impacts relating to the increase in traffic, but fails to identify feasible mitigation.

The IS finds that the project would have **less-than-significant** impacts on traffic operation **with mitigation**, and mitigation is identified as part of the project description.

As noted in the traffic study, both study intersections are projected to operate acceptably at LOS C or better overall under Future plus Project volumes (worst case condition). As regards intersection operation, the project's impact is therefore less-than-significant, without any mitigation being needed.

The County's General Plan projects Future LOS F operation on SR 29, though the County's policy does not establish a threshold for this roadway as the General Plan prohibits widening the road to four lanes. Analysis was performed to determine the project's potential impact on operation of SR 29 under projected Future 2030 p.m. peak hour volumes. As indicated in the enclosed calculations, both with the maximum estimated project volumes added to anticipated 2030 volumes and without, operation would remain at LOS E both north and south of Dunaweal Lane, with no change in the volume-to-capacity (v/c) ratios. (Note that the volumes used may differ from those applied in the General Plan analysis, which is why LOS E operation results in this analysis compared to LOS F in the General Plan. The focus of the analysis is the difference in operation without and with the project, however.) The "percent time following" is expected to be 89 percent north of Dunaweal Lane and 93 percent south of this intersection both without and with the estimated trips from the project added.

Since the project will enact transportation demand management (TDM) measures to eliminate adding **any** peak hour trips, the evaluated conditions would only occur if there were employee and visitor trips as estimated without the benefit of the TDM program. Given that it is relatively easy for employee and visitor trips to be managed, as proposed, it appears reasonable to accept this TDM plan as a realistic and feasible option for addressing potential traffic impacts, even if they would be less-than-significant. Based on this analysis it was determined that even without the TDM program the project's trips would result in less-than-significant impacts.

The study area is inadequate; it should have addressed the distribution of trips along SR 29 and Silverado Trail.

The study area was selected to include the two locations where the project would generate the highest number of vehicle turning movements, which in turn would reflect the locations with the greatest potential transportation impacts. Beyond these two intersections the added trips would be almost entirely comprised of through movements, which would result in no change to the level of service or volume-to-capacity ratio of SR 29, as shown in the calculations discussed above. Further, the number of project-generated trips would be considerably lower at locations further from Dunaweal Lane as the trips disperse wherever paths diverge, such as at the intersections of Dunaweal Lane with SR 29 and Silverado Trail. As shown in Table 4 of the traffic study, the projected number of p.m. peak hour trips on SR 29 would vary from two south of Dunaweal Lane to 13 north of Dunaweal Lane.

It is noted that the projections of future LOS F operation along SR 29 are based on a substantial anticipated increase in traffic over current levels. These added future trips would reasonably be expected to include the project-generated trips, so any impacts associated with project traffic have already been accounted for in the General Plan and its associated EIR.

However, while the project's impact would not be significant even if it generated the number of trips estimated based on the County's standard winery trip generation calculations, the project description includes measures limiting activity during peak periods to minimize potential transportation impacts by essentially eliminating any new trips during peak periods.

The IS does not establish proper thresholds of significance that define when an increase is substantial in relation to the existing traffic load or capacity of the street system.

The traffic study relies on both the Caltrans and County standards of significance which indicate that operation at LOS C or better is acceptable. As noted in the traffic study, both intersections of Dunaweal Lane with SR 29 and Silverado Trail are projected to operate at LOS C or better overall under the highest volume scenario, which is Future plus Project. The CEQA checklist has traditionally been interpreted such that if acceptable operation is maintained, then the increase is not considered substantial in relation to the existing traffic load or capacity of the street system.

The IS asserts that project impacts could be mitigated by altering employee shifts and timing of events.

The IS does not assert that the project has significant impacts, therefore mitigation measure are not necessary. However, to minimize the project's potential to affect traffic the project description includes transportation demand management (TDM) measures to shift project-generated trips outside the periods of peak traffic and congestion. However, even if the TDM measures failed, as noted above, the project's traffic impact would still be less-than-significant.

The traffic analysis was based on the County's standard trip generation estimates, which overstate peak hour trips according to data collected by W-Trans. Although these added trips would be expected to have a less-than-significant impact, the proposed TDM program would reduce the number of trips added to the network below the 26 p.m. peak hour and 29 Saturday midday peak hour trips used for the analysis. The TDM program would shift most, if not all, of these trips outside the peak hours, resulting in minimal impact during periods of peak congestion.

The IS ignores the effect of event traffic, including a proposed 500-person event. Further, the impacts of truck traffic, especially the 242 daily truck trips during harvest, should be addressed since all of the wineries harvest during the same week or two.

Events occur on an infrequent basis (14 times per year, or less than two per month on average), so the traffic associated with them falls below the "30th highest hour" level that is typically the basis for design. Further, the TDM plan pushes these trips outside the peak hours on both weekdays and weekends, taking advantage of the excess roadway capacity available during these off-peak times rather than adding to peak period congestion.

It is unclear where the estimate of 242 daily truck trips came from. The trip generation sheet shows a maximum of 142 daily trips during harvest, of which 14 are trucks; 80 are for employees. Further, crush occurs over a six to eight week period, not one to two weeks and each individual winery receives grapes at various times depending on the varietals and the microclimate where they are grown.

Finally, it should be noted that the maximum-sized 500-person event occurs only once per year. To avoid facilities with excessive capacities, AASHTO recommends that designs be based on volumes during the 30th highest hour. Since trips associated with the single large event per year would represent only a few of the highest hourly volumes annually, these "plus Project" conditions would not abe appropriate for design purposes. Given that there is only one such event per year, analysis of conditions during the 500-person event are not warranted.

The potential impacts of weddings held at the Girard Winery must be evaluated.

The special events evaluated in the traffic study are based on typical traffic associated with a maximum number of attendees, regardless of what type of event it is. Weddings were not specifically evaluated in the traffic study as they are not proposed, nor will they be allowed.

The cumulative impacts that will result from the project and planned or recently approved projects in the County are not examined.

The cumulative impacts of all of the winery projects should be accounted for in the future traffic projections used in this analysis. These volumes reflect an 82.5 percent increase in traffic on SR 29 and more than a 200 percent increase on Silverado Trail. Given that the County is substantially more than half built out, it would appear that this magnitude of an increase is unlikely to actually be experienced, so these projections overstate the actual potential for traffic volumes to increase. It is therefore reasonable to conclude that the projected future traffic volumes include all of the trips associated with future winery development, including that which is currently envisioned and even that which is not.

The IS fails to consider parking-related impacts from the project, especially the largest event with a maximum of 500 persons.

It is intended that shuttles will be used during the 500-person event to transport guests from off-site parking areas to the winery. Event invitations will provide details about the parking and shuttle operation, and guests will be reminded to park off-site in any event-related communications. The amount of parking allowed on-site will be limited to the supply available. For a 200-person event the parking needed would be 71 spaces for attendees and ten for employees. With 37 marked spaces plus the ability to create about 90 informal spaces at the rear of the parcel as well as along vineyard rows, there is more than adequate space to park all of the vehicles associated with the special events having 200 attendees or less.

The IS further fails to identify or analyze transportation impacts that would result from shuttle buses.

If shuttles are used in lieu of personal vehicles, even assuming use of 14-passenger vans with only 12 passengers either arriving or departing and no passengers on the return trip, then a 500-person event would generate a total of 84 round trips, or 168 trip ends, over the course of several hours. This is less than half the number of trips that would be generated by personal vehicles, and therefore shuttles would result in less of an impact than personal vehicles were used. Since the 500-person event only occurs once per year, its impacts would not be considered as the basis for the environmental impact analysis.

We hope this information adequately addresses the comments received regarding the traffic analysis. Please call if you have any questions.

Sincerely,

Dalene J. Whitlock, PE, PTOE
Principal



DJW/djw/NAX077.L2

Enclosure: Two-Lane Highway Level of Service Calculations

HCS 2010: Two-Lane Highways Release 6.50

Phone: Fax:
E-Mail:

Directional Two-Lane Highway Segment Analysis

Analyst	Dalene Whitlock
Agency/Co.	Napa County
Date Performed	2/11/15
Analysis Time Period	Weekday PM Peak Hour
Highway	SR 29
From/To	Calistoga to Dunaweal Lane
Jurisdiction	Caltrans
Analysis Year	2030
Description	Future Conditions

Input Data

Highway class	Class 3		Peak hour factor, PHF	1.00	
Shoulder width	6.0	ft	% Trucks and buses	5	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	1.3	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	2	%
Grade: Length	-	mi	% No-passing zones	90	%
Up/down	-	%	Access point density	8	/mi

Analysis direction volume, Vd 1062 veh/h
Opposing direction volume, Vo 1113 veh/h

Average Travel Speed

Direction	Analysis (d)		Opposing (o)	
PCE for trucks, ET	2.0*		2.0*	
PCE for RVs, ER	1.0		1.0	
Heavy-vehicle adj. factor, (note-5) fHV	0.952		0.952	
Grade adj. factor, (note-1) fg	1.00		1.00	
Directional flow rate, (note-2) vi	1116	pc/h	1169	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, (note-3) S FM	-	mi/h
Observed total demand, (note-3) V	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, (note-3) BFFS	45.0	mi/h
Adj. for lane and shoulder width, (note-3) fLS	0.0	mi/h
Adj. for access point density, (note-3) fA	2.0	mi/h
Free-flow speed, FFSd	43.0	mi/h
Adjustment for no-passing zones, fnp	0.9	mi/h
Average travel speed, ATSd	24.4	mi/h
Percent Free Flow Speed, PFFS	56.8	%

Percent Time-Spent-Following

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.0	1.0
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adjustment factor, fHV	1.000	1.000
Grade adjustment factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	1062 pc/h	1113 pc/h
Base percent time-spent-following, (note-4) BPTSFd	80.9 %	
Adjustment for no-passing zones, fnp	16.0	
Percent time-spent-following, PTSFd	88.7 %	

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.66	
Peak 15-min vehicle-miles of travel, VMT15	345	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1381	veh-mi
Peak 15-min total travel time, TT15	14.1	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

Passing Lane Analysis

Total length of analysis segment, Lt	1.3	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSd (from above)	24.4	mi/h
Percent time-spent-following, PTSFd (from above)	88.7	
Level of service, LOSd (from above)	E	

Average Travel Speed with Passing Lane

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSpl	-	
Percent free flow speed including passing lane, PFFSpl	0.0	%

Percent Time-Spent-Following with Passing Lane

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

Level of Service and Other Performance Measures with Passing Lane

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

Bicycle Level of Service

HCS 2010: Two-Lane Highways Release 6.50

Phone: Fax:
E-Mail:

Directional Two-Lane Highway Segment Analysis

Analyst	Dalene Whitlock
Agency/Co.	Napa County
Date Performed	2/11/15
Analysis Time Period	Weekday PM Peak Hour
Highway	SR 29
From/To	Calistoga to Dunaweal Lane
Jurisdiction	Caltrans
Analysis Year	2030
Description	Future plus Project Conditions

Input Data

Highway class	Class 3		Peak hour factor, PHF	1.00	
Shoulder width	6.0	ft	% Trucks and buses	5	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	1.3	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	2	%
Grade: Length	-	mi	% No-passing zones	90	%
Up/down	-	%	Access point density	8	/mi

Analysis direction volume, Vd 1075 veh/h
Opposing direction volume, Vo 1113 veh/h

Average Travel Speed

Direction	Analysis (d)		Opposing (o)	
PCE for trucks, ET	2.0*		2.0*	
PCE for RVs, ER	1.0		1.0	
Heavy-vehicle adj. factor, (note-5) fHV	0.952		0.952	
Grade adj. factor, (note-1) fg	1.00		1.00	
Directional flow rate, (note-2) vi	1129	pc/h	1169	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, (note-3) S FM	-	mi/h
Observed total demand, (note-3) V	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, (note-3) BFFS	45.0	mi/h
Adj. for lane and shoulder width, (note-3) fLS	0.0	mi/h
Adj. for access point density, (note-3) fA	2.0	mi/h
Free-flow speed, FFSd	43.0	mi/h
Adjustment for no-passing zones, fnp	0.9	mi/h
Average travel speed, ATSd	24.3	mi/h
Percent Free Flow Speed, PFFS	56.5	%

Percent Time-Spent-Following

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.0	1.0
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adjustment factor, fHV	1.000	1.000
Grade adjustment factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	1075 pc/h	1113 pc/h
Base percent time-spent-following, (note-4) BPTSFd	81.2 %	
Adjustment for no-passing zones, fnp	15.8	
Percent time-spent-following, PTSFd	89.0 %	

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.66	
Peak 15-min vehicle-miles of travel, VMT15	349	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1397	veh-mi
Peak 15-min total travel time, TT15	14.4	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

Passing Lane Analysis

Total length of analysis segment, Lt	1.3	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSd (from above)	24.3	mi/h
Percent time-spent-following, PTSFd (from above)	89.0	
Level of service, LOSd (from above)	E	

Average Travel Speed with Passing Lane

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSpl	-	
Percent free flow speed including passing lane, PFFSpl	0.0	%

Percent Time-Spent-Following with Passing Lane

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

Level of Service and Other Performance Measures with Passing Lane

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

Bicycle Level of Service

HCS 2010: Two-Lane Highways Release 6.50

Phone: Fax:
E-Mail:

Directional Two-Lane Highway Segment Analysis

Analyst	Dalene Whitlock
Agency/Co.	Napa County
Date Performed	2/11/15
Analysis Time Period	Weekday PM Peak Hour
Highway	SR 29
From/To	Dunaweal Lane to Larkmead Lane
Jurisdiction	Caltrans
Analysis Year	2030
Description	Future Conditions

Input Data

Highway class	Class 3		Peak hour factor, PHF	1.00	
Shoulder width	6.0	ft	% Trucks and buses	5	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	2.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	2	%
Grade: Length	-	mi	% No-passing zones	90	%
Up/down	-	%	Access point density	8	/mi

Analysis direction volume, Vd 1361 veh/h
Opposing direction volume, Vo 1434 veh/h

Average Travel Speed

Direction	Analysis (d)		Opposing (o)	
PCE for trucks, ET	2.0*		2.0*	
PCE for RVs, ER	1.0		1.0	
Heavy-vehicle adj. factor, (note-5) fHV	0.952		0.952	
Grade adj. factor, (note-1) fg	1.00		1.00	
Directional flow rate, (note-2) vi	1430	pc/h	1506	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, (note-3) S FM	-	mi/h
Observed total demand, (note-3) V	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, (note-3) BFFS	45.0	mi/h
Adj. for lane and shoulder width, (note-3) fLS	0.0	mi/h
Adj. for access point density, (note-3) fA	2.0	mi/h
Free-flow speed, FFSd	43.0	mi/h
Adjustment for no-passing zones, fnp	0.6	mi/h
Average travel speed, ATSd	19.6	mi/h
Percent Free Flow Speed, PFFS	45.7	%

Percent Time-Spent-Following

Direction	Analysis(d)		Opposing (o)	
PCE for trucks, ET	1.0		1.0	
PCE for RVs, ER	1.0		1.0	
Heavy-vehicle adjustment factor, fHV	1.000		1.000	
Grade adjustment factor, (note-1) fg	1.00		1.00	
Directional flow rate, (note-2) vi	1361	pc/h	1434	pc/h
Base percent time-spent-following, (note-4) BPTSFd	88.8	%		
Adjustment for no-passing zones, fnp	9.0			
Percent time-spent-following, PTSFd	93.2	%		

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.84	
Peak 15-min vehicle-miles of travel, VMT15	681	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2722	veh-mi
Peak 15-min total travel time, TT15	34.7	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

Passing Lane Analysis

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSd (from above)	19.6	mi/h
Percent time-spent-following, PTSFd (from above)	93.2	
Level of service, LOSd (from above)	E	

Average Travel Speed with Passing Lane

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSpl	-	
Percent free flow speed including passing lane, PFFSpl	0.0	%

Percent Time-Spent-Following with Passing Lane

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

Level of Service and Other Performance Measures with Passing Lane

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

Bicycle Level of Service

HCS 2010: Two-Lane Highways Release 6.50

Phone: Fax:
E-Mail:

Directional Two-Lane Highway Segment Analysis

Analyst	Dalene Whitlock
Agency/Co.	Napa County
Date Performed	2/11/15
Analysis Time Period	Weekday PM Peak Hour
Highway	SR 29
From/To	Dunaweal Lane to Larkmead Lane
Jurisdiction	Caltrans
Analysis Year	2030
Description	Future plus Project Conditions

Input Data

Highway class	Class 3		Peak hour factor, PHF	1.00	
Shoulder width	6.0	ft	% Trucks and buses	5	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	2.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	2	%
Grade: Length	-	mi	% No-passing zones	90	%
Up/down	-	%	Access point density	8	/mi

Analysis direction volume, Vd 1363 veh/h
Opposing direction volume, Vo 1434 veh/h

Average Travel Speed

Direction	Analysis (d)		Opposing (o)	
PCE for trucks, ET	2.0*		2.0*	
PCE for RVs, ER	1.0		1.0	
Heavy-vehicle adj. factor, (note-5) fHV	0.952		0.952	
Grade adj. factor, (note-1) fg	1.00		1.00	
Directional flow rate, (note-2) vi	1432	pc/h	1506	pc/h

Free-Flow Speed from Field Measurement:			
Field measured speed, (note-3) S FM		-	mi/h
Observed total demand, (note-3) V		-	veh/h
Estimated Free-Flow Speed:			
Base free-flow speed, (note-3) BFFS		45.0	mi/h
Adj. for lane and shoulder width, (note-3) fLS		0.0	mi/h
Adj. for access point density, (note-3) fA		2.0	mi/h
Free-flow speed, FFSd		43.0	mi/h
Adjustment for no-passing zones, fnp		0.6	mi/h
Average travel speed, ATSd		19.6	mi/h
Percent Free Flow Speed, PFFS		45.7	%

Percent Time-Spent-Following

Direction	Analysis (d)	Opposing (o)
PCE for trucks, ET	1.0	1.0
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adjustment factor, fHV	1.000	1.000
Grade adjustment factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	1363 pc/h	1434 pc/h

Base percent time-spent-following, (note-4)	BPTSFd	88.8	%
Adjustment for no-passing zones, fnp		9.0	
Percent time-spent-following, PTSFd		93.2	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.84	
Peak 15-min vehicle-miles of travel, VMT15	682	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2726	veh-mi
Peak 15-min total travel time, TT15	34.7	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

Passing Lane Analysis

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSd (from above)	19.6	mi/h
Percent time-spent-following, PTSFd (from above)	93.2	
Level of service, LOSd (from above)	E	

Average Travel Speed with Passing Lane

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSpl	-	
Percent free flow speed including passing lane, PFFSpl	0.0	%

Percent Time-Spent-Following with Passing Lane

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

Level of Service and Other Performance Measures with Passing Lane

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

Bicycle Level of Service

Bike Map, 2nd Edition, 2011

Bike Map

The City of Calistoga Bike Map shows two preferred bicycle loops in and around Calistoga. This map is designed to help riders choose the safest and most scenic routes. Always use caution and common sense when bicycling anywhere in Calistoga.

The 2nd Edition, 2011 City Bike Map is now available in PDF format. To view a PDF version of the bike map - click on one of the following Bicycle Map PDF links:

Bike Map - Front Page, Downtown, Calistoga and Vicinity, Back Page

For more Bicycle Map information please contact Erik V. Lundquist, Senior Planner at elundquist@ci.calistoga.ca.us

CITY OF CALISTOGA BIKE MAP

for Calistoga and Surrounding Area:

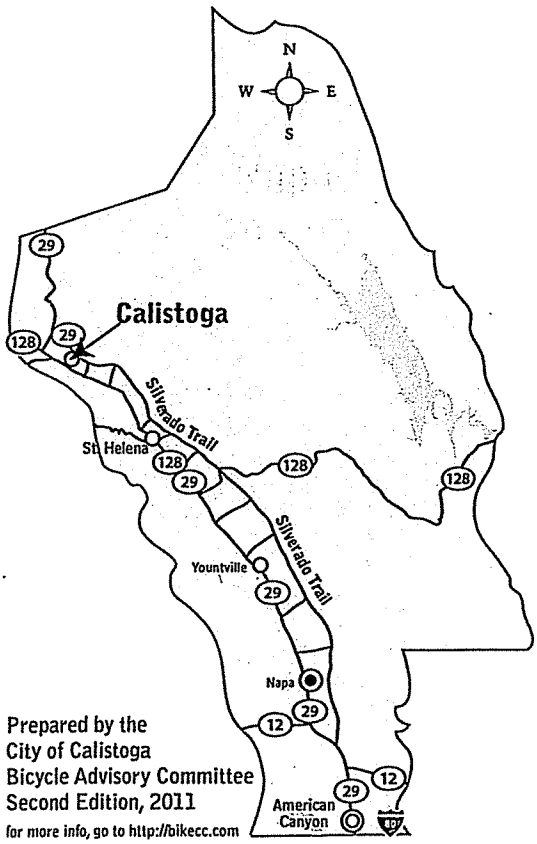
Calistoga Bicycle Loops

East Loop: Silverado Trail, Dunaweal Lane, Washington Street, Lake Street

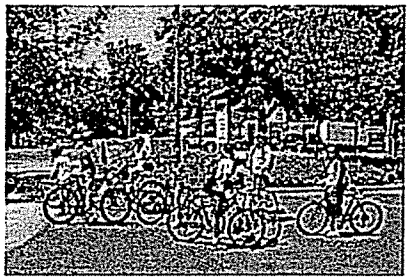
West Loop: Cedar Street, Mitzi Drive, Centennial Circle, Grant Street, Myrtledale Avenue, Tubbs Lane, Bennett Lane, Washington Street

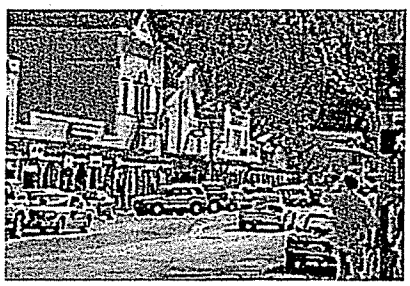
Plus hiking, driving and bike maps for:

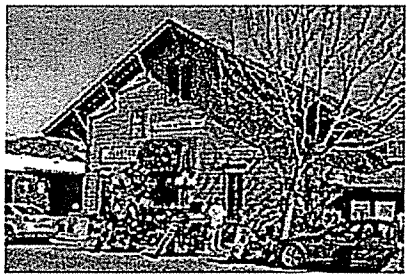
- Oat Hill Mine and Palisades Trails
- Kortum Canyon & Diamond Mountain Roads
- Over 40 Calistoga AVA and Area Wineries
- Historic Downtown Calistoga
- Bothe Napa Valley State Park, Tucker's Farm Center, Old Bale Grist Mill
- The Petrified Forest and Safari West



Prepared by the
City of Calistoga
Bicycle Advisory Committee
Second Edition, 2011
for more info, go to http://bikecc.com

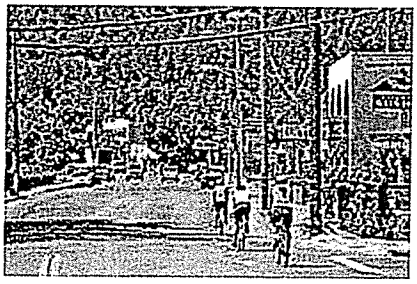








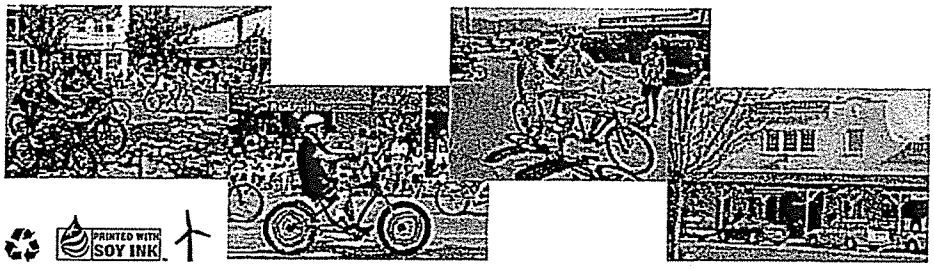




Calistoga is one of the best places to bicycle in the Napa Valley. The varied terrain accommodates all riders. Calistoga and the surrounding area offers smooth country roads with very little traffic and mountainous hard-core trails for the adrenaline junkies. Take a ride through our beautiful vineyards and historic locales on your own—or with an experienced tour guide. Bike rentals are available at the local bike shop in the downtown area. While you're out-and-about, check out some of our local attractions, shops, points of interest, and wonderful eating and dining establishments. Start your day with a breathtaking balloon ride at dawn and enjoy a mud bath, a massage, and a glass of wine at dusk.



Calistoga—Hot Springs, Cool Wines, Warm Welcomes!



PRINTED WITH SOY INK

THIS MAP HAS A WEBSITE!

Use your cell phone's web browser to find out more information at http://bikecc.com. Type in one of the many links shown on different parts of this map for in-depth information, pictures, Calistoga visitor info, and more!

BIKEWAY CLASSIFICATIONS

BIKE PATH (CLASS 1): a route intended solely for the purpose of bicycle and pedestrian traffic.

BIKE LANE (CLASS 2): a protected lane on a vehicular road intended for bicycle traffic only. Exercisie caution and common sense.

BIKE ROUTE (CLASS 3): motorists are supposed to share the road with bicycles. Exercise extreme caution and common sense.

BICYCLE SAFETY

This map is designed to help you choose the safest and most scenic routes in and around Calistoga. Always use caution and common-sense when bicycling anywhere in Calistoga.

OBEY ALL TRAFFIC SIGNS & SIGNALS

- Do not pass on the right
- Do not ride against traffic
- Use hand signals

RIDE IN A STRAIGHT LINE

- Always ride single-file on City Streets, Bike Routes and in Bike Lanes
- Do not weave between parked cars
- Follow lane markings
- Do not ride on sidewalks

RIDE DEFENSIVELY

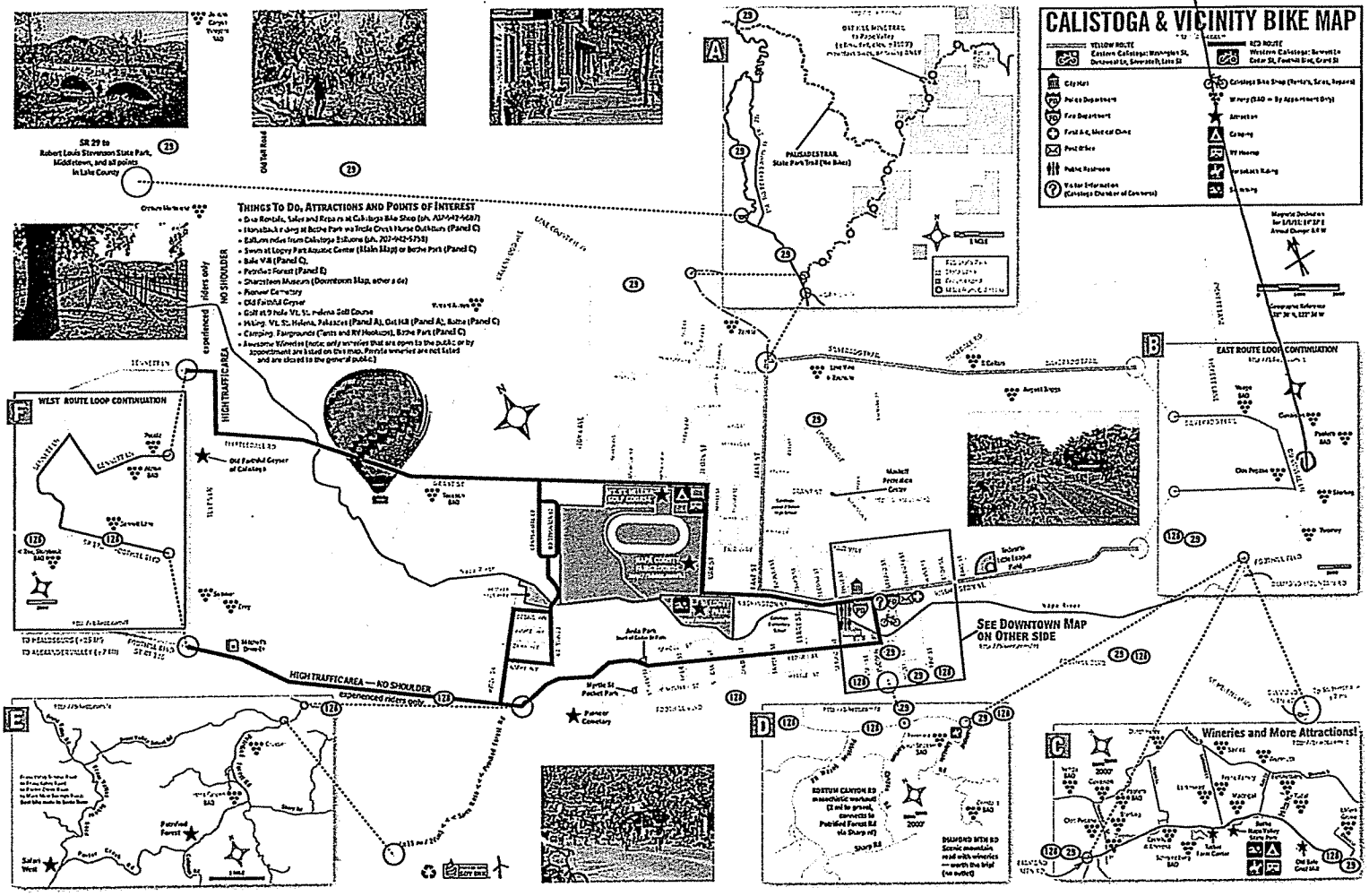
- Watch for cars pulling out
- Make eye contact with drivers making turns
- Scan the road behind you

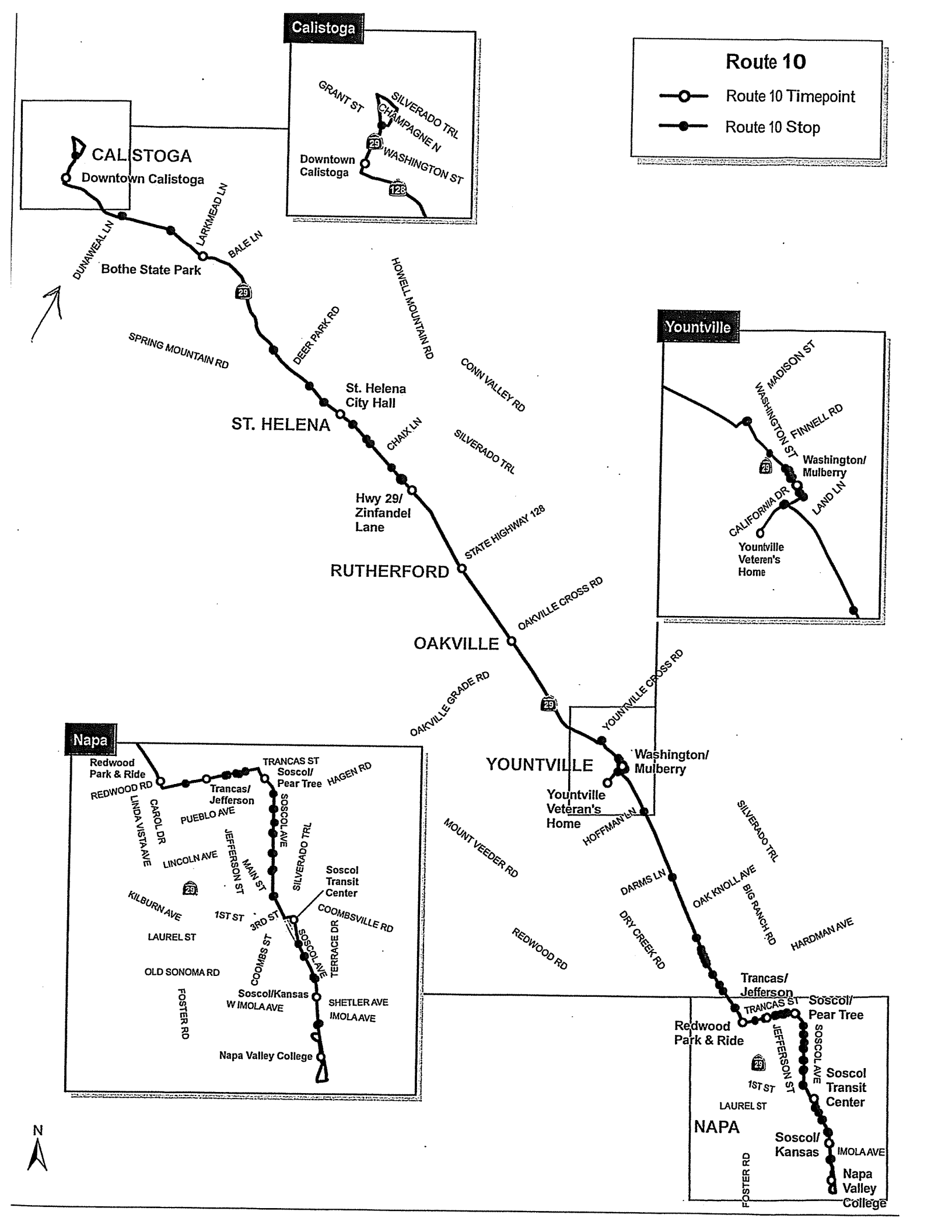
BE BIKE SAFE

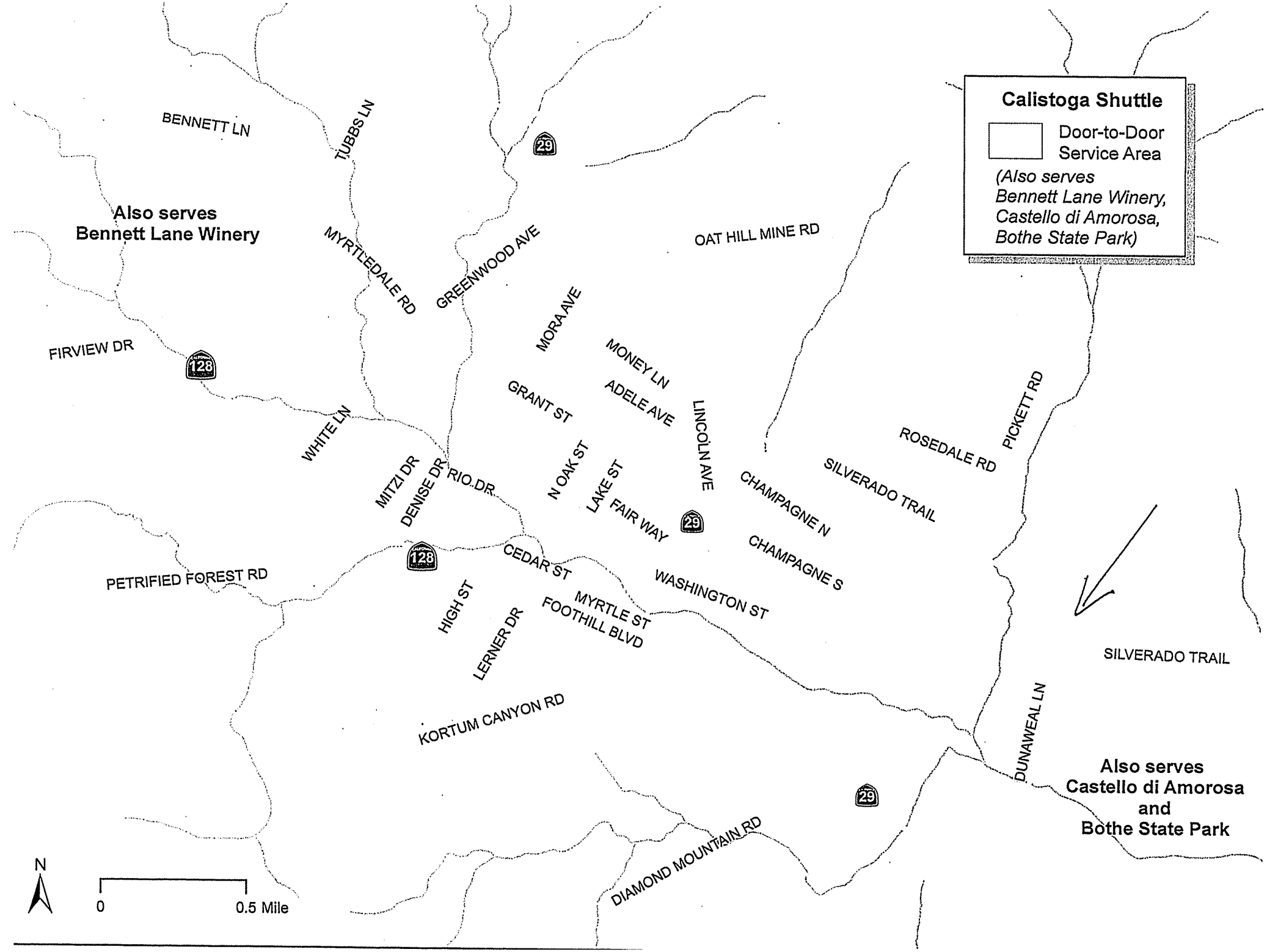
- Ride a well-equipped bike
- Inspect your bike regularly
- Use a helmet
- Wear light color clothing at night/bright colors during the day
- Have plenty of water/liquids and healthy road-snacks at the ready.

design, cartography, and website by winslow technology services & studio (http://www.wtsas.com)—a calistoga company—DUNS# 831755975

Project site




Route 10
Route 10 Timepoint
Route 10 Stop
Calistoga
GRANT ST
SILVERADO TRL
CHAMPAGNE N
WASHINGTON ST
Downtown Calistoga
CALISTOGA
Downtown Calistoga
DUNAWEAL LN
LARKMEAD LN
BALE LN
Bothe State Park
SPRING MOUNTAIN RD
DEER PARK RD
HOWELL MOUNTAIN RD
CONN VALLEY RD
St. Helena City Hall
ST. HELENA
CHAIX LN
SILVERADO TRL
Hwy 29/ Zinfandel Lane
STATE HIGHWAY 128
RUTHERFORD
OAKVILLE CROSS RD
OAKVILLE
OAKVILLE GRADE RD
YOUNTVILLE CROSS RD
Yountville
MADISON ST
WASHINGTON ST
FINNELL RD
Washington/ Mulberry
CALIFORNIA DR
LAND LN
Yountville Veteren's Home
YOUNTVILLE
Washington/ Mulberry
Yountville Veteran's Home
HOFFMAN LN
MOUNT VEEDER RD
SILVERADO TRL
DARMS LN
OAK KNOLL AVE
BIG RANCH RD
HARDMAN AVE
DRY CREEK RD
REDWOOD RD
Napa
Redwood Park & Ride
REDWOOD RD
TRANCAS ST
Soscol/ Pear Tree
HAGEN RD
Trancas/ Jefferson
PUEBLO AVE
LINDA VISTA AVE
CAROL DR
SOSCOL AVE
JEFFERSON ST
MAIN ST
LINCOLN AVE
SILVERADO TRL
Soscol Transit Center
KILBURN AVE
1ST ST
3RD ST
COOMBSVILLE RD
LAUREL ST
COOMBS ST
SOSCOL AVE
TERRACE DR
OLD SONOMA RD
FOSTER RD
Soscol/Kansas
W IMOLA AVE
SHETLER AVE
IMOLA AVE
Napa Valley College
Trancas/ Jefferson
TRANCAS ST
Soscol/ Pear Tree
Redwood Park & Ride
JEFFERSON ST
SOSCOL AVE
1ST ST
Soscol Transit Center
LAUREL ST
NAPA
Soscol/ Kansas
IMOLA AVE
FOSTER RD
Napa Valley College
N


Calistoga Shuttle
Door-to-Door Service Area
(Also serves Bennett Lane Winery, Castello di Amorosa, Bothe State Park)
Also serves Bennett Lane Winery
Also serves Castello di Amorosa and Bothe State Park
BENNETT LN
TUBBS LN
MYRTLEDALE RD
GREENWOOD AVE
OAT HILL MINE RD
MORA AVE
MONEY LN
ADELE AVE
GRANT ST
LINCOLN AVE
ROSEDALE RD
PICKETT RD
SILVERADO TRAIL
CHAMPAGNE N
CHAMPAGNE S
FIRVIEW DR
WHITE LN
MITZI DR
DENISE DR
RIO DR
N OAK ST
LAKE ST
FAIR WAY
CEDAR ST
WASHINGTON ST
MYRTLE ST
FOOTHILL BLVD
HIGH ST
LERNER DR
PETRIFIED FOREST RD
KORTUM CANYON RD
DUNAWEAL LN
DIAMOND MOUNTAIN RD
29
128
N
0
0.5 Mile

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Girard Winery

1077 Dunaweal Ln., Calistoga, CA 94515
APN: 020-150-017



USE PERMIT
WASTEWATER FEASIBILITY STUDY

Project and Site Background

Vintage Wine Estates owns and operates the existing "Clos Pegase" Winery located at 1060 Dunaweal Ln in Calistoga, Ca (APN: 020-150-012). Vintage Wine Estates also owns the parcel across Dunaweal Ln., (1077 Dunaweal Ln., APN: 020-150-017), which has the existing process wastewater ponds and water well for Clos Pegase.

Vintage Wine Estates is proposing to construct a new winery and tasting room (the Girard Winery) on the above referenced parcel. A production capacity of 200,000 gal of wine annually is proposed for the new Girard Winery. With the Use Permit, it is proposed to also treat the process waste (PW) generated by Girard Winery using the existing Clos Pegase Pond Treatment system. A new collection system and transfer pump sump will be required for Girard Winery. A new aerator in the process waste ponds will also be required. A new sanitary sewage system on-site is proposed to accommodate the winery employees, visitors, and events.

The parcel consists of existing vineyards, water supply well and treatment, an agricultural storage building, 2 PW treatment ponds and an irrigation storage pond. The parcel is generally flat, with a small flow line along the southern property line.

A site plan is provided in Enclosure B displaying the existing site and proposed wastewater system improvements.

SANITARY SEWAGE (SS)

Existing Site Evaluation

A site evaluation was performed by Ben Monroe, P.E. of Always Engineering and Peter Ex of Napa County on November 14, 2013. A total of 16 soil profiles were evaluated and 6 were logged for use. Test pits displayed a sandy clay loam surface soil which ranged in depth from 36" to 56" in depth. Soils were underlain by a sandy loam or loamy sand for a total permeable depth ranging from 49" to 60" in depth. All soil displayed a moderate to strong sub-angular blocky structure. Faint mottling was observed to 24" deep, with increasing intensity with depth below that. Prominent mottling was observed below 48" in all test pits. Additional groundwater monitoring is required onsite to determine if the upper mottling is due to subsurface groundwater or heavy irrigation of the onsite vineyards. At the time of preparation of this study, there has not been sufficient rainfall

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to perform groundwater monitoring and therefore, it is assumed that a minimum of 24" suitable soil is available for septic system design. An interceptor drain is also proposed with this feasibility study to ensure we have the required separation to seasonal groundwater. The Napa County Site Evaluation procedures indicate a Sandy clay loam or sandy loam with moderate structure should be loading at 0.75 to 1.0 gpd using pretreated effluent.

Proposed Wastewater Flows

The proposed onsite sanitary wastewater flow rate is entirely associated with the proposed Girard Winery. The use permit is requesting a similar level of use as Clos Pegase; an average number of 10 employees (15 gpcd) along with 75 visitors (3gpcd), and a peak number of 30 employees (15 gpcd) along with 100 visitors (3 gpcd). There will be one large event per year which will have 500 attendees. Portable toilets will be used for this event. All events will have fully catered food with all preparation and cleanup occurring off site. The proposed wastewater flows are estimated as follows:

Average

Employees

8 FT employees	x	15 gpd/employee	=	120 gpd
3 PT employees	x	7.5 gpd/employee	=	22.5 gpd

Tasting Room

42 tasting visitors	x	3 gpd/visitor	=	126 gpd

Events

75 event visitors	x	5 gpd/visitor	=	375 gpd

TOTAL PROPOSED AVERAGE DESIGN FLOW	=	**643.5 GPD**

Peak

Employees

20 FT employees	x	15 gpd/employee	=	300 gpd
10 PT employees	x	7.5 gpd/employee	=	75 gpd

Tasting Room

100 tasting visitors	x	3 gpd/visitor	=	300 gpd

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Events

200 event visitors x	5 gpd/visitor	=	1,000 gpd

TOTAL PROPOSED PEAK DESIGN FLOW = **1,675 GPD**

Proposed Sanitary Sewage Loading

It is proposed to design a subsurface drip system to accommodate all sanitary sewage dispersal. Sizing as follows:

Proposed Septic System Design Flow: 1,675 gpd
Proposed Pretreated Effluent Loading Rate: 0.6 gpd/sf (Moderate -Strong Sandy Loam/Sandy Clay loam)

This loading rate is within the suitable range for pretreated effluent in the onsite soil types. Because there has not been sufficient rainfall to perform ground water monitoring

Proposed Sanitary Sewage Management System

With improvement to the site, the following tanks are proposed for the Girard Winery septic system. Because a pretreatment system is required for subsurface drip, a septic, recirculation, and sump tank are required for an AdvanTex pretreatment system. Other NSF Certified pretreatment systems may be reviewed at the time of Construction Drawings. Tank sizes are verified using the plumbing code commercial sizing formula.

V = 1,125 + 0.75 x Q
= 1,125 + 0.75 x 1,675 gpd
= 2,381.25 gallons

Septic Tank: 6,000 gallons (3.6 days retention time)
Recirculation Tank: 2,000 gallons (1.2 days retention time)
Sump/Dispersal Equalization Tank: 3,000 gallons (1.8 days retention time)

These tank volumes meet the minimum criteria for an AvanTex pretreatment system.

Leachfield Sizing

The area required for a primary sanitary sewer drip system is as follows:

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Area Required = Flow/Application Rate

= 1,675 gpd / 0.6 gpd/sf

= 2,792 sf

Reserve Area

200% reserve area, or 5,584 sf, is required for this site and is shown adjacneet to the primary septic area on the Use Permit Site Plan.

Irrigation Reuse Alternative

In the event that groundwater monitoring cannot occur prior to the application for construction permits, it is also desired to have the ability to provide a pretreatment and irrigation reuse system. The Lyve Wastewaer System has been used at Alpha Omega Winery to treat and reuse domestic wastewater for irrigation. Also, the Biomicrobics BioBarrier Membrane Bioreactor (MBR) is NSF 350 certified for reuse. A design for a BioBarrier MBR would include the following:

Septic Tank:	2,000 gallons
Processing Tank:	13,000 gallons
Treated Collection Sump:	1,500 gallons
Treated Storage Tank:	40,000 gallons

A storage tank would be provided for period in the winter when irrigation reuse cannot occur. As demonstrated in the process wastewater section of this study, more than sufficient vineyard is available onsite for irrigation dispersal of effluent. Approximately 3 acres is required for process wastewater and a total of 18 acres is available onsite.

If treatment, irrigation, and reuse is proposed for construction of this project, the project must first obtain approval from the San Francisco Bay Regional Water Quality Control Board (SFBREWQCB) for this use. Prior to issuance of building permits, the RWQCB will need to approve of the proposal, and issue Waste Discharge Requirements for the reuse of the sanitary sewage. If future groundwater monitoring cannot occur in a time schedule appropriate for building permits, or does not provide at least 24 inches of separation to groundwater, treatment, irrigation, and reuse will be required for the project. In this event, the RWQCB must also grant system approval prior to building permit issuance.

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PROCESS WASTEWATER (PW)

Existing System

The existing on-site process wastewater system consists of 2 aerated facultative lagoons and an irrigation holding pond. This system is currently treating the process waste from the Clos Pegase winery located across Dunaweal Lane under the same ownership. No sanitary wastewater is discharged into the process wastewater system.

Before entering the process wastewater ponds, the entire flow of process wastewater is filtered through a rotary screen where suspended solids are collected and removed. Biological stabilization occurs in the facultative pond system. The total volume of the existing pond system is approximately 1.5 MG. There is a 10 hp aerator in Pond 1 and a 5 hp aerator in Pond 2. Clos Pegase is currently producing 200,000 gallons of wine with an average annual PW production of 920,000 gallons. This pond system is large enough to provide at least 200 days of retention time at current Clos Pegase average flow conditions. Treated PW is used for irrigation of the onsite vineyards.

Proposed System

The proposed PW system for the new Girard Winery will connect to the existing PW wastewater pond system. The new PW connection will include a pump sump and new aerators to accommodate the increase in flows.

Proposed Flow Calculations

The winery is currently proposing a production of 200,000 gallons of wine per year. Using a monthly PW distribution from multiple wineries and a PW generation rate of 4.6 gal PW per gal wine produced (from Clos Pegase data) flow rates are estimated as follows:

Winery Process Wastewater (PW)

Average Daily Flow	=	2,521 gal PW/day
Average Harvest Day	=	3,950 gal PW/day
Average Day, Peak Harvest Month	=	5,060 gal PW/day (See calculations spreadsheet)

The **design flow proposed** to the system is **10,120 gpd** (5,060 gpd from Girard and 5,060 gpd from Clos Pegase).

Aerator Sizing

The Aerators have been sized using a BOD mass loading and the Aqua-Jet Surface Mechanical Aerator brochure specifications. Calculations (attached) show that a total of 22.5 hp of aerators is required for both ponds. It is proposed to add a second 10 hp

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aerator to Pond 1 for a total of 20 hp in Pond 1. This results in a power to volume (P/V) ratio of 0.21 hp per 1000 ft3. This is sufficient for surface mixing and aeration in Pond 1. Pond 2 has an (E) 5 hp aerator. This provided a P/V ratio of 0.05 hp per 1000 ft3. This is sufficient for surface mixing and to prevent odors in Pond 2. No aeration should be required in the irrigation pond due to dilution, level of treatment exiting Pond 2, and natural aeration from algae. In addition, an Anti-Erosion Assembly is recommended for both aerators, to minimize sediment mixing during periods of low liquid levels in the ponds.

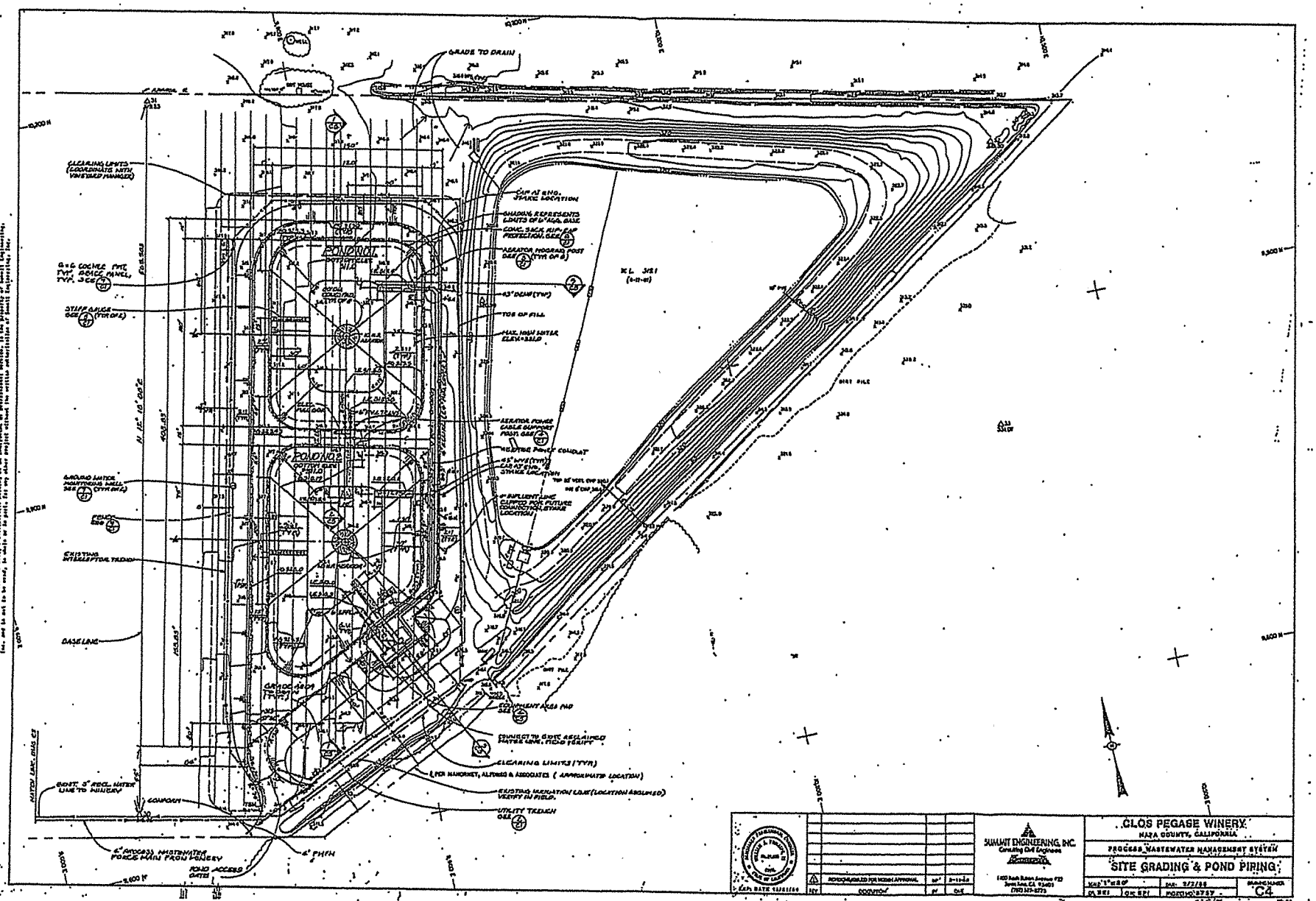
Pond Sizing
The facultative ponds combined volume is roughly 1.5 MG. This provides for a retention time of >140 days at peak month flows (see calculations spreadsheet). Facultative pond systems are sized with a minimum of 60 days in the entire system, and at least 45 days in the first pond. Therefore, this system will have sufficient contact time for treatment before discharge. During the rainy winter months when irrigation needs are low the existing irrigation pond will be used as a detention system to hold excess effluent until the spring months when increased irrigation loading is appropriate.

Irrigation Reserve/Dispersal
A total of 7.5 acres of vineyard is required for dispersal of effluent to avoid ponding and concentration.

SUMMARY AND CONCLUSIONS

Sanitary Wastewater
With the proposed installation of a new sanitary management system, as discussed in this report, the site is capable of supporting the proposed sanitary sewage loads.

Process Wastewater
With the proposed installation of additional aerators and a collection system and pump station, the existing aerated facultative pond system is sufficient for the proposed Girard Winery PW flows in addition to the existing Clos Pegase Winery PW flows.


GRADE TO DRAIN
CLEARING LIMITS (COORDINATE WITH VINEYARD MANAGER)
POND #1
POND #2
POND #3
EXISTING INTERCEPTOR TRENCH
BASE LINE
4" PHFH
POND ACCESS
UTILITY TRENCH
CLEARING LIMITS (TYP)
EXISTING VEGETATION LINE (LOCATION ASSUMED) VERIFY IN FIELD
COMPOSITE ACCESS PAD
CONNECT TO EXIST RECLAIMED WATER LINE, FIELD VERIFY
4" SUPPLEMENT LINE STUBBED FOR FUTURE CONNECTION, EXACT LOCATION
AERATOR POWER CABLE SUPPORT POST
ELECTRIC POWER CONDUIT
AERATOR MOORING POST
CONC. SACK RIP-RAP PROTECTION
TOE OF FILL
MAX. HIGH WATER ELEV.=XXX.0
SHADING REPRESENTS LIMITS OF D'ALTA SILT
CIP AT END, SPARE LOCATION
43" DIAM (TYP)
STIFF KNEE
GRADING LIMITS MAINTENANCE WALL
EXISTING MANHOLE
4" RECL. WATER LINE TO WINERY
COMPOSITE
4" (MOSS) WASTEWATER FORCE MAIN FROM WINERY
POND GATES
CLOS PEGASE WINERY
NAPA COUNTY, CALIFORNIA
PROCESS WASTEWATER MANAGEMENT SYSTEM
SITE GRADING & POND PIPING
SUMMIT ENGINEERING, INC.
Consulting Civil Engineers
DRAWING NUMBER C4

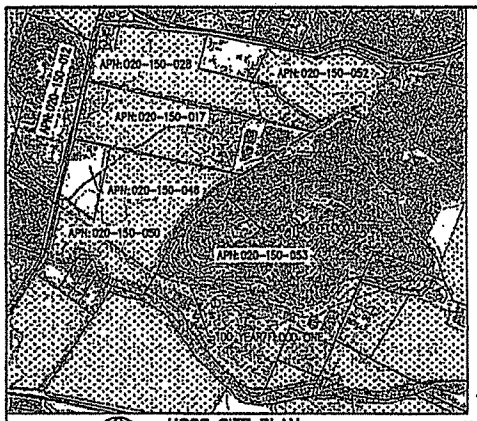
GIRARD WINERY

1077 Dunaweal Ln.

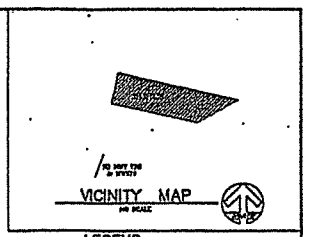
Calistoga, California 94515

APN 022-150-017

USE PERMIT APPLICATION

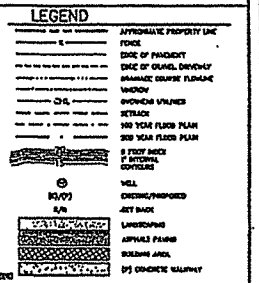


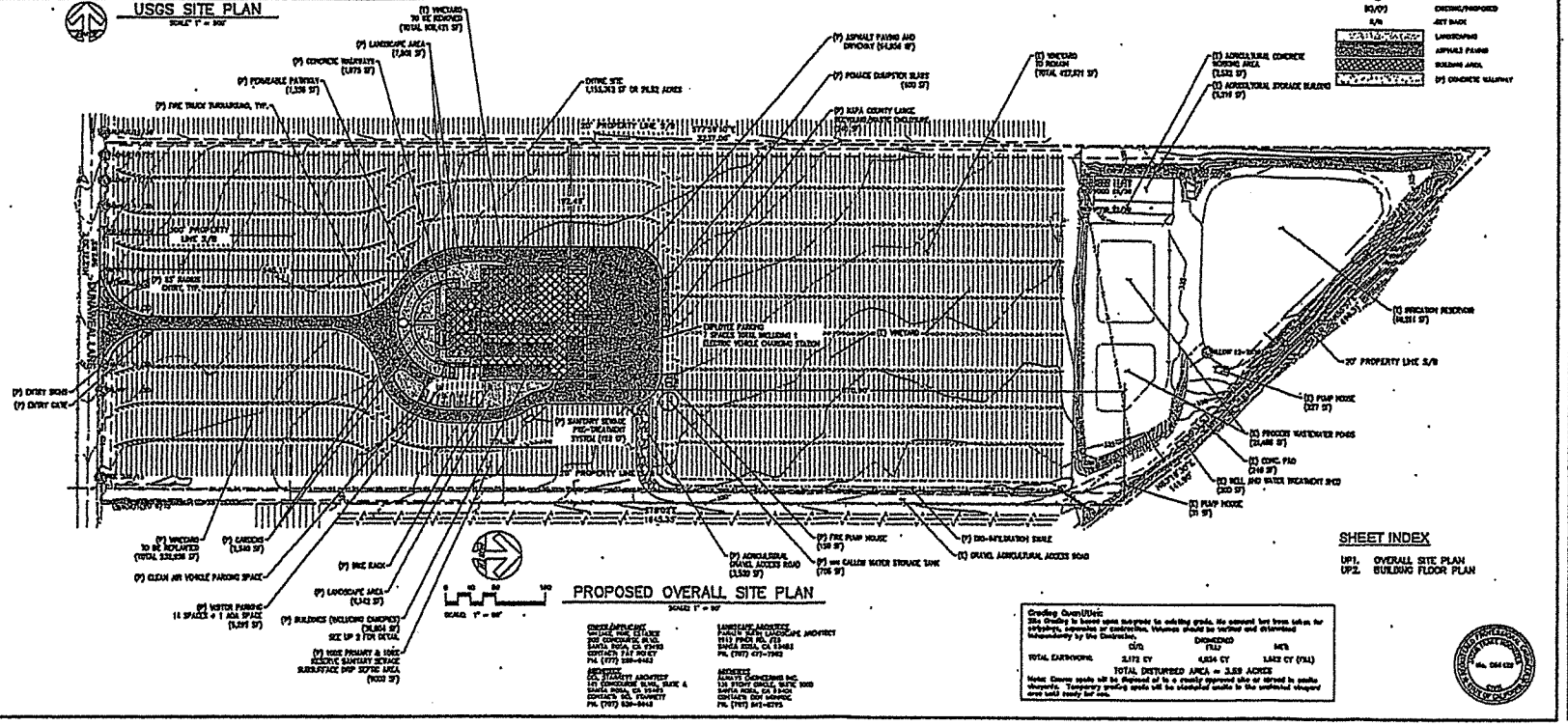
USGS SITE PLAN



VICINITY MAP

LEGEND





PROPOSED OVERALL SITE PLAN

SHEET INDEX

UP1. OVERALL SITE PLAN
UP2. BUILDING FLOOR PLAN

Grading Quantities

	CUT	DISPOSED FILL	IMPORT
TOTAL EARTHWORK	2,172 CY	4,834 CY	1,662 CY (FILL)

TOTAL DISTURBED AREA = 3.69 ACRES

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GIRARD WINERY
1077 DUNAWEAL LN, CALISTOGA, CA

February 4, 2014

USE PERMIT
OVERALL SITE PLAN
1077 DUNAWEAL LN., CALISTOGA, CA
APN:020-150-017

Job # 13530
SHEET
UP1 OF UP2

Date: 02/20/2014 Designed By: BM/RO - Always Engineering, Inc.
Project: Girard Winery Use Permit

Girard Winery

Annual Process Wastewater Flow = 920,000 gallons PW/year
*Refer to the design calculations report for additional flow estimates.

Month	Percentage of Annual Flow (%)	Monthly Flow (MGal)	Days
January	6.50%	0.060	31
February	7.00%	0.064	28
March	8.00%	0.074	31
April	7.00%	0.064	30
May	6.50%	0.060	31
June	5.50%	0.051	30
July	6.00%	0.055	31
August	10.50%	0.097	31
September	16.50%	0.152	30
October	12.50%	0.115	31
November	7.50%	0.069	30
December	6.50%	0.060	31
Total	100.00%	0.920	365

Date: 02/20/2014
Project: Girard Winery Use Permit

Designed By: BM/RO - Always Engineering, Inc.

Girard Winery
PROCESS WASTEWATER

Annual Volume

Annual Production (projected)				=	1,212 ton/year
Wine Generation Rate (assumed)[a]				=	165 gal wine/ton
Wine Produced	1,212 ton/year	x	165 gal wine/ton	=	200,013 gal wine/year
Process Wastewater (PW) Generation Rate[b]	(assumed)			=	4.60 gal PW/gal wine
Annual PW Flow	200,013 gal wine/year	x	4.60 gal PW/gal wine	=	***920,060 gal PW/year***

Average Day Flow

	920,060 gal PW/year	÷	365 days	=	***2,521 gal PW/day***

Average Harvest Day

Total Harvest Flow[c]	920,060 gal PW/year	x	39.5%	=	363,424 gal PW/harvest
Average Harvest Flow (3 month harvest)	363,424 gal PW/harvest	÷	92 days	=	***3,950 gal PW/day***

Average Day, Peak harvest Month - Pond Design

Total Peak Month Flow[c]	920,060 gal PW/year	x	16.5%	=	151,810 gal PW/month
Average Day, Peak Month Flow	151,810 gal PW/month	÷	30 days	=	***5,060 gal PW/day***

a. 165 Gal wine per ton of grapes is used as a wine industr standard
b. 4.6 gal of PW per gallon wine prodcued over the course of 1 year is based on hisotrical data from Clos Pegase and existing Griard operations.
c. Percentage of PW prodcued during each month is based on the average flow distirubtion from 16 wineries

Date: 02/20/2014
Project: Girard Winery Use Permit

Designed By: BM/RO - Always Engineering, Inc.

Clos Pegase Winery

Annual Process Wastewater Flow = 920,000 gallons PW/year

*Refer to the design calculations report for additional flow estimates.

Month	Percentage of Annual Flow (%)	Monthly Flow (MGal)	Days
January	6.50%	0.060	31
February	7.00%	0.064	28
March	8.00%	0.074	31
April	7.00%	0.064	30
May	6.50%	0.060	31
June	5.50%	0.051	30
July	6.00%	0.055	31
August	10.50%	0.097	31
September	16.50%	0.152	30
October	12.50%	0.115	31
November	7.50%	0.069	30
December	6.50%	0.060	31
Total	100.00%	0.920	365

Date: 02/20/2014 Designed By: BM/RO - Always Engineering, Inc.
Project: Girard Winery Use Permit

Clos Pegase Winery
PROCESS WASTEWATER

Annual Volume

Annual Production (projected)				=	1,212 ton/year
Wine Generation Rate (assumed)[a]				=	165 gal wine/ton
Wine Produced	1,212 ton/year	x	165 gal wine/ton	=	200,013 gal wine/year
Process Wastewater (PW) Generation Rate[b]	(assumed)			=	4.60 gal PW/gal wine
Annual PW Flow	200,013 gal wine/year	x	4.60 gal PW/gal wine	=	***920,060 gal PW/year***

Average Day Flow

	920,060 gal PW/year	÷	365 days	=	***2,521 gal PW/day***

Average Harvest Day

Total Harvest Flow[c]	920,060 gal PW/year	x	39.5%	=	363,424 gal PW/harvest
Average Harvest Flow (3 month harvest)	363,424 gal PW/harvest	÷	92 days	=	***3,950 gal PW/day***

Average Day, Peak harvest Month - Pond Design

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Average Day, Peak Month Flow	151,810 gal PW/month	÷	30 days	=	***5,060 gal PW/day***

a. 165 Gal wine per ton of grapes is used as a wine industr standard
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c. Percentage of PW prodcued during each month is based on the average flow distirubtion from 16 wineries

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www.alwayseng.com JasonH@alwayseng.com

Date: 02/20/2014
Project: Girard Winery Use Permit

Designed By: BM/RO - Always Engineering, Inc.

Climate Data

Month	Days	Reference Evapotranspiration[1] (inches)	Pan Evaoporation (inches)	Lake Evaporation (inches)	Average Precipitation (inches)	10-Year Precipitation (inches)	100-Year Precipitation (inches)
January	31	1.0	1.5	1.2	9.0	12.9	17.6
February	28	1.5	2.2	1.7	5.6	8.0	11.0
March	31	2.9	3.8	2.9	5.7	8.1	11.2
April	30	4.7	5.8	4.5	2.6	3.7	5.1
May	31	5.8	8.9	6.9	0.6	0.9	1.2
June	30	6.9	11.0	8.5	0.2	0.3	0.4
July	31	7.2	13.2	10.2	0.1	0.1	0.2
August	31	6.4	12.1	9.3	0.2	0.3	0.4
September	30	4.9	8.7	6.7	0.3	0.4	0.6
October	31	3.5	5.7	4.4	2.4	3.4	4.7
November	30	1.6	2.5	1.9	6.8	9.7	13.3
December	31	1.2	1.7	1.3	8.2	11.7	16.1
TOTAL	365.0	47.7	77.0	59.3	41.7	59.6	81.8

1 Reference Evapotranspiration data is for the Angwin FS obtained from the California Irrigation Management Information System
See http://wwwcimis.water.ca.gov/cimis/monthlyEToReport.do
2 Average Monthly Pan Evaopration Rates observed at Berryessa Lake, Ca between 1957 and 1970.
3 Lake evaopration is pan evaporation multiplied by a 0.77 factor.
4 Average precipitation data is from TheWeatherChannel.com for Calistoga, CA
See http://www.weather.com/weather/wxclimatology/monthly/94515

Date: 02/20/2014
Project: Girard Winery Use Permit
Pond 1 Balance

Designed By: BM/RO - Always Engineering, Inc.

Month	Start Volume (Mgal)	Input: Process Wastewater In (Mgal)	Input: 10 Year Precipitation (Mgal)	Output: Pond Evaporation* (Mgal)	Output: Discharge to Pond 2 (Mgal)	Volume at end of Month (Mgal)	Water Depth at end of month (feet)	Volume Change (Mgal)
January	0.300	0.120	0.173	0.009	0.000	0.593	8.7	0.293
February	0.593	0.129	0.108	0.015	0.100	0.730	10.0	0.137
March	0.730	0.147	0.110	0.027	0.257	0.730	10.0	0.000
April	0.730	0.129	0.050	0.042	0.179	0.730	10.0	0.000
May	0.730	0.120	0.012	0.061	0.231	0.630	9.1	-0.100
June	0.630	0.101	0.004	0.070	0.261	0.524	8.0	-0.106
July	0.524	0.110	0.002	0.072	0.312	0.324	5.7	-0.200
August	0.324	0.193	0.004	0.059	0.197	0.324	5.7	0.000
September	0.324	0.304	0.006	0.042	0.309	0.324	5.7	0.000
October	0.324	0.230	0.046	0.027	0.300	0.300	5.4	-0.024
November	0.300	0.138	0.131	0.012	0.269	0.300	5.4	0.000
December	0.300	0.120	0.158	0.008	0.278	0.300	5.4	0.000
Total		1.840	0.803	0.444	2.643			0.000

Date: 02/20/2014
Project: Girard Winery Use Permit
Pond 2 Balance

Designed By: BM/RO - Always Engineering, Inc.

Month	Start Volume (Mgal)	Input: Process Wastewater In From Pond 1 (Mgal)	Input: 10 Year Precipitation (Mgal)	Output: Pond Evaporation* (Mgal)	Output: Discharge to Irrigation Pond (Mgal)	Volume at end of Month (Mgal)	Water Depth (feet)	Volume Change (Mgal)
January	0.530	0.000	0.175	0.011	0.000	0.705	9.1	0.175
February	0.705	0.100	0.109	0.017	0.000	0.915	10.8	0.209
March	0.915	0.257	0.111	0.031	0.450	0.833	10.2	-0.082
April	0.833	0.179	0.051	0.044	0.400	0.662	8.7	-0.170
May	0.662	0.231	0.012	0.062	0.300	0.605	8.2	-0.057
June	0.605	0.211	0.004	0.073	0.300	0.520	7.4	-0.085
July	0.520	0.312	0.002	0.082	0.400	0.434	6.5	-0.086
August	0.434	0.197	0.004	0.068	0.300	0.335	5.4	-0.099
September	0.335	0.309	0.006	0.047	0.300	0.350	5.6	0.015
October	0.350	0.300	0.047	0.031	0.350	0.347	5.5	-0.003
November	0.347	0.269	0.133	0.013	0.450	0.299	5.0	-0.049
December	0.299	0.278	0.160	0.010	0.206	0.530	7.5	0.231
Total		2.643	0.813	0.489	3.456			0.000

Date: 02/20/2014
Project: Girard Winery Use Permit

Landscape	0.5 a
Vineyard =	2.5 a
Pasture =	0 a
Soil perc rate =	1 I

Month	Days	Reference Evapotranspiration[1] (inches)	ersal Capacity		Treated Effluent to Irrigation Pond		Residual Capacity[7] (Mgal)
			i)	(Mgal)	(in)	(Mgal)	
January	31	1.0	)	0.000	0.000	0.000	0.000
February	28	1.6	)	0.000	0.000	0.000	0.000
March	31	3.0	3	0.474	0.460	0.450	0.024
April	30	4.6	0	0.848	0.409	0.400	0.448
May	31	6.0	3	1.373	0.307	0.300	1.073
June	30	7.0	0	1.543	0.307	0.300	1.243
July	31	8.0	6	2.594	0.409	0.400	2.194
August	31	7.0	1	2.619	0.307	0.300	2.319
September	30	5.2	5	2.457	0.307	0.300	2.157
October	31	3.4	2	1.073	0.358	0.350	0.723
November	30	1.4	)	0.541	0.460	0.450	0.091
December	31	0.9	)	0.000	0.211	0.206	-0.206
TOTAL	365.0	49.1	:2	13.520	3.536	3.456	10.064

1 Average monthly reference evapotranspra
2 Pasture coefficient from Table 5-1, "Irrigat
3 Vineayrd coefficient from Table 5-12, "Irrig
4 Crop coefficient times the reference evapo
5 Precipitation for a 10-yr event, refer to the
6 Irrigation demand is the evapotrasnpiratio
7 Residual capacity estimates irrigation/perc

Date: 02/20/2014
Project: Girard Winery Use Permit

Designed By: BM/RO - Always Engineering, Inc.
Aeration Calculations

Design Flow	= Estimated Average Daily Flow							
	= [redacted] gal/day							
	= 0.010 Mgal/day							
	= 38 m^3/day							
	= 38,294 liters/day							

BOD MASS LOADING - Amount of Biochemical Oxygen Demand (BOD) Based on Amount of Organics in Wastewater

BOD into Pond	= [redacted] mg/L	(Table 4-12 & 4-14 of *Small and Decentralized Wastewater Management Systems)*						
BOD Mass Load	= 38 m^3/day	x	7700 mg BOD/L	x	1000 ml/m^3	x	0.000001 kg/mg	
	= 294.9 kg BOD/day							
	= 648.7 lb BOD/day							

OXYGEN REQUIREMENTS - The amount of oxygen requiremed to breakdown the waste in the water

O2 Requirement	= 648.7 lb BOD/day	x	1.5 lbs O2/lb BOD					
	= 973.1 lbs O2/day							

HORSEPOWER REQUIREMENTS - The horsepower of aeration required to provide the necessary amount of oxygen

Oxygen Transfer Efficiency	= [redacted] lbs O2/Hp*hr (3.4 assumes a VBT aerator , model 100)							
Horsepower Requirement	= 973.1 lbs O2/day	÷	1.8 lbs O2/Hp*hr	÷	24 hr/day			
	= 22.5 Hp required							

POWER TO VOLUME RATIO (Hp/10^3 ft^3) - This is used to estimate the amount of mixing which will occur in a pond due to aeration

Pond Volume	= 0.723 Mgal							
	= 722,797 gallons							
	= 96,631 ft^3							
Number if cells	= 2							
Ratio of first to second cell	= 2							
Volume in Pond 1	= 722,797 gallons							
	= 96,631 ft^3							
Volume in Pond 2	= 803,995 gallons							
	= 107,486 ft^3							
Horsepower in Pond 1; cell 1	= [redacted] Hp							
Pond 1 Power to Volume Ratio	= 20 Hp	x	1000 ft^3	÷	96,631 ft^3	÷	1000 ft^3	
	= 0.21 Hp/1000 ft^3							
Horsepower in Pond 1, cell 2	= [redacted] Hp							
Pond 2 Power to Volume Ratio	= 5 Hp	x	1000 ft^3	÷	107,486 ft^3	÷	1000 ft^3	
	= 0.05 Hp/1000 ft^3							
Complete Mix	= 0.75 - 1.5 Hp/1000 ft^3	(Page 463 of *Small and Decentralized Wastewater Management)*						
Partial Mix	= 0.4 - 0.75 Hp/1000 ft^3							
Facultative	= 0.1 - 0.4 Hp/1000 ft^3							

Pond 1
Retention Time (t)/ Estimated Effluent

Cn	= Effluent BOD	
Co	= 7700 mg/L	
n	= 1	for single cell pond
k	= 0.276 d^(-1)	
t	= 71.4 days	
Cn	= 372 mg/L	
Effluent BOD	= 372 mg/L	

Pond 2
Pond 1
Retention Time (t)/ Estimated Effluent

Cn	= Effluent BOD	
Co	= 372 mg/L	
n	= 1	for baffled pond
k	= 0.276 d^(-1)	
t	= 71.4 days	
Cn	= 18 mg/L	
Effluent BOD	= 18 mg/L	

Napa County Department of
Environmental Management

SITE EVALUATION REPORT

Please attach an 8.5" x 11" plot map showing the locations of all test pits triangulated from permanent landmarks or known property corners. The map must be drawn to scale and include a North arrow, surrounding geographic and topographic features, direction and % slope, distance to drainages, water bodies, potential areas for flooding, unstable landforms, existing or proposed roads, structures, utilities, domestic water supplies, wells, ponds, existing wastewater treatment systems and facilities.

Permit #: E13-00744
APN: 020-150-017
(County Use Only) Reviewed by: Date:

PLEASE PRINT OR TYPE ALL INFORMATION

Property Owner Vintage Wine Estates dba Girard Winery	x New Construction ☐ Addition ☐ Remodel ☐ Relocation ☐ Other:
Property Owner Mailing Address 205 Concourse Blvd	☐ Residential - # of Bedrooms: Design Flow : gpd
City State Zip Santa Rosa CA 95403	x Commercial – Type: Winery domestic Sanitary Waste: 500-1675 gpd Process Waste: 0 gpd
Site Address/Location 1077 Dunaweal Lane Calistoga, CA 94515	☐ Other: Sanitary Waste: gpd Process Waste: gpd

Evaluation Conducted By:

Company Name Always Engineering, Inc.	Evaluator's Name Ben Monroe, P.E. RCE 70012	Signature (Civil Engineer, R.E.H.S., Geologist, Soil Scientist)
Mailing Address: 131B Stony Circle, Sutie 1000		Telephone Number (707) 542-8795 x 17
City State Zip Santa Rosa, Ca 95401		Date Evaluation Conducted 11/14/2013

Primary Area	Expansion Area
Acceptable Soil Depth: 24-48 in. Test pit #'s: TP1-TP6	Acceptable Soil Depth: 24-48 in. Test pit #'s: TP1-TP6
Soil Application Rate (gal. /sq. ft. /day): 0.75 to 1.0 gpd/sf	Soil Application Rate (gal. /sq. ft. /day):0.75 to 1.0 gpd/sf
System Type(s) Recommended: PD, drip – pending gw	System Type(s) Recommended: PD, drip – pending gw
Slope: 3-5 %. Distance to nearest water source: 1000 ft.	Slope: 3-5 %. Distance to nearest water source: 1000 ft.
Hydrometer test performed? No	Hydrometer test performed? No
Bulk Density test performed? No	Bulk Density test performed? No
Percolation test performed? No	Percolation test performed? No
Groundwater Monitoring Performed? Pending Rain	Groundwater Monitoring Performed? Pending Rain

Site constraints/Recommendations:

- Existing well
- Groundwater monitoring to be performed to identify perched groundwater level due to presence of mottling at less than 24 inches deep.
- Interceptor drain and surface drainage to divert away from septic area recommended.
- Proposed drainage features and grading will need to avoid.
- Additional test pits near wastewater ponds showed signs of significant seasonal saturation and lesser depths of permeable soils. Pits on map but not logged due to time onsite.

Test Pit # 1

PLEASE PRINT OR TYPE ALL INFORMATION

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
34	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
48	D/G	35	SCL	SAB,3	VF	S	SS	3,M	1,M	1,F
60+	----------	<10	SCL	SAB,2	D/L	M	M	1,VF	1,M	2,P

Test Pit #2

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
24	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
56	D/G	35	SCL	SAB,3	VF	S	SS	3,M	1,M	1,F
65+	----------	<10	SCL	SAB,2	D/L	M	M	1,VF	1,M	2,P

Test Pit # 3

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
28	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
60	D/G	15-20	SL/LS	SAB,3	F	M	SS	3,M/F	1,M	1,F
70+	----------	<10	SCL	SAB,2	D/L	M	M	1,VF	1,M	2,P

Test Pit # 4

PLEASE PRINT OR TYPE ALL INFORMATION

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
24	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
49	D/G	25	SCL	SAB,3	FR	F	S	2,M	1,M	2,F
60+	----------	<10	SCL	SAB,2	D/L	L	M	1,VF	1,M	2,P

Test Pit #5

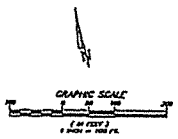
Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
24	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
49	D/G	25	SCL	SAB,3	F	M/FR	SS	2,F	1,F	1,F
54+		>50%								

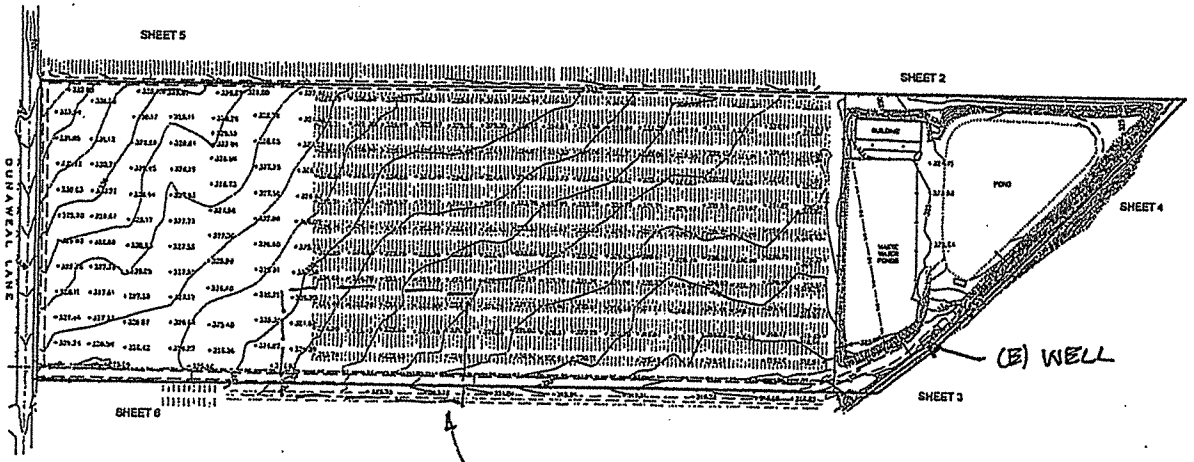
Test Pit # 6

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
36	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
55	D/G	25	SL	G/B,2	L	L	SS	2,C	1,M	1,D
70+		>50%								

SHEET 1 OF 2

SITE EVALUATION
11/14/13
E13-00744





SEE SHEET 2 FOR DETAIL

LEGEND:



ELECTRICAL
FINISHED FLOOR
GATE / VALVE
IRRIGATION CONTROL VALVE BOX
LIGHT POLE
SEWER LINE
WATER LINE
FENCE TYPE & DIA. IN INCHES/SPACING IN FEET
6" CONTOUR
1' CONTOUR
APPROXIMATE PROPERTY LINE; SEE DRAWING NOTES
EDGE OF DIRT ROAD
EDGE OF GRAVEL ROAD
EDGE OF CONCRETE
EDGE OF ASPHALT/CONCRETE PAVEMENT
CENTERLINE
FLOW LINE OF DITCH OR DRAINAGE DITCH
GUARD RAIL/BARRIER
OVERHEAD FENCE AND/OR TELEPHONE LINE
BUILDING

ALBION SURVEYS, INC.
CIVIL ENGINEERING AND LAND SURVEYING
1111 MAIN AVENUE
ST. HELENA, CA 94574
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FAX (707) 963-1829

DRAWING NOTES

SITE INFORMATION

APN: 026-150-017
ADDRESS: 1077 DUNAVAL LANE
CALISTOGA, CA 94515

MAP OF TOPOGRAPHY
OF A PORTION OF THE LANDS OF
CLOS PEGASE
COUNTY OF NAPA STATE OF CALIFORNIA

REVISIONS & ADDITIONS

	TO PTS # 614	TO PTS # 1000
	PA	PA
	PA	PA
	PA	PA
	PA	PA
	PA	PA

ALBION REFERENCES

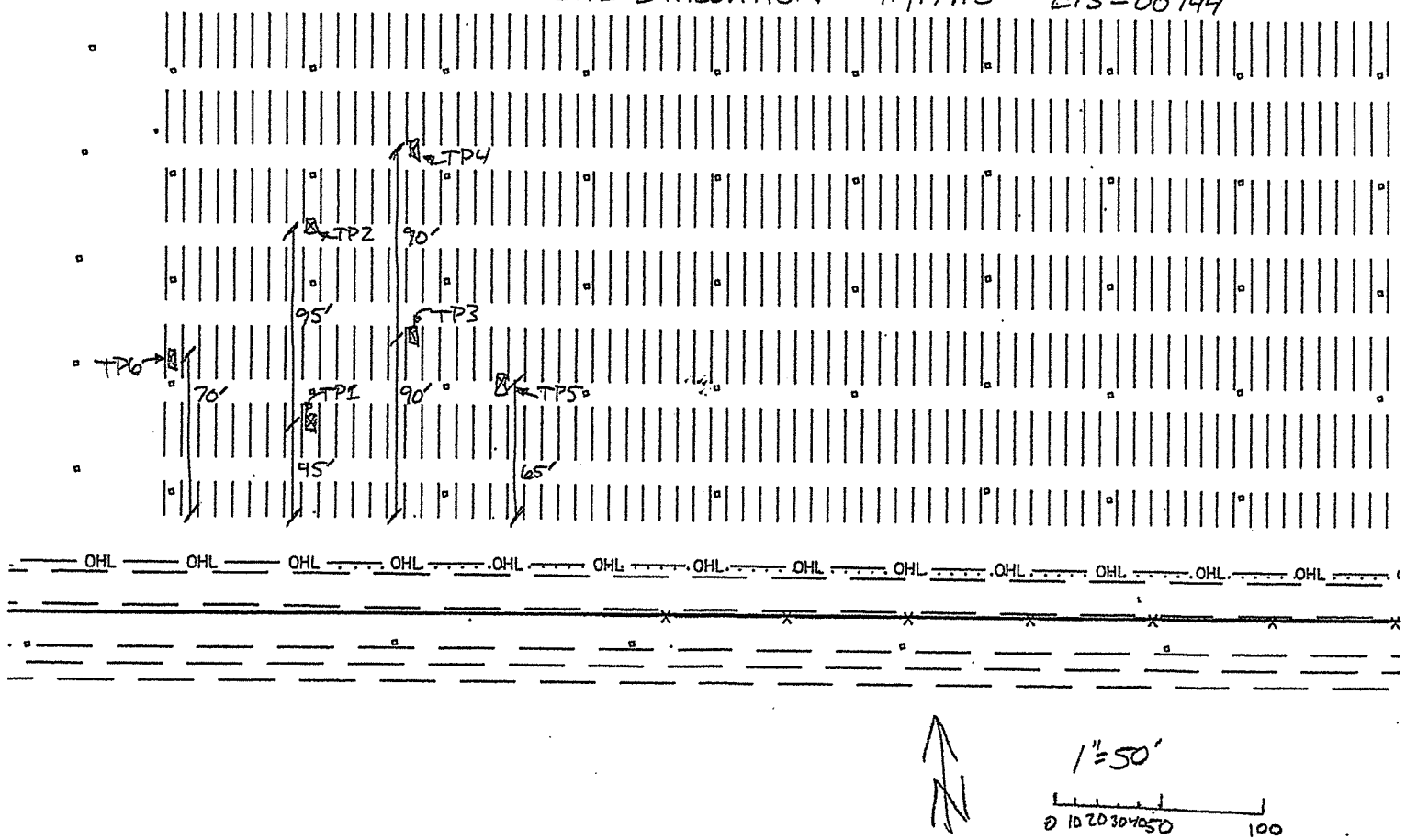
PROJECT NO. 2127
ASSOCIATED SHEETS
PROJECT MANAGER: J. BALLISH
DATE OF SURVEY: 1-21-2014

CONTOUR INTERVAL = 1'
VERTICAL DATUM BASED ON NAVD 88
DIRECTION OF NORTH BASED ON NAD 83 CALIFORNIA STATE PLANE ZONE 3

1077 DUNAWEAL LN
CALISTOGA, CA
APN: 020-150-017

SHEET 2 OF 2

SITE EVALUATION 11/14/13 E13-00744



13530.0 Vintage Wine Estates_Girard Winery
Wastewater Feasibility Study
February 20, 2014
Revised: May 5, 2014

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Girard Winery

1077 Dunaweal Ln., Calistoga, CA 94515
APN: 020-150-017

USE PERMIT
WASTEWATER FEASIBILITY STUDY



Project and Site Background

Vintage Wine Estates owns and operates the existing "Clos Pegase" Winery located at 1060 Dunaweal Ln in Calistoga, Ca (APN: 020-150-012). Vintage Wine Estates also owns the parcel across Dunaweal Ln., (1077 Dunaweal Ln., APN: 020-150-017), which has the existing process wastewater ponds and water well for Clos Pegase.

Vintage Wine Estates is proposing to construct a new winery and tasting room (the Girard Winery) on the above referenced parcel. A production capacity of 200,000 gal of wine annually is proposed for the new Girard Winery. With the Use Permit, it is proposed to also treat the process waste (PW) generated by Girard Winery using the existing Clos Pegase Pond Treatment system. A new collection system and transfer pump sump will be required for Girard Winery. A new aerator in the process waste ponds will also be required. A new sanitary sewage system on-site is proposed to accommodate the winery employees, visitors, and events.

The parcel consists of existing vineyards, water supply well and treatment, an agricultural storage building, 2 PW treatment ponds and an irrigation storage pond. The parcel is generally flat, with a small flow line along the southern property line.

A site plan is provided in Enclosure B displaying the existing site and proposed wastewater system improvements.

SANITARY SEWAGE (SS)

Existing Site Evaluation

A site evaluation was performed by Ben Monroe, P.E. of Always Engineering and Peter Ex of Napa County on November 14, 2013. A total of 16 soil profiles were evaluated and 6 were logged for use. Test pits displayed a sandy clay loam surface soil which ranged in depth from 36" to 56" in depth. Soils were underlain by a sandy loam or loamy sand for a total permeable depth ranging from 49" to 60" in depth. All soil displayed a moderate to strong sub-angular blocky structure. Faint mottling was observed to 24" deep, with increasing intensity with depth below that. Prominent mottling was observed below 48" in all test pits. Additional groundwater monitoring is required onsite to determine if the upper mottling is due to subsurface groundwater or heavy irrigation of the onsite vineyards. At the time of preparation of this study, there has not been sufficient rainfall

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to perform groundwater monitoring and therefore, it is assumed that a minimum of 24" suitable soil is available for septic system design. An interceptor drain is also proposed with this feasibility study to ensure we have the required separation to seasonal groundwater. The Napa County Site Evaluation procedures indicate a Sandy clay loam or sandy loam with moderate structure should be loading at 0.75 to 1.0 gpd using pretreated effluent.

Proposed Wastewater Flows

The proposed onsite sanitary wastewater flow rate is entirely associated with the proposed Girard Winery. The use permit is requesting a similar level of use as Clos Pegase; an average number of 10 employees (15 gpcd) along with 75 visitors (3gpcd), and a peak number of 30 employees (15 gpcd) along with 100 visitors (3 gpcd). There will be one large event per year which will have 500 attendees. Portable toilets will be used for this event. All events will have fully catered food with all preparation and cleanup occurring off site. The proposed wastewater flows are estimated as follows:

Average

Employees

8 FT employees	x	15 gpd/employee	=	120 gpd
3 PT employees	x	7.5 gpd/employee	=	22.5 gpd

Tasting Room

42 tasting visitors	x	3 gpd/visitor	=	126 gpd

Events

75 event visitors	x	5 gpd/visitor	=	375 gpd

TOTAL PROPOSED AVERAGE DESIGN FLOW	=	**643.5 GPD**

Peak

Employees

20 FT employees	x	15 gpd/employee	=	300 gpd
10 PT employees	x	7.5 gpd/employee	=	75 gpd

Tasting Room

100 tasting visitors	x	3 gpd/visitor	=	300 gpd

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Events

200 event visitors x	5 gpd/visitor	=	1,000 gpd

TOTAL PROPOSED PEAK DESIGN FLOW = **1,675 GPD**

Proposed Sanitary Sewage Loading

It is proposed to design a subsurface drip system to accommodate all sanitary sewage dispersal. Sizing as follows:

Proposed Septic System Design Flow: 1,675 gpd
Proposed Pretreated Effluent Loading Rate: 0.6 gpd/sf (Moderate -Strong Sandy Loam/Sandy Clay loam)

This loading rate is within the suitable range for pretreated effluent in the onsite soil types. Because there has not been sufficient rainfall to perform ground water monitoring

Proposed Sanitary Sewage Management System

With improvement to the site, the following tanks are proposed for the Girard Winery septic system. Because a pretreatment system is required for subsurface drip, a septic, recirculation, and sump tank are required for an AdvanTex pretreatment system. Other NSF Certified pretreatment systems may be reviewed at the time of Construction Drawings. Tank sizes are verified using the plumbing code commercial sizing formula.

$V = 1,125 + 0.75 \times Q$
$= 1,125 + 0.75 \times 1,675 \text{ gpd}$
$= 2,381.25 \text{ gallons}$

Septic Tank: 6,000 gallons (3.6 days retention time)
Recirculation Tank: 2,000 gallons (1.2 days retention time)
Sump/Dispersal Equalization Tank: 3,000 gallons (1.8 days retention time)

These tank volumes meet the minimum criteria for an AvanTex pretreatment system.

Leachfield Sizing

The area required for a primary sanitary sewer drip system is as follows:

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Area Required = Flow/Application Rate

= 1,675 gpd / 0.6 gpd/sf

= 2,792 sf

Reserve Area

200% reserve area, or 5,584 sf, is required for this site and is shown adjacneet to the primary septic area on the Use Permit Site Plan.

Irrigation Reuse Alternative

In the event that groundwater monitoring cannot occur prior to the application for construction permits, it is also desired to have the ability to provide a pretreatment and irrigation reuse system. The Lyve Wastewaer System has been used at Alpha Omega Winery to treat and reuse domestic wastewater for irrigation. Also, the Biomicrobics BioBarrier Membrane Bioreactor (MBR) is NSF 350 certified for reuse. A design for a BioBarrier MBR would include the following:

Septic Tank:	2,000 gallons
Processing Tank:	13,000 gallons
Treated Collection Sump:	1,500 gallons
Treated Storage Tank:	40,000 gallons

A storage tank would be provided for period in the winter when irrigation reuse cannot occur. As demonstrated in the process wastewater section of this study, more than sufficient vineyard is available onsite for irrigation dispersal of effluent. Approximately 3 acres is required for process wastewater and a total of 18 acres is available onsite.

If treatment, irrigation, and reuse is proposed for construction of this project, the project must first obtain approval from the San Francisco Bay Regional Water Quality Control Board (SFBREWQCB) for this use. Prior to issuance of building permits, the RWQCB will need to approve of the proposal, and issue Waste Discharge Requirements for the reuse of the sanitary sewage. If future groundwater monitoring cannot occur in a time schedule appropriate for building permits, or does not provide at least 24 inches of separation to groundwater, treatment, irrigation, and reuse will be required for the project. In this event, the RWQCB must also grant system approval prior to building permit issuance.

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PROCESS WASTEWATER (PW)

Existing System

The existing on-site process wastewater system consists of 2 aerated facultative lagoons and an irrigation holding pond. This system is currently treating the process waste from the Clos Pegase winery located across Dunaweal Lane under the same ownership. No sanitary wastewater is discharged into the process wastewater system.

Before entering the process wastewater ponds, the entire flow of process wastewater is filtered through a rotary screen where suspended solids are collected and removed. Biological stabilization occurs in the facultative pond system. The total volume of the existing pond system is approximately 1.5 MG. There is a 10 hp aerator in Pond 1 and a 5 hp aerator in Pond 2. Clos Pegase is currently producing 200,000 gallons of wine with an average annual PW production of 920,000 gallons. This pond system is large enough to provide at least 200 days of retention time at current Clos Pegase average flow conditions. Treated PW is used for irrigation of the onsite vineyards.

Proposed System

The proposed PW system for the new Girard Winery will connect to the existing PW wastewater pond system. The new PW connection will include a pump sump and new aerators to accommodate the increase in flows.

Proposed Flow Calculations

The winery is currently proposing a production of 200,000 gallons of wine per year. Using a monthly PW distribution from multiple wineries and a PW generation rate of 4.6 gal PW per gal wine produced (from Clos Pegase data) flow rates are estimated as follows:

Winery Process Wastewater (PW)

Average Daily Flow	=	2,521 gal PW/day
Average Harvest Day	=	3,950 gal PW/day
Average Day, Peak Harvest Month	=	5,060 gal PW/day (See calculations spreadsheet)

The **design flow proposed** to the system is **10,120 gpd** (5,060 gpd from Girard and 5,060 gpd from Clos Pegase).

Aerator Sizing

The Aerators have been sized using a BOD mass loading and the Aqua-Jet Surface Mechanical Aerator brochure specifications. Calculations (attached) show that a total of 22.5 hp of aerators is required for both ponds. It is proposed to add a second 10 hp

Always Engineering, Inc.
Civil Engineering & Topographic Surveying
131 Stony Circle, Suite 1000 (707) 542-8795
Santa Rosa, CA 95401 Fax (707) 542-8798
www.alwayseng.com JasonH@alwayseng.com

aerator to Pond 1 for a total of 20 hp in Pond 1. This results in a power to volume (P/V) ratio of 0.21 hp per 1000 ft3. This is sufficient for surface mixing and aeration in Pond 1. Pond 2 has an (E) 5 hp aerator. This provided a P/V ratio of 0.05 hp per 1000 ft3. This is sufficient for surface mixing and to prevent odors in Pond 2. No aeration should be required in the irrigation pond due to dilution, level of treatment exiting Pond 2, and natural aeration from algae. In addition, an Anti-Erosion Assembly is recommended for both aerators, to minimize sediment mixing during periods of low liquid levels in the ponds.

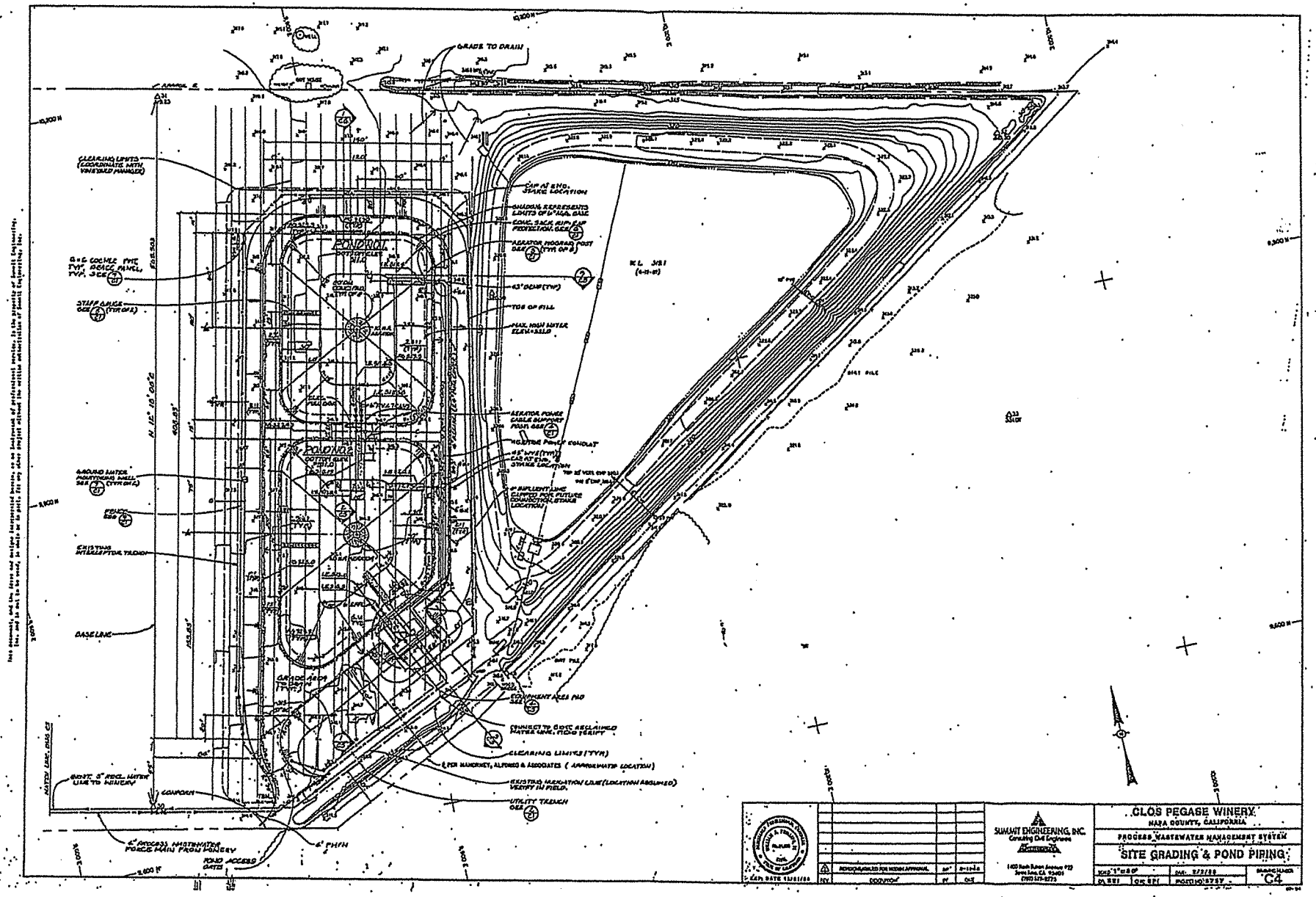
Pond Sizing
The facultative ponds combined volume is roughly 1.5 MG. This provides for a retention time of >140 days at peak month flows (see calculations spreadsheet). Facultative pond systems are sized with a minimum of 60 days in the entire system, and at least 45 days in the first pond. Therefore, this system will have sufficient contact time for treatment before discharge. During the rainy winter months when irrigation needs are low the existing irrigation pond will be used as a detention system to hold excess effluent until the spring months when increased irrigation loading is appropriate.

Irrigation Reserve/Dispersal
A total of 7.5 acres of vineyard is required for dispersal of effluent to avoid ponding and concentration.

SUMMARY AND CONCLUSIONS

Sanitary Wastewater
With the proposed installation of a new sanitary management system, as discussed in this report, the site is capable of supporting the proposed sanitary sewage loads.

Process Wastewater
With the proposed installation of additional aerators and a collection system and pump station, the existing aerated facultative pond system is sufficient for the proposed Girard Winery PW flows in addition to the existing Clos Pegase Winery PW flows.


GRADE TO DRAIN
CLEARING LIMITS (COORDINATE WITH VINEYARD MANAGER)
POND #1
POND #2
POND #3
BASELINE
EXIST. 3" RECL. WATER LINE TO WINERY
6" PVC
6" FM
FOND ACCESS GATE
CONNECT TO EXIST. RECLAIMED WATER LINE. FIELD VERIFY
CLEARING LIMITS (TYP.)
EXISTING IRRIGATION LINE (LOCATION ASSUMED) VERIFY IN FIELD.
UTILITY TRENCH
SUMMIT ENGINEERING, INC.
Civil Engineers
CLOS PEGASE WINERY
NAPA COUNTY, CALIFORNIA
PROCESS WASTEWATER MANAGEMENT SYSTEM
SITE GRADING & POND PIPING
C4

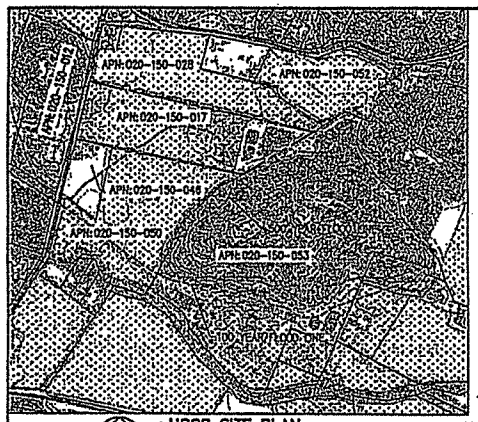
GIRARD WINERY

1077 Dunaweal Ln.

Calistoga, California 94515

APN 022-150-017

USE PERMIT APPLICATION



VICINITY MAP

LEGEND

USGS SITE PLAN

PROPOSED OVERALL SITE PLAN

SHEET INDEX

UP1. OVERALL SITE PLAN
UP2. BUILDING FLOOR PLAN

Always Engineering, Inc.

GIRARD WINERY
1077 DUNAWEAL LN., CALISTOGA, CA

February 4, 2014

USE PERMIT
OVERALL SITE PLAN
1077 DUNAWEAL LN., CALISTOGA, CA
APN:020-150-017

SHEET
UP1
OF
UP2

Date: 02/20/2014 Designed By: BM/RO - Always Engineering, Inc.
Project: Girard Winery Use Permit

Girard Winery

Annual Process Wastewater Flow = 920,000 gallons PW/year
*Refer to the design calculations report for additional flow estimates.

Month	Percentage of Annual Flow (%)	Monthly Flow (MGal)	Days
January	6.50%	0.060	31
February	7.00%	0.064	28
March	8.00%	0.074	31
April	7.00%	0.064	30
May	6.50%	0.060	31
June	5.50%	0.051	30
July	6.00%	0.055	31
August	10.50%	0.097	31
September	16.50%	0.152	30
October	12.50%	0.115	31
November	7.50%	0.069	30
December	6.50%	0.060	31
Total	100.00%	0.920	365

Date: 02/20/2014
Project: Girard Winery Use Permit

Designed By: BM/RO - Always Engineering, Inc.

Girard Winery

PROCESS WASTEWATER

Annual Volume

Annual Production (projected)				=	1,212 ton/year
Wine Generation Rate (assumed)[a]				=	165 gal wine/ton
Wine Produced	1,212 ton/year	x	165 gal wine/ton	=	200,013 gal wine/year
Process Wastewater (PW) Generation Rate[b]	(assumed)			=	4.60 gal PW/gal wine
Annual PW Flow	200,013 gal wine/year	x	4.60 gal PW/gal wine	=	***920,060 gal PW/year***

Average Day Flow

	920,060 gal PW/year	÷	365 days	=	***2,521 gal PW/day***

Average Harvest Day

Total Harvest Flow[c]	920,060 gal PW/year	x	39.5%	=	363,424 gal PW/harvest
Average Harvest Flow (3 month harvest)	363,424 gal PW/harvest	÷	92 days	=	***3,950 gal PW/day***

Average Day, Peak harvest Month - Pond Design

Total Peak Month Flow[c]	920,060 gal PW/year	x	16.5%	=	151,810 gal PW/month
Average Day, Peak Month Flow	151,810 gal PW/month	÷	30 days	=	***5,060 gal PW/day***

a. 165 Gal wine per ton of grapes is used as a wine industr standard
b. 4.6 gal of PW per gallon wine prodcued over the course of 1 year is based on hisotrical data from Clos Pegase and existing Griard operations.
c. Percentage of PW prodcued during each month is based on the average flow distirubtion from 16 wineries

Date: 02/20/2014 Designed By: BM/RO - Always Engineering, Inc.
Project: Girard Winery Use Permit

Clos Pegase Winery

Annual Process Wastewater Flow = 920,000 gallons PW/year
*Refer to the design calculations report for additional flow estimates.

Month	Percentage of Annual Flow (%)	Monthly Flow (MGal)	Days
January	6.50%	0.060	31
February	7.00%	0.064	28
March	8.00%	0.074	31
April	7.00%	0.064	30
May	6.50%	0.060	31
June	5.50%	0.051	30
July	6.00%	0.055	31
August	10.50%	0.097	31
September	16.50%	0.152	30
October	12.50%	0.115	31
November	7.50%	0.069	30
December	6.50%	0.060	31
Total	100.00%	0.920	365

Date: 02/20/2014 Designed By: BM/RO - Always Engineering, Inc.
Project: Girard Winery Use Permit

Clos Pegase Winery
PROCESS WASTEWATER

Annual Volume

Annual Production (projected)				=	1,212 ton/year
Wine Generation Rate (assumed)[a]				=	165 gal wine/ton
Wine Produced	1,212 ton/year	x	165 gal wine/ton	=	200,013 gal wine/year
Process Wastewater (PW) Generation Rate[b]	(assumed)			=	4.60 gal PW/gal wine
Annual PW Flow	200,013 gal wine/year	x	4.60 gal PW/gal wine	=	***920,060 gal PW/year***

Average Day Flow

	920,060 gal PW/year	÷	365 days	=	***2,521 gal PW/day***

Average Harvest Day

Total Harvest Flow[c]	920,060 gal PW/year	x	39.5%	=	363,424 gal PW/harvest
Average Harvest Flow (3 month harvest)	363,424 gal PW/harvest	÷	92 days	=	***3,950 gal PW/day***

Average Day, Peak harvest Month - Pond Design

Total Peak Month Flow[c]	920,060 gal PW/year	x	16.5%	=	151,810 gal PW/month
Average Day, Peak Month Flow	151,810 gal PW/month	÷	30 days	=	***5,060 gal PW/day***

a. 165 Gal wine per ton of grapes is used as a wine industr standard
b. 4.6 gal of PW per gallon wine prodcued over the course of 1 year is based on hisotrical data from Clos Pegase and existing Griard operations.
c. Percentage of PW prodcued during each month is based on the average flow distirubtion from 16 wineries

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131 Stony Circle, Suite 1000 (707) 542-8795
Santa Rosa, CA 95401 Fax (707) 542-8798
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Date: 02/20/2014
Project: Girard Winery Use Permit

Designed By: BM/RO - Always Engineering, Inc.

Climate Data

Month	Days	Reference Evapotranspiration[1] (inches)	Pan Evaoporation (inches)	Lake Evaporation (inches)	Average Precipitation (inches)	10-Year Precipitation (inches)	100-Year Precipitation (inches)
January	31	1.0	1.5	1.2	9.0	12.9	17.6
February	28	1.5	2.2	1.7	5.6	8.0	11.0
March	31	2.9	3.8	2.9	5.7	8.1	11.2
April	30	4.7	5.8	4.5	2.6	3.7	5.1
May	31	5.8	8.9	6.9	0.6	0.9	1.2
June	30	6.9	11.0	8.5	0.2	0.3	0.4
July	31	7.2	13.2	10.2	0.1	0.1	0.2
August	31	6.4	12.1	9.3	0.2	0.3	0.4
September	30	4.9	8.7	6.7	0.3	0.4	0.6
October	31	3.5	5.7	4.4	2.4	3.4	4.7
November	30	1.6	2.5	1.9	6.8	9.7	13.3
December	31	1.2	1.7	1.3	8.2	11.7	16.1
TOTAL	365.0	47.7	77.0	59.3	41.7	59.6	81.8

1 Reference Evapotranspiration data is for the Angwin FS obtained from the California Irrigation Management Information System
See http://wwwcimis.water.ca.gov/cimis/monthlyEToReport.do
2 Average Monthly Pan Evaopration Rates observed at Berryessa Lake, Ca between 1957 and 1970.
3 Lake evaopration is pan evaporation multiplied by a 0.77 factor.
4 Average precipitation data is from TheWeatherChannel.com for Calistoga, CA
See http://www.weather.com/weather/wxclimatology/monthly/94515

Date: 02/20/2014
Project: Girard Winery Use Permit
Pond 1 Balance

Designed By: BM/RO - Always Engineering, Inc.

Month	Start Volume	Input		Output		Volume at end of Month	Water Depth at end of month	Volume Change
		Process Wastewater In	10 Year Precipitation	Pond Evaporation*	Discharge to Pond 2			
	(Mgal)	(Mgal)	(Mgal)	(Mgal)	(Mgal)	(Mgal)	(feet)	(Mgal)
January	0.300	0.120	0.173	0.009	0.000	0.593	8.7	0.293
February	0.593	0.129	0.108	0.015	0.100	0.730	10.0	0.137
March	0.730	0.147	0.110	0.027	0.257	0.730	10.0	0.000
April	0.730	0.129	0.050	0.042	0.179	0.730	10.0	0.000
May	0.730	0.120	0.012	0.061	0.231	0.630	9.1	-0.100
June	0.630	0.101	0.004	0.070	0.211	0.524	8.0	-0.106
July	0.524	0.110	0.002	0.072	0.312	0.324	5.7	-0.200
August	0.324	0.193	0.004	0.059	0.197	0.324	5.7	0.000
September	0.324	0.304	0.006	0.042	0.309	0.324	5.7	0.000
October	0.324	0.230	0.046	0.027	0.300	0.300	5.4	-0.024
November	0.300	0.138	0.131	0.012	0.269	0.300	5.4	0.000
December	0.300	0.120	0.158	0.008	0.278	0.300	5.4	0.000
Total		1.840	0.803	0.444	2.643			0.000

Date: 02/20/2014
Project: Girard Winery Use Permit
Pond 2 Balance

Designed By: BM/RO - Always Engineering, Inc.

Month	Start Volume (Mgal)	Input: Process Wastewater In From Pond 1 (Mgal)	Input: 10 Year Precipitation (Mgal)	Output: Pond Evaporation* (Mgal)	Output: Discharge to Irrigation Pond (Mgal)	Volume at end of Month (Mgal)	Water Depth (feet)	Volume Change (Mgal)
January	0.560	0.000	0.175	0.011	0.000	0.705	9.1	0.175
February	0.705	0.100	0.109	0.017	0.000	0.915	10.8	0.209
March	0.915	0.257	0.111	0.031	0.450	0.833	10.2	-0.082
April	0.833	0.179	0.051	0.044	0.400	0.662	8.7	-0.170
May	0.662	0.231	0.012	0.062	0.300	0.605	8.2	-0.057
June	0.605	0.211	0.004	0.073	0.300	0.520	7.4	-0.085
July	0.520	0.312	0.002	0.082	0.400	0.434	6.5	-0.086
August	0.434	0.197	0.004	0.068	0.300	0.335	5.4	-0.099
September	0.335	0.309	0.006	0.047	0.300	0.350	5.6	0.015
October	0.350	0.300	0.047	0.031	0.350	0.347	5.5	-0.003
November	0.347	0.269	0.133	0.013	0.450	0.299	5.0	-0.049
December	0.299	0.278	0.160	0.010	0.206	0.530	7.5	0.231
Total		2.643	0.813	0.489	3.456			0.000

Date: 02/20/2014
Project: Girard Winery Use Permit

Landscape	0.5 a
Vineyard =	2.5 a
Pasture =	0 a
Soil perc rate =	1 i

Month	Days	Reference Evapotranspiration[1] (inches)	ersal Capacity (Mgal)	Treated Effluent to Irrigation Pond (in)	Treated Effluent to Irrigation Pond (Mgal)	Residual Capacity[7] (Mgal)
January	31	1.0	0.000	0.000	0.000	0.000
February	28	1.6	0.000	0.000	0.000	0.000
March	31	3.0	0.474	0.460	0.450	0.024
April	30	4.6	0.848	0.409	0.400	0.448
May	31	6.0	1.373	0.307	0.300	1.073
June	30	7.0	1.543	0.307	0.300	1.243
July	31	8.0	2.594	0.409	0.400	2.194
August	31	7.0	2.619	0.307	0.300	2.319
September	30	5.2	2.457	0.307	0.300	2.157
October	31	3.4	1.073	0.358	0.350	0.723
November	30	1.4	0.541	0.460	0.450	0.091
December	31	0.9	0.000	0.211	0.206	-0.206
TOTAL	365.0	49.1	13.520	3.536	3.456	10.064

1 Average monthly reference evapotranspri
2 Pasture coefficient from Table 5-1, "Irrigati
3 Vineayrd coefficient from Table 5-12, "Irrig
4 Crop coefficient times the reference evapo
5 Precipitation for a 10-yr event, refer to the
6 Irrigation demand is the evapotrasnpiratio
7 Residual capacity estimates irrigation/perc

Date: 02/20/2014
Project: Girard Winery Use Permit

Designed By: BM/RO - Always Engineering, Inc.
Aeration Calculations

Design Flow	= Estimated Average Daily Flow							
	= 10,120 gal/day							
	= 0.010 Mgal/day							
	= 38 m^3/day							
	= 38,294 liters/day							

BOD MASS LOADING - Amount of Biochemical Oxygen Demand (BOD) Based on Amount of Organics in Wastewater

BOD into Pond	= 7700 mg/L	(Table 4-12 & 4-14 of *Small and Decentralized Wastewater Management Systems)*						
BOD Mass Load	= 38 m^3/day	x	7700 mg BOD/L	x	1000 ml/m^3	x	0.000001 kg/mg	
	= 294.9 kg BOD/day							
	= 648.7 lb BOD/day							

OXYGEN REQUIREMENTS - The amount of oxygen requiremed to breakdown the waste in the water

O2 Requirement	= 648.7 lb BOD/day	x	1.5 lbs O2/lb BOD					
	= 973.1 lbs O2/day							

HORSEPOWER REQUIREMENTS - The horsepower of aeration required to provide the necessary amount of oxygen

Oxygen Transfer Efficiency	= 1.8 lbs O2/Hp*hr (3.4 assumes a VBT aerator , model 100)							
Horsepower Requirement	= 973.1 lbs O2/day	÷	1.8 lbs O2/Hp*hr	÷	24 hr/day			
	= 22.5 Hp required							

POWER TO VOLUME RATIO (Hp/10^3 ft^3) - This is used to estimate the amount of mixing which will occur in a pond due to aeration

Pond Volume	= 0.723 Mgal							
	= 722,797 gallons							
	= 96,631 ft^3							
Number if cells	= 2							
Ratio of first to second cell	= 2							
Volume in Pond 1	= 722,797 gallons							
	= 96,631 ft^3							
Volume in Pond 2	= 803,995 gallons							
	= 107,486 ft^3							
Horsepower in Pond 1; cell 1	= 20 Hp							
Pond 1 Power to Volume Ratio	= 20 Hp	x	1000 ft^3	÷	96,631 ft^3	÷	1000 ft^3	
	= 0.21 Hp/1000 ft^3							
Horsepower in Pond 1, cell 2	= 5 Hp							
Pond 2 Power to Volume Ratio	= 5 Hp	x	1000 ft^3	÷	107,486 ft^3	÷	1000 ft^3	
	= 0.05 Hp/1000 ft^3							
Complete Mix	= 0.75 - 1.5 Hp/1000 ft^3	(Page 463 of *Small and Decentralized Wastewater Management)*						
Partial Mix	= 0.4 - 0.75 Hp/1000 ft^3							
Facultative	= 0.1 - 0.4 Hp/1000 ft^3							

Pond 1
Retention Time (t)/ Estimated Effluent

Cn	= Effluent BOD	
Co	= 7700 mg/L	
n	= 1	for single cell pond
k	= 0.276 d^(-1)	
t	= 71.4 days	
Cn	= 372 mg/L	
Effluent BOD	= 372 mg/L	

Pond 2
Pond 1
Retention Time (t)/ Estimated Effluent

Cn	= Effluent BOD	
Co	= 372 mg/L	
n	= 1	for baffled pond
k	= 0.276 d^(-1)	
t	= 71.4 days	
Cn	= 18 mg/L	
Effluent BOD	= 18 mg/L	

Napa County Department of
Environmental Management

SITE EVALUATION REPORT

Please attach an 8.5" x 11" plot map showing the locations of all test pits triangulated from permanent landmarks or known property corners. The map must be drawn to scale and include a North arrow, surrounding geographic and topographic features, direction and % slope, distance to drainages, water bodies, potential areas for flooding, unstable landforms, existing or proposed roads, structures, utilities, domestic water supplies, wells, ponds, existing wastewater treatment systems and facilities.

Permit #: E13-00744
APN: 020-150-017
(County Use Only) Reviewed by: Date:

PLEASE PRINT OR TYPE ALL INFORMATION

Property Owner Vintage Wine Estates dba Girard Winery	x New Construction ☐ Addition ☐ Remodel ☐ Relocation ☐ Other:
Property Owner Mailing Address 205 Concourse Blvd	☐ Residential - # of Bedrooms: Design Flow : gpd
City State Zip Santa Rosa CA 95403	x Commercial – Type: Winery domestic Sanitary Waste: 500-1675 gpd Process Waste: 0 gpd
Site Address/Location 1077 Dunaweal Lane Calistoga, CA 94515	☐ Other: Sanitary Waste: gpd Process Waste: gpd

Evaluation Conducted By:

Company Name Always Engineering, Inc.	Evaluator's Name Ben Monroe, P.E. RCE 70012	Signature (Civil Engineer, R.E.H.S., Geologist, Soil Scientist)
Mailing Address: 131B Stony Circle, Sutie 1000		Telephone Number (707) 542-8795 x 17
City State Zip Santa Rosa, Ca 95401		Date Evaluation Conducted 11/14/2013

Primary Area	Expansion Area
Acceptable Soil Depth: 24-48 in. Test pit #'s: TP1-TP6	Acceptable Soil Depth: 24-48 in. Test pit #'s: TP1-TP6
Soil Application Rate (gal. /sq. ft. /day): 0.75 to 1.0 gpd/sf	Soil Application Rate (gal. /sq. ft. /day):0.75 to 1.0 gpd/sf
System Type(s) Recommended: PD, drip – pending gw	System Type(s) Recommended: PD, drip – pending gw
Slope: 3-5 %. Distance to nearest water source: 1000 ft.	Slope: 3-5 %. Distance to nearest water source: 1000 ft.
Hydrometer test performed? No	Hydrometer test performed? No
Bulk Density test performed? No	Bulk Density test performed? No
Percolation test performed? No	Percolation test performed? No
Groundwater Monitoring Performed? Pending Rain	Groundwater Monitoring Performed? Pending Rain

Site constraints/Recommendations:

- Existing well
- Groundwater monitoring to be performed to identify perched groundwater level due to presence of mottling at less than 24 inches deep.
- Interceptor drain and surface drainage to divert away from septic area recommended.
- Proposed drainage features and grading will need to avoid.
- Additional test pits near wastewater ponds showed signs of significant seasonal saturation and lesser depths of permeable soils. Pits on map but not logged due to time onsite.

Test Pit # 1

PLEASE PRINT OR TYPE ALL INFORMATION

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
34	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
48	D/G	35	SCL	SAB,3	VF	S	SS	3,M	1,M	1,F
60+	----------	<10	SCL	SAB,2	D/L	M	M	1,VF	1,M	2,P

Test Pit #2

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
24	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
56	D/G	35	SCL	SAB,3	VF	S	SS	3,M	1,M	1,F
65+	----------	<10	SCL	SAB,2	D/L	M	M	1,VF	1,M	2,P

Test Pit # 3

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
28	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
60	D/G	15-20	SL/LS	SAB,3	F	M	SS	3,M/F	1,M	1,F
70+	----------	<10	SCL	SAB,2	D/L	M	M	1,VF	1,M	2,P

Test Pit # 4

PLEASE PRINT OR TYPE ALL INFORMATION

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
24	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
49	D/G	25	SCL	SAB,3	FR	F	S	2,M	1,M	2,F
60+	----------	<10	SCL	SAB,2	D/L	L	M	1,VF	1,M	2,P

Test Pit #5

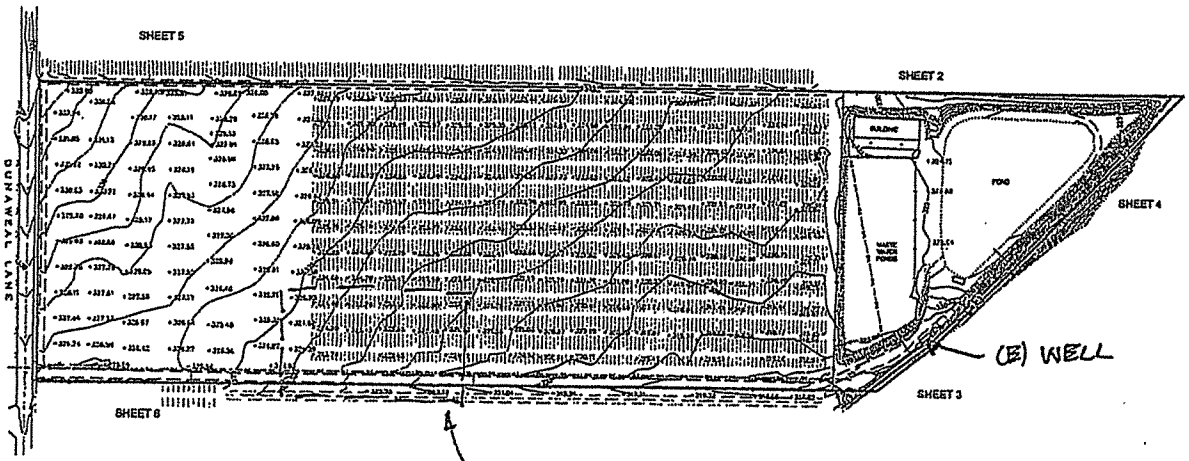
Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
24	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
49	D/G	25	SCL	SAB,3	F	M/FR	SS	2,F	1,F	1,F
54+		>50%								

Test Pit # 6

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
36	D/G	15-20	SCL	SAB,3	FR	S	S	3,C	1,M	1,VF
55	D/G	25	SL	G/B,2	L	L	SS	2,C	1,M	1,D
70+		>50%								

SITE EVALUATION
11/14/13
E13-00744

GRAPHIC SCALE



SEE SHEET 2 FOR DETAIL

LEGEND:

ALBION SURVEYS, INC.
CIVIL ENGINEERING AND LAND SURVEYING
1414 JOHN AVENUE
EL NIDO, CA 94574
(707) 963-1317
FAX (707) 963-1829

DRAWING NOTES

SITE INFORMATION

APN: 039-180-017
ADDRESS: 1077 DUNAWAL LANE
CARNEROS, CA 94515

MAP OF TOPOGRAPHY
OF A PORTION OF THE LANDS OF
CLOS PEGASE
COUNTY OF NAPA STATE OF CALIFORNIA

REVISIONS & ADDITIONS

DATE	BY	DESCRIPTION
11-14-13	PS	ORIGINAL PLAN

ALBION REFERENCES

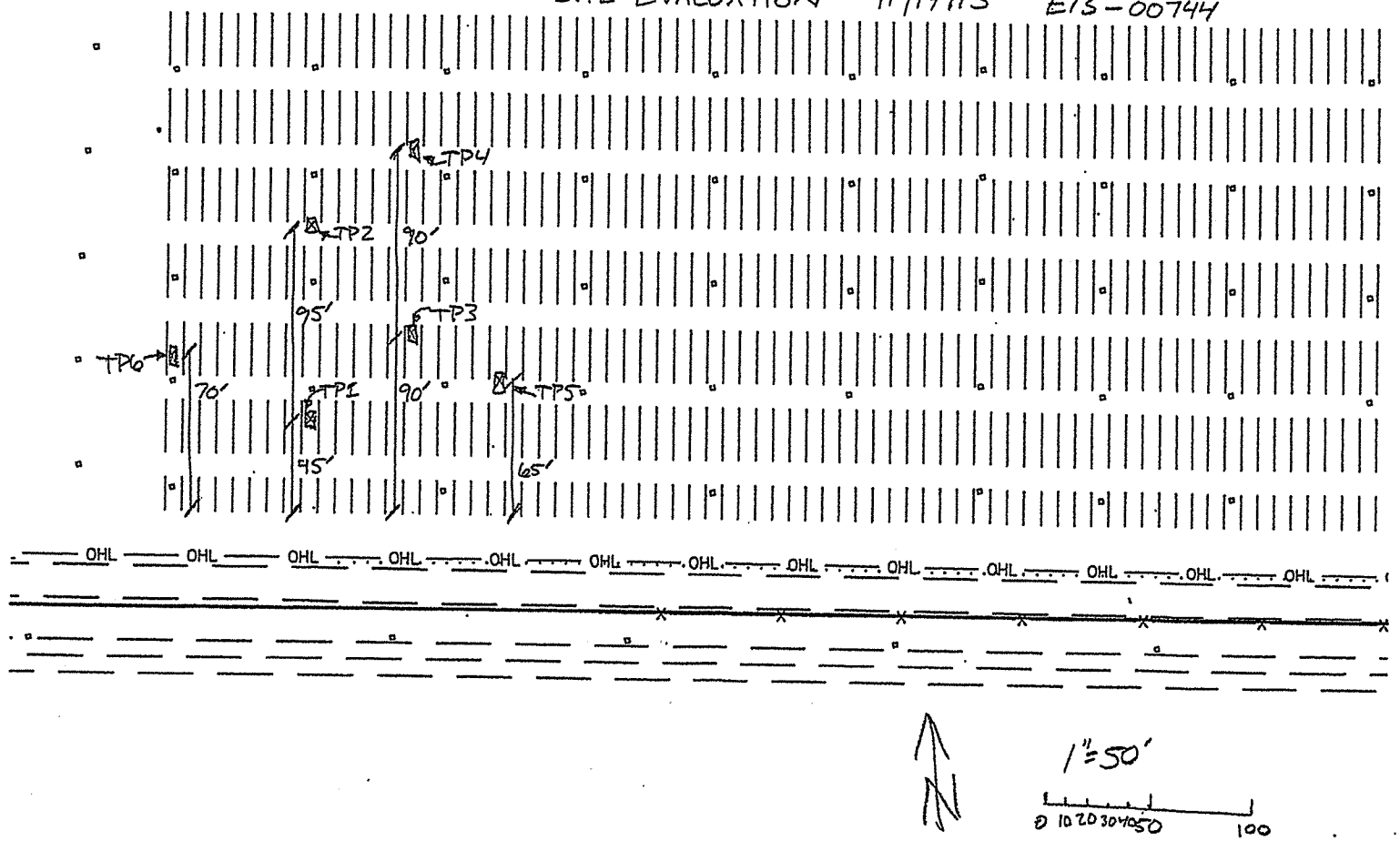
PROJECT NO. 2037
ASSOCIATED SURVEY
PROJECT MANAGER: A. SULLIVAN
DATE OF SURVEY: 11-21-2006

CONTOUR INTERVAL = 1'
VERTICAL DATUM BASED ON NAVD 88
DIRECTION OF NORTH BASED ON NAD 83 CALIFORNIA STATE PLANE ZONE 2

1077 DUNAWEAL LN
CALISTOGA, CA
APN: 020-150-017

SHEET 2 OF 2

SITE EVALUATION 11/14/13 E13-00744



13530.0 Dunaweal Winery
Storm Drainge for Use Permit
modification
April 28, 2014

Always Engineering, Inc.
Civil Engineering & Topographic Surveying
131 Stony Circle, Suite 1000 (707) 542-8795
Santa Rosa, CA 95401 Fax (707) 542-8798
www.alwayseng.com JasonH@alwayseng.com

Jeanette Doss
Napa County Department of Public Works
1195 3rd St., Room 201
Napa, CA 94555

RECEIVED
MAY
Napa County Planning, Building
& Environmental Services

Project: Use Permit Modification for Dunaweal Winery,
1077 Dunaweal Ln.
APN 020-150-017
File #14-00053

RECEIVED
7 2014
Napa County Planning, Building
& Environmental Services

Jeannette,

This correspondence is provided to satisfy the requirements list in the Memorandum of Incompleteness dated April 3, 2013.

Vintage Wine Estates is proposing to construct the Girard Winery and associated improvements on the parcel located at 1077 Dunaweal Ln., Calistoga CA (APN 020-150-017). The parcel is currently a planted vineyard with a Waste Water Pond treatment system for process waste presently located in the rear of the parcel.

The proposed AC driveway, parking, and winery accessory structures will result in an increase in impervious area of approximately 130,803 sf (3.003 acres). Our preliminary calculations show this will result in an increase in the 2-yr 24-hr storm water runoff of approximately 16,722 cf. At this stage of design, we are anticipating utilizing a bio-retention swale with subsurface storage chambers totaling 910 LF. During detailed design, alternative methods such as pipes/chambers under paved areas or other acceptable retention methods may be used to provide the required volume retention.

The anticipated surface flow across the project site due to the 10-yr Storm is approximately 35.28 cfs. It is proposed to direct this flow around the project site using a grass lined trapezoidal swale 0.75' deep, 2' wide at the bottom, and 32' wide at the top which will accommodate 52.71 cfs.

The sizing of pipes was reviewed as well. Runoff from the entire site can be accommodated with a 30" pipe with a minimum 1% slope. However, the site will likely be split into multiple smaller drainage areas with multiple smaller pipes discharging into the proposed bioswale.

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To assist with your review the following is attached:

- Stormwater Runoff Management Plan (SRMP)
- Ex 1: Hydrology Map
- Ex 2: NOAA Precipitation Data
- Ex 3: Drainage Area Calculations
- Ex 4: Composite C and CN Calculations
- Ex 5: Pre vs Post Runoff Calculations
- Ex 6: Swale Calculations and Pipe Sizes
- Ex 7: Precipitation Chart – Lower County
- Ex 8: Mean Annual Precipitation vs. 60 Minute Rainfall
- Ex 9: Intensity – Duration Chart
- Ex 10: Table of Runoff Curve Numbers
- Ex 11: NRCS Hydrologic Soil Group

Please feel free to contact me should you have any questions or require additional information.

We trust that this letter sufficiently responds to the items of incompleteness. If you require clarification or have any questions, please feel free to contact us.

Sincerely,

Ben Monroe, P.E.
ALWAYS ENGINEERING, INC.
Project Manager

REGISTERED PROFESSIONAL ENGINEER
BENJAMIN W. MONROE
No. 70012
Exp. 9-30-14
CIVIL
STATE OF CALIFORNIA

cc: Heather McCollister
Amy Haedt (Vintage Wine Estates)

USE PERMIT EX 1: HYDROLOGY MAP 1077 DUNAWEAL LN., CALISTOGA, CA APN:020-150-017	Prepared for: GIRARD WINERY 1077 DUNAWEAL LN., CALISTOGA, CA Prepared on: April 25, 2014	Always Engineering, Inc. Civil Engineering & Topographic Surveying 131 Stony Circle, Suite 1900 (707) 542-9795 Santa Rosa, CA 95401 Fax (707) 542-9796 www.alwayseng.com JasonH@alwayseng.com	REVISION / DESCRIPTION / BY / DATE 1 DRAINAGE REVISIONS AJS 04/23/14

SHEET DA 1 OF DA 1

Ex 2: NOAA Precipitation Data
1077 Dunaweal Lane
April 25, 2014

Precipitation Frequency Data Server

NOAA Atlas 14, Volume 6, Version 2
Location name: Calistoga, California, US*
Latitude: 38.5725°, Longitude: -122.5537°
Elevation: 329 ft*
* source: Google Maps

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.154 (0.137-0.175)	0.186 (0.165-0.211)	0.228 (0.202-0.260)	0.263 (0.231-0.303)	0.311 (0.263-0.373)	0.349 (0.288-0.428)	0.389 (0.311-0.490)	0.430 (0.334-0.560)	0.489 (0.362-0.667)	0.536 (0.381-0.760)
10-min	0.221 (0.196-0.251)	0.266 (0.236-0.303)	0.327 (0.289-0.373)	0.377 (0.331-0.434)	0.446 (0.377-0.534)	0.501 (0.413-0.614)	0.557 (0.446-0.703)	0.617 (0.479-0.803)	0.701 (0.519-0.956)	0.768 (0.547-1.09)
15-min	0.267 (0.237-0.303)	0.322 (0.286-0.366)	0.395 (0.350-0.451)	0.456 (0.400-0.525)	0.540 (0.455-0.646)	0.606 (0.499-0.743)	0.674 (0.540-0.850)	0.746 (0.579-0.971)	0.847 (0.627-1.16)	0.929 (0.661-1.32)
30-min	0.392 (0.348-0.445)	0.473 (0.420-0.538)	0.580 (0.514-0.662)	0.669 (0.587-0.771)	0.792 (0.669-0.949)	0.889 (0.732-1.09)	0.990 (0.793-1.25)	1.10 (0.850-1.43)	1.24 (0.921-1.70)	1.36 (0.971-1.94)
60-min	0.573 (0.509-0.650)	0.691 (0.614-0.786)	0.849 (0.751-0.968)	0.979 (0.859-1.13)	1.16 (0.978-1.39)	1.30 (1.07-1.59)	1.45 (1.16-1.82)	1.60 (1.24-2.09)	1.82 (1.35-2.48)	1.99 (1.42-2.83)
2-hr	0.871 (0.775-0.990)	1.05 (0.932-1.19)	1.28 (1.13-1.46)	1.47 (1.29-1.69)	1.72 (1.45-2.05)	1.91 (1.57-2.33)	2.10 (1.68-2.64)	2.29 (1.78-2.98)	2.55 (1.89-3.48)	2.76 (1.96-3.91)
3-hr	1.12 (0.997-1.27)	1.35 (1.20-1.54)	1.65 (1.46-1.88)	1.88 (1.65-2.16)	2.19 (1.85-2.62)	2.42 (1.99-2.97)	2.65 (2.12-3.34)	2.88 (2.24-3.76)	3.19 (2.36-4.36)	3.43 (2.44-4.86)
6-hr	1.70 (1.51-1.93)	2.06 (1.83-2.34)	2.51 (2.22-2.87)	2.87 (2.52-3.30)	3.33 (2.81-3.98)	3.67 (3.02-4.50)	4.00 (3.21-5.05)	4.33 (3.36-5.64)	4.77 (3.53-6.50)	5.09 (3.62-7.22)
12-hr	2.42 (2.16-2.75)	3.01 (2.68-3.43)	3.74 (3.31-4.27)	4.31 (3.78-4.96)	5.04 (4.25-6.03)	5.56 (4.58-6.82)	6.08 (4.87-7.67)	6.59 (5.11-8.57)	7.24 (5.36-9.88)	7.72 (5.50-11.0)
24-hr	3.38 (3.04-3.84)	4.32 (3.88-4.92)	5.49 (4.92-6.25)	6.39 (5.69-7.33)	7.55 (6.54-8.90)	8.39 (7.14-10.1)	9.21 (7.68-11.3)	10.0 (8.16-12.5)	11.1 (8.70-14.3)	11.8 (9.04-15.8)
2-day	4.45 (4.00-5.05)	5.70 (5.12-6.48)	7.29 (6.53-8.30)	8.54 (7.60-9.79)	10.2 (8.81-12.0)	11.4 (9.69-13.7)	12.6 (10.5-15.4)	13.8 (11.2-17.3)	15.3 (12.1-19.9)	16.5 (12.6-22.0)
3-day	5.17 (4.64-5.87)	6.62 (5.95-7.53)	8.49 (7.60-9.67)	9.97 (8.88-11.4)	11.9 (10.3-14.1)	13.4 (11.4-16.1)	14.9 (12.4-18.2)	16.4 (13.4-20.6)	18.4 (14.5-23.9)	19.9 (15.2-26.6)
4-day	5.76 (5.18-6.54)	7.39 (6.63-8.40)	9.48 (8.49-10.8)	11.1 (9.92-12.8)	13.4 (11.6-15.8)	15.1 (12.8-18.1)	16.8 (14.0-20.5)	18.5 (15.0-23.1)	20.8 (16.3-26.9)	22.5 (17.2-30.0)
7-day	7.12 (6.40-8.09)	9.11 (8.18-10.3)	11.7 (10.4-13.3)	13.7 (12.2-15.7)	16.4 (14.2-19.4)	18.5 (15.8-22.2)	20.6 (17.2-25.2)	22.7 (18.5-28.4)	25.5 (20.1-33.1)	27.7 (21.2-37.0)
10-day	8.10 (7.28-9.20)	10.4 (9.30-11.8)	13.2 (11.9-15.1)	15.5 (13.8-17.8)	18.6 (16.1-21.9)	20.8 (17.7-25.0)	23.1 (19.3-28.3)	25.4 (20.7-31.8)	28.4 (22.4-36.8)	30.7 (23.5-41.0)
20-day	10.7 (9.62-12.2)	13.7 (12.3-15.6)	17.4 (15.6-19.9)	20.3 (18.1-23.3)	24.0 (20.8-28.3)	26.7 (22.7-32.0)	29.3 (24.5-35.9)	31.9 (26.0-39.9)	35.2 (27.7-45.6)	37.6 (28.7-50.2)
30-day	12.9 (11.6-14.6)	16.5 (14.8-18.8)	20.9 (18.7-23.8)	24.2 (21.6-27.8)	28.4 (24.6-33.5)	31.4 (26.8-37.7)	34.3 (28.6-42.0)	37.1 (30.2-46.4)	40.5 (31.9-52.6)	43.0 (32.9-57.4)
45-day	15.8 (14.2-17.9)	20.1 (18.1-22.9)	25.3 (22.7-28.8)	29.1 (25.9-33.4)	33.9 (29.4-40.0)	37.3 (31.7-44.7)	40.4 (33.7-49.4)	43.4 (35.3-54.3)	47.0 (37.0-61.0)	49.6 (38.0-66.3)
60-day	18.8 (16.9-21.3)	23.7 (21.3-27.0)	29.6 (26.5-33.7)	33.9 (30.2-38.9)	39.2 (33.9-46.2)	42.8 (36.4-51.3)	46.2 (38.5-56.5)	49.4 (40.2-61.8)	53.3 (41.9-69.1)	56.0 (42.8-74.7)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Back to Top

Ex 3:Drainage Area Calculations
1177 Dunaweal Ln.
April 25, 2014

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Annual Average Rainfall = 38 Inches (FromNapa County Precipitation Chart - Lower County)
Time of concentration = 10 minutes (Minimum Pper Napa Road and Street Standards)

Drainage Area- per attached	Watershed Area (acres)	Discharge Rate (cfs) At Return Period (years) 10	25	100	Rainfall Intensity (I = in/hr) From Ex. 9 Intensity-Duration
		2.80		3.60	
	Runoff Coefficient (C) =	0.4			
DA 1	10.78	12.08		15.53	
	Runoff Coefficient (C) =	0.4			
DA 2	15.57	17.44		22.42	
	Runoff Coefficient (C) =	0.8			
DA 3	2.57	5.76		7.40	
TOTAL		35.28		45.35	

Ex 4:Composite C and CN Calculations
1077 Dunaweal Ln.
April 25, 2014

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			EXISTING					PROPOSED				
	Total Area (acre)	Desc.	(acre)	(SQ. FT.)	C Runoff 10 -Yr	C Runoff 85th %	CN group B from SCS	(acre)	(SQ. FT.)	C Runoff 10 -Yr	C Runoff 85th %	CN group B from SCS
DI #1	3.003	Vineyard	2.24	97,601	0.45	0.80	81	0.00	0	0.45	0.10	81
		AC/Roof	0.00	0	0.90	0.10	98	2.62	114,316	0.90	0.80	98
		Undeveloped	0.76	33,202	0.45	0.10	69	0.38	16,487	0.45	0.10	69
	TOTAL		3.00	130,803				3.00	130,803			
	c*a				112,542	81,401	10,196,619			110,304	93,102	12,340,571
	combined c				0.86	0.62	77.95			0.84	0.71	94.34
TOTALS:	3.00			130,803					130,803			
WEIGHTED AVERAGE:					0.86	0.62	77.95			0.84	0.71	94.34

Exhibit 5: Pre vs Post

Pre-Development Total Runoff Volume

NRCS Curve Number Procedure,

Weighted Average Volume Technique

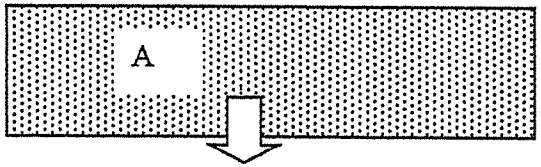
Q=(P-0.2S)^2/(P+0.8S) where, S=1000/CN-10

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Vintage_ Dunaweal Winery
1077 Dunaweal Ln
Calistoga, CA 94515
APN: 020-150-017
25-Apr-14
Proposed Winery

NOAA 2-Year, 24-Hour Storm (Inches):
4.32

Hydrologic Condition and Direction of Runoff



Area ID	Area (Acres)	Land Use	Soil Group	Combined CN (Curve Number)	S	Q (Rainfall Excess, inches)	Runoff Volume (acre-feet)	Runoff Volume (cu ft)
DA1	3.003	Agricultural	B	77.95	2.83	2.141	0.536	23,339
						Total Runoff Volume	0.54	23,339

Exhibit 5: Pre vs Post

Post-Development Total Runoff Volume

NRCS Curve Number Procedure,

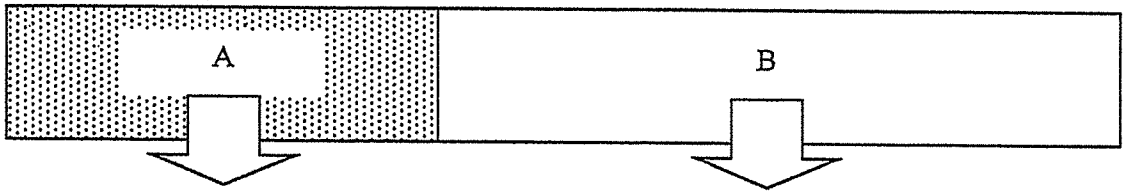
Weighted Average Volume Technique

Q=(P-0.2S)^2/(P+0.8S) where, S=1000/CN-10

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25-Apr-14
Proposed Winery

NOAA 2-Year, 24-Hour Storm (Inches):
4.32



Area ID	Area (Acres)	Land Use	Soil Group	CN (Curve Number)	S	Q (Rainfall Excess, inches)	Runoff Volume (acre-feet)	Runoff Volume (cu ft)
DA1	3.003	Agricultural	B	94.34	0.60	3.675	0.920	40061
						Total Runoff Volume	0.92	40,061

	acre-feet	cubic-feet
Total Pre-Project Runoff Volume	0.54	23,339
Total Post-Project Runoff Volume	0.92	40,061
Difference in Runoff Volume	0.38388	16,722
Percent Change	72%	72%

Bioretention Swale Linear Volume (cubic ft/ft)	18.41	ft^3/ft
Bioretention Swale Length (ft)	908	lf

Area of Development (Acres)	3.00
Percent of development needed for bioretention.	1%

Ex 6: Swale Calculations & Pipe Sizes
1077 Dunaweal Ln.
April 25, 2014

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Swale Capacity 0.75 ft n = .0275 short grass

OUTPUT INFORMATION

This report is for a channel running full.

The Flow Capacity is 52.71 cfs
The flow velocity is 4.134 fps

CHANNEL PROPERTIES

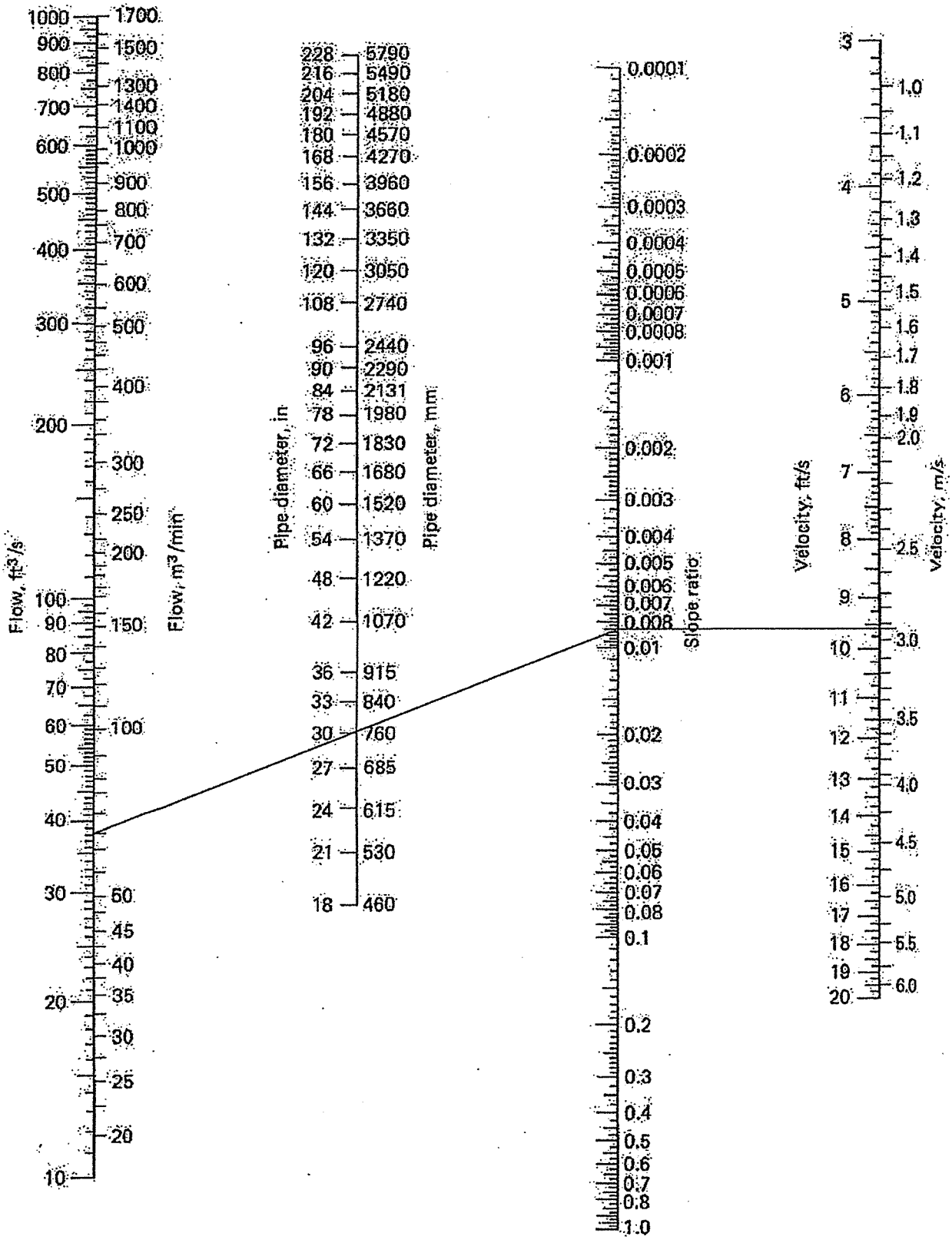
The friction factor 'n' = 0.0275
The channel slope = 0.0200 ft/ft

'Trapizoidal' Shaped Channel:

Width at top = 32.00ft
Width at bottom = 2.000ft
Height = 0.750ft
Flow Area = 12.75 sq-ft
Wetted perimiter = 32.04 ft
Hydraulic radius = 0.398 ft

Ex 6: Swale Calculations & Pipe
Sizes 1077 Dunaweal Ln.
April 25, 2014

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Nomogram for solution of Manning's equation for circular pipes flowing full (n = 0.013)

Exhibit 7: Precipitation Chart Lower County
1077 Dunaweal Ln.
April 25, 2014

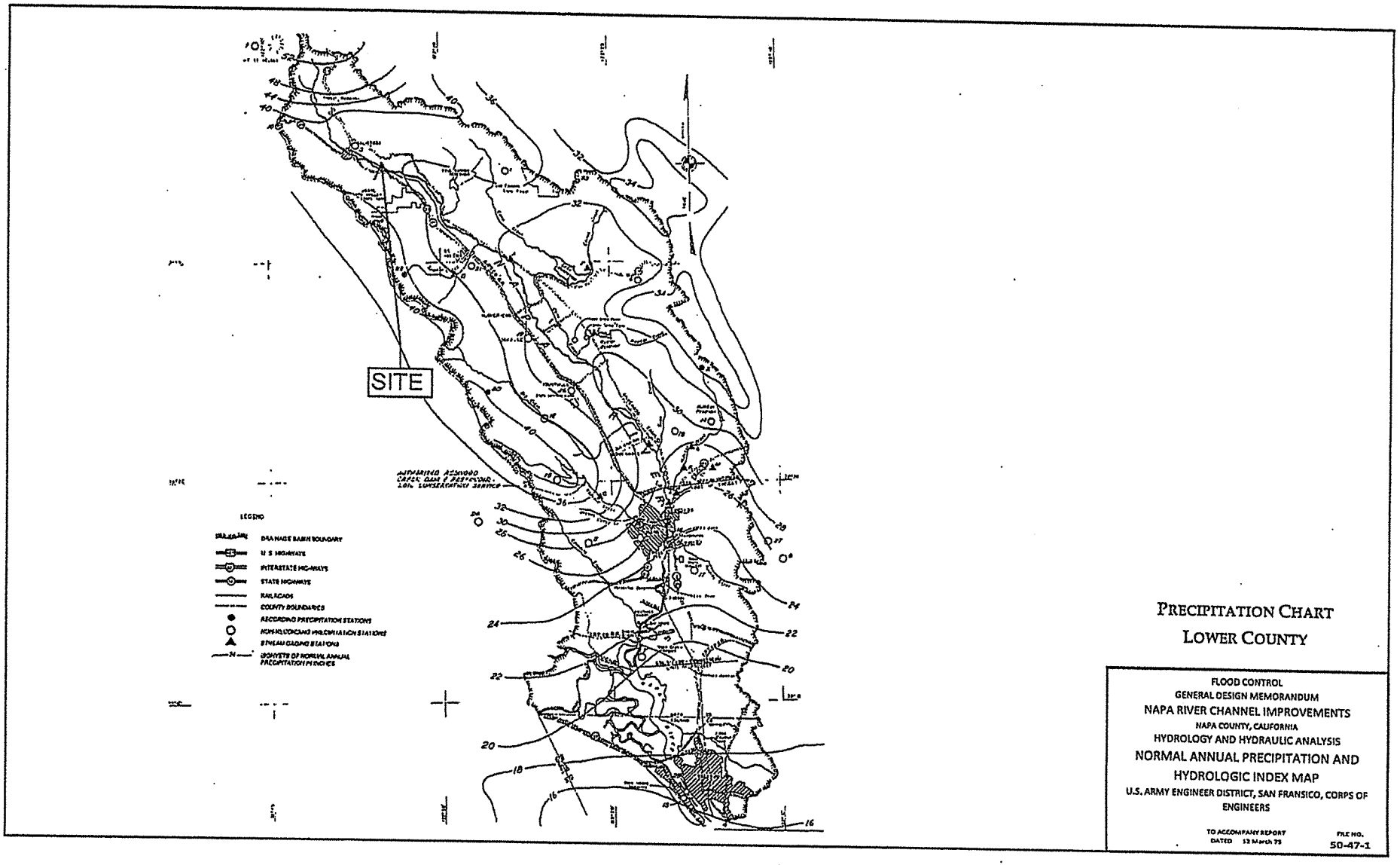


Exhibit 8: MEAN ANNUAL PRECIPITATION VS. 60 MINUTE RAINFALL

1077 Dunaweal Ln.

April 25, 2014

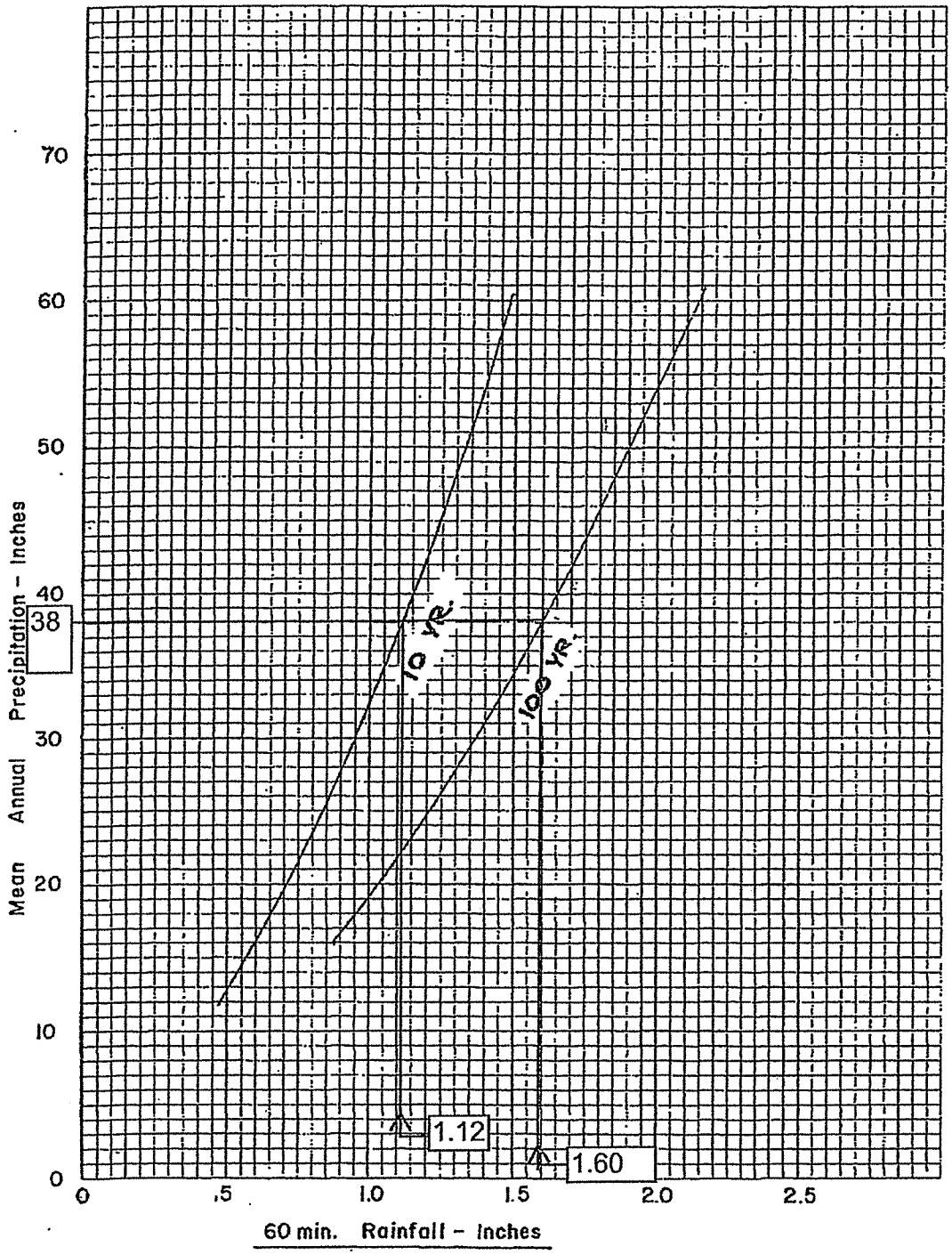
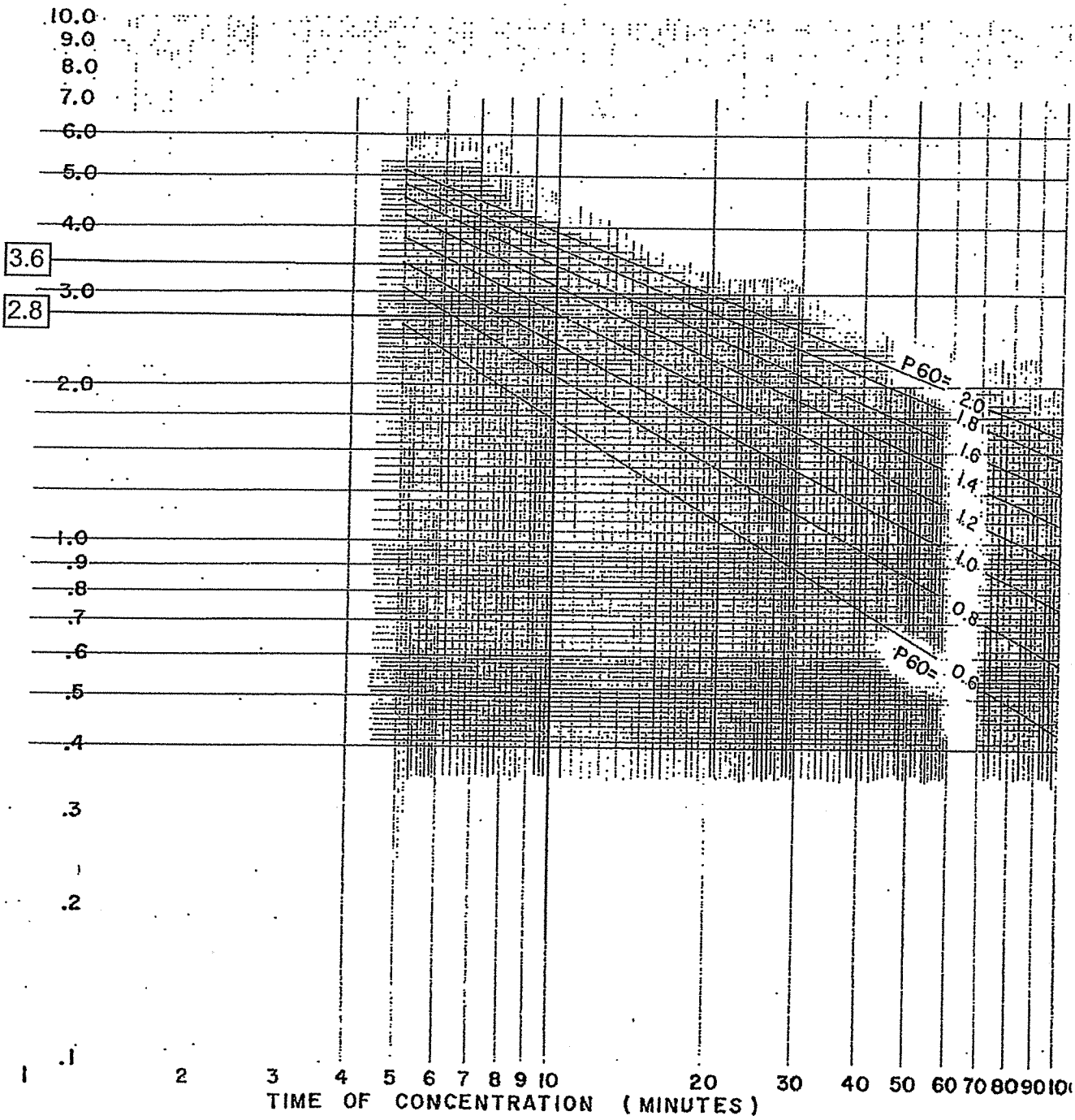


Exhibit 9: INTENSITY – DURATION CHART

1077 Dunaweal Ln.

April 25, 2014



Based on figure 7-8II.6 (-8-64)
State of California
Division of Highways
Planning Manual

Exhibit 10:Table of Runoff Curve Numbers
1077 Dunaweal Ln.
April 25, 2014

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Table of Runoff Curve Numbers (SCS, 1986)

Description of Land Use	Hydrologic Soil Group			
	A	B	C	D
Paved parking lots, roofs, driveways	98	98	98	98
Streets and Roads:				
Paved with curbs and storm sewers	98	98	98	98
Gravel	76	85	89	91
Dirt	72	82	87	89
Cultivated (Agricultural Crop) Land*:				
Without conservation treatment (no terraces)	72	81	88	91
With conservation treatment (terraces, contours)	62	71	78	81
Pasture or Range Land:				
Poor (<50% ground cover or heavily grazed)	68	79	86	89
Good (50-75% ground cover; not heavily grazed)	39	61	74	80
Meadow (grass, no grazing, mowed for hay)	30	58	71	78
Brush (good, >75% ground cover)	30	48	65	73
Woods and Forests:				
Poor (small trees/brush destroyed by over-grazing or burning)	45	66	77	83
Fair (grazing but not burned; some brush)	36	60	73	79
Good (no grazing; brush covers ground)	30	55	70	77
Open Spaces (lawns, parks, golf courses, cemeteries, etc.):				
Fair (grass covers 50-75% of area)	49	69	79	84
Good (grass covers >75% of area)	39	61	74	80
Commercial and Business Districts (85% impervious)	89	92	94	95
Industrial Districts (72% impervious)	81	88	91	93
Residential Areas:				
1/8 Acre lots, about 65% impervious	77	85	90	92
1/4 Acre lots, about 38% impervious	61	75	83	87
1/2 Acre lots, about 25% impervious	54	70	80	85
1 Acre lots, about 20% impervious	51	68	79	84

*From Chow et al. (1988).

Ex 11 NRCS Hydrologic Soil Group
1077 Dunaweal Ln.
April 25, 2014



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California
Survey Area Data: Version 5, Nov 25, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 2, 2010—Feb 17, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Ex 11 NRCS Hydrologic Soil Group
1077 Dunaweal Ln.
April 25, 2014

Hydrologic Soil Group

Hydrologic Soil Group—Summary by Map Unit—Napa County, California (CA055)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
103	Bale loam, 0 to 2 percent slopes	B	20.3	79.3%
116	Clear Lake clay, drained	C	4.0	15.7%
118	Cole silt loam, 0 to 2 percent slopes	C	1.1	4.3%
140	Forward gravelly loam, 30 to 75 percent slopes	B	0.2	0.7%
Totals for Area of Interest			25.5	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Biological Resource Survey

Girard Winery

1077 Dunaweal Lane
APN# 020-150-017
Calistoga, CA



Prepared
For

Girard Winery

By
Kjeldsen Biological Consulting
923 St. Helena Ave.
Santa Rosa, CA 95404

July 2014

Biological Resource Survey

Girard Winery

1077 Dunaweal Lane

APN# 020-150-017

Calistoga, CA

PROJECT NAME: Girard Winery
1077 Dunaweal Ln.
Calistoga, CA
Use Permit Application
APN 022-150-017

CIVIL ENGINEER: Always Engineering, Inc.
2360 Professional Drive
Santa Rosa, CA 95403

PROJECT COORDINATOR: Heather McCollister
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PERIOD OF STUDY: March –July 2014

Biological Resource Survey

Girard Winery

1077 Dunaweal Lane

APN# 020-150-017

Calistoga, CA

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Biological Resource Survey

Girard Winery

1077 Dunaweal Lane

APN# 020-150-017

Calistoga, CA

Executive Summary

This study was conducted at the request of Heather McCollister, on behalf of the property owners, as background information for project permits from the Napa County Conservation, Development and Planning Department.

The project proposes a winery, access road, landscaping, parking areas, primary and reserve treated sanitary subsurface drip septic area and associated infrastructure. The property is approximately 26.53 acres. The total disturbed area of the project is 3.59 acres. The entire project is within a disturbed environment. The property is in Napa County located at 1077 Dunaweal Lane east of the city of Calistoga. The property is within the USGS Calistoga Quadrangle.

The purpose of this report is to identify biological resources that may be affected by the proposed project. The fieldwork studied the proposed project envelope, the property and adjoining environment. The findings presented below are the results of fieldwork conducted during the spring and summer of 2014 by Kjeldsen Biological Consulting:

- The project footprint is within a developed landscape. The winery is proposed for an area that was a vineyard that has been removed and prepped for replanting;
- The project as proposed will not have any direct impacts to Federal or State protected wetlands as defined by Section 404 of the Clean Water Act;
- The proposed project will not significantly reduce habitat for or have the potential to negatively impact any special-status plants or animals;
- No sensitive plants, sensitive plant habitat, or special-status plant species was identified on the property. We find that it is unlikely that the proposed project would impact any of the special-status plants known for the Quadrangle or the region based on our fieldwork, the habitat present and historic use within and associated with the project footprint:
- No sensitive animals, sensitive wildlife habitat, or special-status animal species was identified on the project site. We find that it is unlikely that the proposed project would impact any of the special-status animals known for the Quadrangle or the region based on our fieldwork, the habitat present and historic use within and associated with the project footprint:

- One juvenile Northwestern Pond Turtle was observed on the bank of the existing reservoir. There is no potential impact to this species associated with the project.
- No raptor activity or nests were observed on or near the proposed project site;
- No wildlife corridors will be impacted by the proposed project;
- There are no indications of the presence of Sensitive Natural Communities regulated by the California Department of Fish and Wildlife or US Fish and Wildlife within or directly associated with the project footprint;
- No native trees will be removed by the proposed project;
- The footprint of the project will not significantly contribute to habitat loss or habitat fragmentation; and
- The flora and fauna observed on and near the site are included as an Appendix.

Assessment of Impacts

The project is within a developed landscape that has been in agriculture for decades. The property and project site conditions are such that there is no reason to expect any impacts to special-status species on site or off site provided Best Management Practices are implemented.

Recommendations

The following recommended measures are presented to reduce potential biological impacts by the proposed project to a less than significant level pursuant to the California Environmental Quality Act.

Best Management Practices including silt and erosion control measures must be implemented to prevent off-site movement of sediment and dust during and post construction.

Biological Resource Survey
Girard Winery
1077 Dunaweal Lane
Calistoga, CA

A PROJECT DESCRIPTION

This study was conducted at the request of Heather McCollister on behalf the property owner. This study and report are provided as background information necessary for securing permits from Napa County Conservation, Development and Planning Department for the proposed project.

A.1 Introduction

The project proposes a winery, access road, landscaping, parking areas, primary and reserve treated sanitary subsurface drip septic area and associated infrastructure. The property is approximately 26.53 acres. The total disturbed area of the project is 3.59 acres. The entire project is within a disturbed environment.

The property is in Napa County located at 1077 Dunaweal Lane east of the city of Calistoga. The property is within the USGS Calistoga Quadrangle. Plate I provides a site and location map of the property. Plate III provides an aerial photograph of the property. The attached Site Plan prepared by Always Engineering, Inc. Civil Engineering and Topographic Surveying illustrates the project (2/4/2014).

A.2 Background

The surrounding land use consists of vineyards, residences, winery, and oak woodlands. The property is a rectangular shaped parcel within the Napa Valley floor. The parcel at present consists of a fallow field from which vineyard has been removed, reservoir, agricultural storage building, process wastewater ponds and associated infrastructure.

A.3 Purpose

The purpose of this report is to identify biological resources that may be affected by the proposed project as listed below:

- To determine the presence of potential habitat for special-status species which would be impacted by the proposed project, including habitat types which may have the potential for supporting special-status species (target species that are known for the region, habitat, the Quadrangle and surrounding Quadrangles);
- To identify and assess potential impacts to Federal or State protected wetlands as defined by Section 404 of the Clean Water Act; and

- To determine if the project will substantially interfere with native wildlife species, wildlife corridors, and or native wildlife nursery sites;
- Identify any State or Federal biological permits required by the proposed project; and
- Recommend measures to reduce biological impacts to a less than significant level pursuant to the California Environmental Quality Act (CEQA).

A.4 Definitions

Definitions used in this report are attached in Appendix B.

B SURVEY METHODOLOGY

The purpose of the spring-summer floristic survey is to provide a faunal and floristic study of the project site with emphasis on any special-status animals, plants, unique plant populations and or critical habitat associated with the proposed project. The project scoping determined the extent of our surveys which ranged from March to July 2014.

B.1 Project Scoping

The scoping for the project considered seasonal fieldwork, location and type of habitat and or vegetation types present on the property or associated with potential special-status plant species known for the Quadrangles, surrounding Quadrangles the County or the region. Our scoping also considered records in the most recent version of the Department of Fish and Wildlife California Natural Diversity Data Base (DFW CNDDB Rare Find-3) and the California Native Plant Society (CNPS) Electronic Inventory of Rare or Endangered Plants. "Target" special-status species are those listed by the State, the Federal Government or the California Native Plant Society or considered threatened in the region. Our scoping is also a function of our familiarity with the local flora and fauna as well as previous projects on other properties in the area.

Section 15380 of the California Environmental Quality Act [CEQA (September, 1983)] has a discussion regarding non-listed (State) taxa. This section states that a plant (or animal) must be treated as Rare or Endangered even if it is not officially listed as such. If a person (or organization) provides information showing that a taxa meets the State's definitions and criteria, then the taxa should be treated as such.

Tables II and III present DFW CNDDB Rare Find species and U.S. Fish and Wildlife Service listed species for the Quadrangle and surrounding Quadrangles.

B.2 Field Survey Methodology

Our studies were made by walking transects through and around the project site. Our fieldwork focused on locating suitable habitat for organisms or indications that such habitat exists on the site. Digital photographs were taken during our studies to document conditions and selected photographs are included within this report. A floristic and seasonally appropriate survey was conducted in the field at the time of year when rare, threatened, or endangered species are both evident and identifiable for all the species expected to occur within the Study Area.

Plants Field surveys were conducted recording identifying all species on the site and in the near proximity. Transects through the proposed project sites were made methodically by foot. Transects were established and scrutinized to cover topographic and vegetation variations within the study area. The Intuitive Controlled approach calls for the qualified surveyor to conduct a survey of the area by walking through it and around its perimeters, and closely examining portions where target species are especially likely to occur. The open nature of the site, historic and on going agricultural practices, and small size of the proposed development footprint

facilitated our field studies. All plant life was recorded in field notes and is presented in Appendix A

The fieldwork for identifying special-status plant species is based on our knowledge and many years of experience in conducting special-status plant species surveys in the region. Plants were identified in the field or reference material was collected, when necessary, for verification using laboratory examination with a binocular microscope and reference materials. Herbarium specimens from plants collected on the project site were made when relevant. Voucher material for selected individuals is in the possession of the authors. All plants observed (living and/or remains from last season's growth) were recorded in field notes.

Typically, blooming examples are required for identification however; it is not the only method for identifying the presence of or excluding the possibility of rare plants. Vegetative morphology and dried flower or fruit morphology, which may persist long after the blooming period, may also be used. Skeletal remains from previous season's growth can also be used for identification. Some species do not flower each year or only flower at maturity and therefore must be identified from vegetative characteristics. Algae, fungi, mosses, lichens, ferns, Lycophyta and Sphenophyta have no flowers and there are representatives from these groups that are now considered to be special-status species, which require non-blooming identification. For some plants unique features such as the aromatic oils present are key indicator. For some trees and shrubs with unique vegetative characteristics flowering is not needed for proper identification. The vegetative evaluation as a function of field experience can be used to identify species outside of the blooming period to verify or exclude the possibility of special-status plants in a study area.

Habitat is also a key characteristic for consideration of special-status species in a study area. Many special-status species are rare in nature because of their specific and often very narrow habitat or environmental requirements. Their presence is limited by specific environmental conditions such as: hydrology, microclimate, soils, nutrients, interspecific and intraspecific competition, and aspect or exposure. In some situations special-status species particularly annuals may not be present each year and in this case one has to rely on skeletal material from previous years. A site evaluation based on habitat or environmental conditions is therefore a reliable method for including or excluding the possibility of special-status species in an area.

Animals were identified in the field by their sight, sign, or call. Our field techniques consisted of surveying the area with binoculars and walking the perimeter of the project site. Existing site conditions were used to identify habitat, which could potentially support special-status animal species. All animal life was recorded in field notes and is presented in Appendix A.

Trees were surveyed to determine whether occupied raptor nests were present within the proximity of the project site (i.e., within a minimum 500 feet of the areas to be disturbed). Surveys consisted of scanning the trees on the property (500 ft +) with binoculars searching for nest or bird activity. Our search was conducted from the property and by walking under existing trees looking for droppings or nest scatter from nests that may be present that were not observable by binoculars.

Aerial photos were reviewed to look at the habitat surrounding the site and the potential for wildlife movement, or wildlife corridors from adjoining properties onto or through the site.

Wetlands The project site was reviewed to determine from existing environmental conditions with a combination of vegetation, soils, and hydrologic information if seasonal wetlands were present. Wetlands were evaluated using the ACOE's three-parameter approach: Vegetation, Hydrology, and Soils.

Tributaries to Waters of the US are determined by the evaluation of continuity and "ordinary high water mark." The ordinary high water mark is determined based on the top of scour marks and high flow impacts on vegetation.

The area surveyed is shown on Plate III.

Table I. Time and Date of Field Work for Spring and Summer 2014

Date	Personnel	Person-hr.	Time	Conditions
March 13, 2014	Chris K. and Daniel T. Kjeldsen	2.0 person-hours	11:15 to 12:15	Clear, clear cool temperatures.
April 25, 2014	Chris K. and Daniel T. Kjeldsen	2.0 person-hours	11:00 to 12:00	Overcast, no wind, with mild temperatures.
May 8, 2014	Chris K. and Daniel T. Kjeldsen	2.0 person-hours	12:00 to 13:00	Clear, windy with warm temperatures.
July 22, 2014	Chris K. and Daniel T. Kjeldsen	2.0 person-hours	13:00 to 14:00	Clear, no wind, with warm temperatures.

C RESULTS / FINDINGS

C.1 Biological Setting

The study site is located in Napa County within the upper Napa Valley. The parcel drains by direct infiltration or sheet flow into roadside ditches and unnamed tributaries of the Napa River. The proposed winery and support facilities are within a developed landscape (hardscape) and the wastewater disposal system is to be located within fallow agricultural lands (vineyard has been removed) (see Plate I for Location). Figures 1 to 5 illustrate the site conditions.

The property is within the inner North Coast Range Mountains, a geographic subdivision of the larger California Floristic Province (Hickman, 1993). The property and surrounding region is strongly influenced storms and fog from the Pacific Ocean. The region is in climate Zone 14 "Ocean influenced Northern and Central California" characterized as an inland area with ocean or cold air influence. The climate of the region is characterized by hot, dry summers and cool, wet winters, with precipitation that varies regionally from less than 30 to more than 60 inches per year. This climate regime is referred to as a "Mediterranean Climate." The average annual temperature ranges from 45 to 90 degrees Fahrenheit. The variations of abiotic conditions including geology results in a high level of biological diversity per unit area in the region.

Our survey focused on the areas proposed project footprint, irrigation wastewater site, and immediate surrounding habitat. The aerial photo illustrates the site (Plate III) and the photographs that follow further document existing conditions of the project sites.

C.2 Habitat Types Present

The vegetation of California has been considered to be a mosaic with major changes present from one area to another often with distinct vegetation changes within short distances. It is generally convenient to refer to the vegetation associates on a site as a plant community or alliance. Typically plant communities or vegetation alliances are identified or characterized by the dominant vegetation form or plant species present. There have been numerous community classification schemes proposed by different authors using different systems for the classification of vegetation. A basic premise for the designation of plant communities, associations or alliances is that in nature there are distinct plant populations occupying a site that are stable at any one time (climax community is a biotic association, that in the absence of disturbance maintains a stable assemblage over long periods of time).

In general terminology one would refer to the habitat on the property as Ruderal Grassland (agricultural land that has been routinely maintained), and hardscape with some landscape plantings. The dominant land cover types on the project site consist of non-native weeds. In the sections below the habitat types present are described and further categorized with the new system of vegetation classification by Sawyer *et al* A Manual of California Vegetation Second Edition. Sawyer classifies the vegetation on the property as Grassland Semi-natural Stands with Herbaceous Layer Sawyer does not classify hardscape or landscape plantings. This classification is the presently preferred system that over time will replace existing classification systems.

Annual Semi-Natural Herbaceous Grassland Stands present as "weeds" within the agricultural lands of the property (this area can also be classified as "ruderal habitat" which reflects the abundance of non-native annuals as a result of the agricultural disturbance.

Ruderal-Grassland Semi-Natural Herbaceous Stands with Herbaceous Layer (Annual Grasslands)

Semi-Natural Herbaceous Grasslands are a result of decades of agriculture and the introduction of non-native grasses and herbs. Sawyer uses the term "Semi-natural Stands to refer to non-native introduced plants that have become established and coexist with native species. This includes what can be termed weeds, aliens, exotics or invasive plants in agricultural and nonagricultural settings. The Semi-natural Herbaceous Stands cannot be mapped due to the small size but if one searches the site one can find small patches of the following;

Avena ssp. Semi-natural Herbaceous Stand, Wild oats grasslands. The membership rules require *Avena ssp.* to be> 50% relative cover of the herbaceous layer. Semi-natural stands are those dominated by non-native species that have become naturalized primarily as a result of historic agricultural practices and fire suppression or management practices for weed abatement and fire suppression.

Bromus diandrus Semi-Natural Herbaceous Stands Annual brome grassland; (Membership Rules *Bromus diandrus >60%* relative cover with other non-natives in the herbaceous layer). *Bromus diandrus* is dominant or co-dominant with non-native in the herbaceous layer. Emergent trees and shrubs may be present at low cover Herbs<75 cm tall are intermittent to continuous. Ripgut brome is an annual grass from Eurasia. This alliance accounts for the largest acreage of grassland vegetation in cismontane California. Stands in our area contain *Aria caryophylla, Cynosurus echinatus, Dichelostemma multiflorum, Erodium botrys, Limnanthes douglasii, Taeniantherum caput-medusae,* and *Baccharis pilularis* shrubs.

Lolium perenne Semi-Natural Herbaceous Stands Perennial Rye Grass Field; (Membership Rules *Lolium perenne*> %50 relative cover, native plants< 15% relative cover). *Lolium perenne* is a non-native grass from Europe introduced into temperate regions throughout the world. It is an annual or a perennial, cool-season bunch grass.

Wildlife Associated with Semi-natural Grasslands

Semi-natural Grasslands with Herbaceous Layer (annual ruderal non-native grasslands) within the study area provide habitat for a variety of birds and Mammals. The vegetation present provides browse for deer (*Odocoileus hemionus*), cover and foraging habitat for mice and voles (*Peromyscus* ssp., *Reithrodontomys* ssp., *Microtus* ssp.), habitat for Pocket Gophers *Thomomys bottae),* foraging habitat for Broad-footed Moles (*Scapanus latimanus*), foraging and habitat for shrews, and cover and foraging habitat for Black-tailed Jackrabbit (*Lepus californicus).* Numerous bird species forage for insects and seeds in these grasslands. Bats will forage for insects over this area and raptors will feed on reptiles and mammals in this type of vegetation cover. In general, however, the non-native annual grasslands, such as are present on the study site, are not an optimum habitat for wildlife.

Developed Hardscape with Landscape Plantings

This occupies a portion of the property and is visible on the aerial photograph. It consists of agricultural buildings, access roads, parking area, reservoir and process water treatment ponds not part of this project.



Figure 1. Fallow vineyard that has been disked. Proposed Winery Site.



Figure 2. View of proposed winery site.



Figure 3. View of Dunaweal Lane and the location of proposed winery entrance.

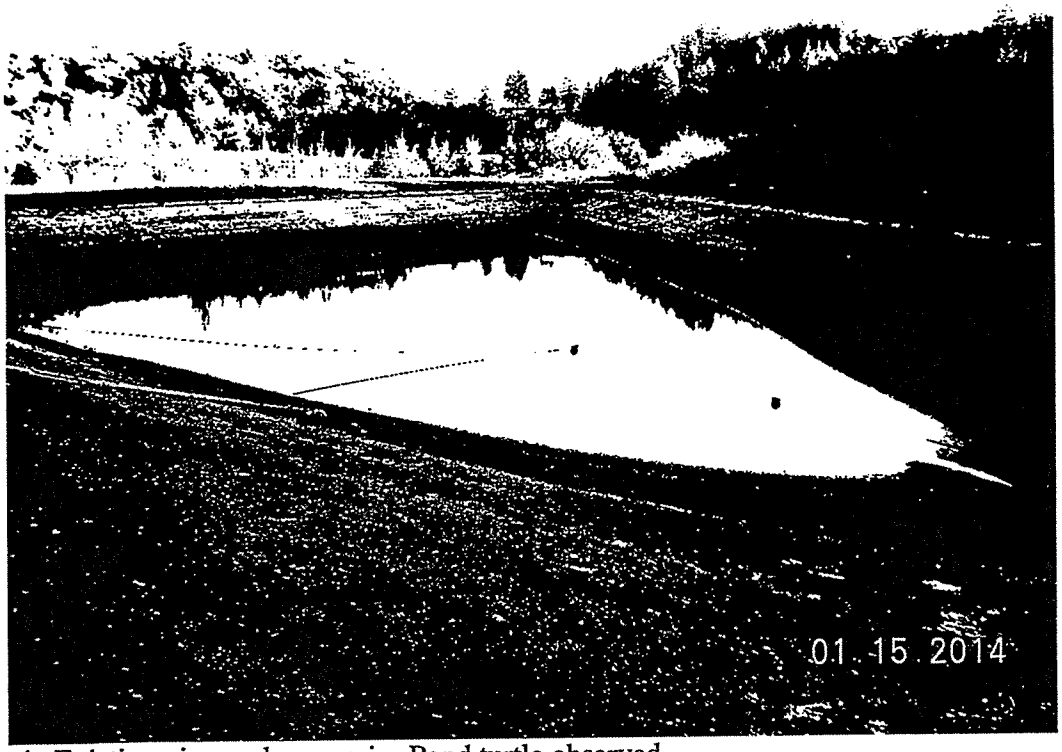


Figure 4. Existing vineyard reservoir. Pond turtle observed.

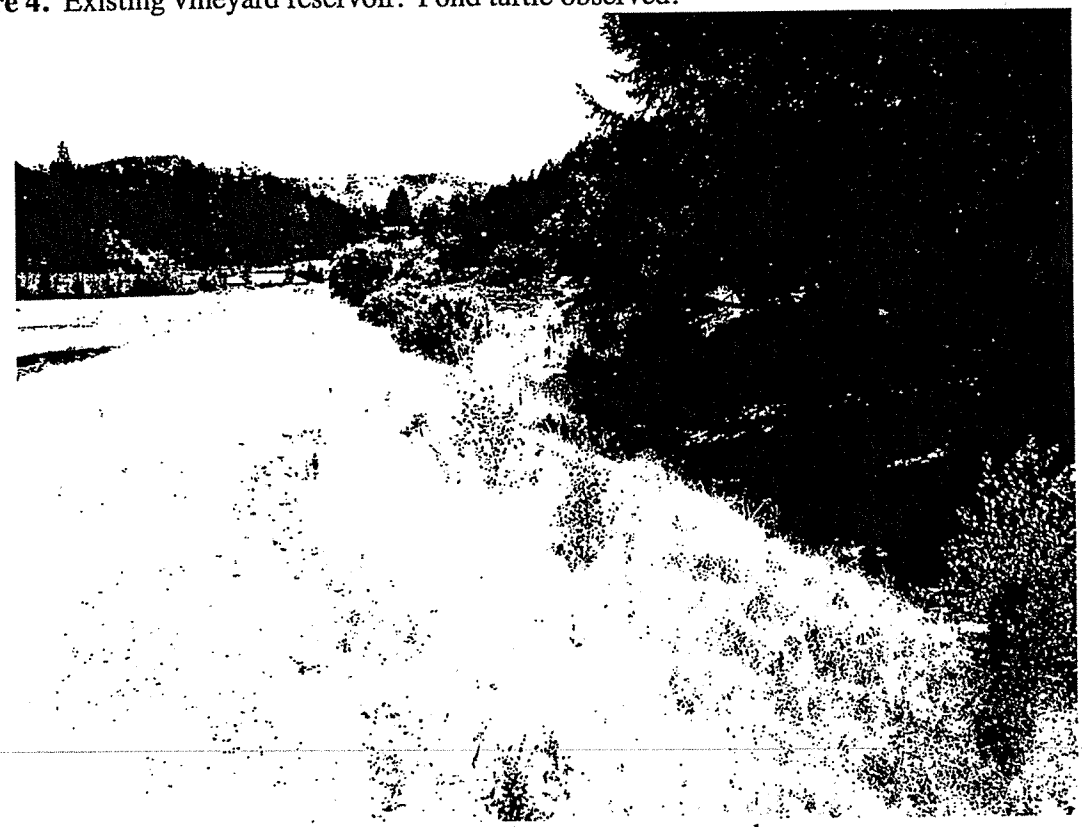


Figure 5. Created drainage swale adjacent to the waste water ponds.

The aerial photograph, Plate III illustrates the site and the surrounding environment. The environmental setting of the project site consists of:

- On the north side of the project – Vineyard, Rural Residential;
- On the east side of the project – Rural Residential and Riparian Corridor of Napa River;
- On the south side of the project – Vineyards; and
- On the west side of the project - State Highway 29.

The dominant land cover types in the vicinity of the property consist of vineyards followed by riparian corridor and on the edge of the valley floor, and Conifer Oak Woodland (Forest or Woodland Alliance)

Drainage on the site is by sheet flow into seasonal unnamed tributaries of the Napa River, and thence San Pablo Bay.

Napa County Definition for a Defined Drainages is a watercourse designated by a solid line or dash and three dots symbol on the largest scale of the United States Geological Survey maps most recently published, or any replacement to that symbol, and or any watercourse which has a well-defined channel with a depth greater that four feet and banks steeper that 3:1 and contains hydrophilic vegetation, riparian vegetation or woody-vegetation including tree species greater that ten feet in height.

There is a created drainage swale adjacent to the eastern property line. This swale would be not be considered a Napa County Defined Drainages. There are no direct impacts to this drainage associated with the proposed winery site or wastewater irrigation area.

C.3 Special-Status Species

Special-status organisms are plants or animals that have been designated by Federal or State agencies as rare, endangered, or threatened. Section 15380 of the California Environmental Quality Act [CEQA (September, 1983)] has a discussion regarding non-listed (State) taxa. This section states that a plant (or animal) must be treated as Rare or Endangered even if it is not officially listed as such. If a person (or organization) provides information showing that a taxa meets the State's definitions and criteria, then the taxa should be treated as such.

A map from the DFW CNDDB Rare Find shows known special-status species in the proximity of the project as shown on Plate II. These taxa as well as those listed in Appendix C Special-status Species known for the Quadrangle and Surrounding Quadrangles were considered and reviewed as part of our scoping for the project site and property. Reference sites were reviewed as part of our scoping for some of the species.

Tables II and III below provides a list of species that are known to occur DFW CNDDB Rare Find search) and U.S Fish and Wildlife Service. The table includes an analysis / justification for concluding absence.

Table II. Analysis of DFW CNDDB and USFWS special-status plant species from the region. Columns are arranged alphabetically by scientific name.

Scientific Name Common Name	Species Habitat Association or Plant Community	Habitat present on Project Site	Bloom Time	Obs. on or Near Site	Analysis of habitat on project site for presence or absence.
Allium peninsulare var. *franciscanum* Franciscan onion	Cismontane woodland, Valley & Foothill Grassland/Clay often Serpentinite	No	May-June	No	Absence of requisite edaphic conditions. Historic use precludes presence.
Amorpha californica var. *napensis* Napa False Indigo	Cismontane Woodland	No	April-July	No	Requisite habitat, exposure and historic land use preclude presence on project site.
Amsinkia lunularis Bent-flowered Fiddleneck	Cismontane Woodland, Valley & Foothill Grassland, 3 to 500 M	No	March-June	No	Potential for project site. No indications for presence during our fieldwork. Historic use precludes presence.
Arctostaphylos stanfordiana ssp. *decumbans* Rincon Manzanita	Chaparral, Lower Montane Coniferous Forest (openings), Rocky, often Serpentinite	No	Feb.-April	No	Absence of requisite habitat and vegetation associates on the site or in the immediate vicinity.
Astragalus claranus Clara Hunt's Milk-vetch	Chaparral, Cismontane Woodland, Valley and Foothill Grassland	No	March-May	No	Absence of requisite micro-habitat, vegetation associates and historic land use precludes presence. Lack of finding during our fieldwork.
Astragalus rattanii var. *jepsonianus* Jepson's Milk-vetch	Cismontane Woodland, Valley & Foothill Grassland	No	April-June	No	Requisite habitat absent on the site or in the immediate vicinity. Historic use precludes presence.

Table II Continued Scientific Name Common Name	Species Habitat Association or Plant Community	Habitat present on Project Site	Bloom Time	Obs. on or Near Site	Analysis of habitat on project site for presence or absence
Balsamorhiza macrolepis var. *macrolepis* Big-scale Balsamroot	Chaparral, Cismontane Woodland, Valley & Foothill Grassland	No	March-June	No	Historic use of site precludes presence.
Blennosperma bakeri Sonoma Sunshine	Valley & Foothill Grassland, Vernal Pools	No	March-May	No	Absence of requisite mesic habitat.
Brodiaea leptandra Narrow-anthered California Brodiaea	Cismontane Woodland	No	May-June	No	Requisite habitat, exposure and historic land use preclude presence on project site.
Ceanothus confusus Rincon Ridge Ceanothus	Closed Cone Conifer Forests, Chaparral	No	Feb.-April	No	Absence of typical habitat and vegetation associates.
Ceanothus divergens Calistoga Ceanothus	Chaparral, Serpentinite or Volcanic-Rocky.	No	May-Sept.	No	Absence of typical habitat and vegetation associates. Lack of finding during our fieldwork.
Ceanothus purpureus Holly-leaved Ceanothus	Chaparral	No	March-May	No	Absence of typical habitat and vegetation associates. Lack of finding during our fieldwork.
Centromadia parryi ssp. *parryi* Pappose Tarplant	Grassland Salt or Alkaline Marshes	No	March-June	No	Requisite mesic conditions absent. Lack of finding during our fieldwork.
Eryngium constancei Loch Lomond Button-celery	Vernal Pools	No	April-June	No	Absence of mesic conditions required for presence. Lack of finding during our fieldwork.

Table II Continued Scientific Name Common Name	Species Habitat Association or Plant Community	Habitat present on Project Site	Bloom Time	Obs. on or Near Site	Analysis of habitat on project site for presence or absence
Downingia pusilla Dwarf Downingia	Wetlands	No	March May	No	Requisite aquatic habitat absent on the site or in the immediate vicinity.
Fritillaria liliacea Fragrant Fritillary	Open Grasslands	No	Feb.-April	No	Absence of edaphic conditions required for presence.
Hemizonia congesta ssp. *congesta* White Seaside Tarplant	Coastal Scrub, Valley & Foothill Grassland	No	April Oct.	No	Absence of requisite habitat. Historic use precludes presence.
Juncus luciensis Santa Lucia Dwarf Rush	Seeps, Meadows, Vernal Pools, Stream Sides	No	April-June	No	Absence of requisite mesic habitat.
Lasthenia burkei Burke's Goldfields	Vernal Pools	No	April – June	No	Requisite aquatic habitat absent on the site or in the immediate vicinity.
Layia septentrionalis Colusa Layia	Cismontane Woodland, Valley and Foothill Grassland, Serpentinite	No	April-May	No	Historic agricultural use and hardscape as well as absence of requisite edaphic conditions preclude presence.
Leptosiphon jepsonii Jepson's Leptosiphon	Chaparral, Cismontane Woodland, Valley and Foothill Grassland	No	April-May	No	Requisite habitat absent on the site or in the immediate vicinity. Lack of finding during our fieldwork.
Limnanthes floccosea ssp. *floccosa* Woolly Meadowfoam	Meadows & Seeps, Valley & Foothill Grassland, Cismontane Woodland, Vernal Pools.	No	April-May	No	Requisite mesic habitat absent on the site or in the immediate vicinity.

Table II Continued Scientific Name Common Name	Species Habitat Association or Plant Community	Habitat present on Project Site	Bloom Time	Obs. on or Near Site	Analysis of habitat on project site for presence or absence
Limnanthes vinculans Sebastopol Meadowfoam	Meadows and Seeps, Valley and Foothill Grassland, Vernal Pools.	No	April-May	No	Requisite mesic habitat absent on the site or in the immediate vicinity.
Lupinus sericatus Cobb Mountain Lupine	Broadleaved Upland Forest, Chaparral, Cismontane Woodland	No	March-June	No	Absence of requisite vegetation associates as well as historical use of project site precludes presence. Lack of finding during our fieldwork.
Microsris paludosa Marsh Microseris	Moist areas Closed Cone Conifer Forests, Cismontane Woodland, Valley & Foothill Grassland	No	April-June	No	Absence of typical habitat and vegetation associates. Historic use precludes presence.
Navarretia leucocephala ssp. *bakeri* Baker's Navarretia	Meadows and Seeps, Cismontane Woodland, Valley and Foothill Grassland, Vernal Pools	No	May-July	No	Absence of typical habitat and vegetation associates. Historic use precludes presence..
Penstemon newberryi var. *sonomensis* Sonoma Beardtongue	Cismontane Woodland	No	April-Aug.	No	Absence of typical habitat and vegetation associates.
Plagiobothrys strictus Calistoga Popcorn-flower	Vernal pools near thermal springs	No	March-June	No	Requisite mesic habitat absent on the site or in the immediate vicinity.
Poa napensis Napa Blue Grass	Meadows near Hot Springs	No	May-Aug.	No	Requisite mesic habitat absent on the site or in the immediate vicinity. Lack of finding during our fieldwork.

Table II Continued Scientific Name Common Name	Species Habitat Association or Plant Community	Habitat present on Project Site	Bloom Time	Obs. on or Near Site	Analysis of habitat on project site for presence or absence
Sidalcea hickmanii ssp. *napensis* Napa Checkerbloom	Chaparral Serpentinite	No	May-June	No	Absence of typical habitat and vegetation associates. Lack of finding during our fieldwork.
Sidalcea oregana ssp. *hydrophila* Marsh Checkerbloom	Meadows and seeps, Riparian scrub mesic	No	June-Aug.	No	Requisite mesic habitat absent.
Trifolium amoenum Showy Rancheria Clover	Coastal Bluff Scrub, Valley & Foothill Grassland (Sometimes Serpentinite)	No	April-June	No	Historic use of the site precludes presence. This species is vulnerable to disturbance and livestock grazing.
Trifolium hydrophilum Saline Clover	Marshes and Swamps Grassland	No	April-June	No	Absence of mesic habitat required for presence.
Trichostema ruygtii Napa Bluecurls, Vinegar Weed	Grassland	No	No	June-Aug.	Requisite habitat absent on the site. Historic use of the site precludes presence.
Triquetrella californica Coastal Triquetrella	Endemic To Coastal California < 30 Miles. Thin Soil On Outcrops In Scrub Or Grassland	No	NA	No	Lack of appropriate habitat for this moss.

Table III. Analysis of anmal species that are known to occur (DFW CNDDB Rare Find search). Columns are arranged alphabetically by scientific name.

Scientific Name Common Name	**Habitat**	**Potential for Property**	**Obs. on Project Site**	**Analysis of habitat on project site for presence or absence.**
Accipter sriatus Sharp-Shinned Hawk	Avian prey, Nests in conifers or tops of live oaks	Yes	No	Lack of habitat for prey. May fly over
Ambystoma californiense California Tiger Salamander	Ephemeral Breeding pools with upland oak woodlands for estivation	No	No	No breeding or upland habitat. Surrounded by development
Antrozous pallidus Pallid Bat	Roosts in Buildings and Overhangs, woodlands	No	No	No evidence for presence observed.
Buteo swainsoni Swainson's Hawk	Open areas with riparian influence	No	No	Lack of nesting habitat.
Corynorhinus townsendii Townsend's Big-eared Bat	Caves, also in Buildings	No	No	No roosting habitat present
Elanus leucurus White-tailed Kite	Nests in tall trees near water	No	No	Requisite habitat absent.
Emys marmorata Western Pond Turtle	Slow moving water or ponds	Yes	Yes	No habitat on project site. Observed in reservoir off site.
Falco mexicanus Prairie Falcon	Nests on cliffs	No	No	May fly over. Lack of habitat for nesting and feeding.
Falco peregrinus anatum American Peregrine Falcon	Nests on cliffs	No	No	May fly over. Lack of habitat for nesting and feeding.
Hypomesus transpacificus Delta Smelt	California Delta	No	No	Lack of aquatic habitat.

Table III Continued Scientific Name Common Name	Habitat	Potential for Property	Obs. or Potential for Project Site	Analysis of habitat on project site for presence or absence.
Hysterocarpus traski pomo Russian River Tule Perch	Riverine	No	No	Requisite habitat absent on project site.
Hydrochara rickseckeri Ricksecker's Water Scavenger Beetle	Shallow Water	No	No	Requisite habitat absent o project site.
Hydroporus leechi Leech's Skyline Diving Beetle	Ponds	No	No	Requisite habitat absent o project site.
Lavinia symmetricus navarroensis Navarro Roach	Riverine	No	No	Lack of habitat.
Myotis thysanodes Fringed Myotis	Montane Forests or Montane Meadows	Yes	No	No evidence for presence observed during our fieldwork.
Oncorhynchus kisutch Coho Salmon-Central California Coast ESU	Aquatic	No	No	Lack of habitat.
Oncorhynchus mykiss irideus Steelhead-central California Coast	Aquatic	No	No	Potential for presence in Napa River. No aquatic impacts. Habitat not associated with the proposed project.
Oncorhynchus tshawytswcha California Coastal Chinook Salmon	Aquatic	No	No	Lack of habitat.
Progne subis Purple Martin	Cavity nesters. Like open areas near water.	No	No	Habitat associated with proposed project is unlikely to contain feeding or nesting potential.
Rana boylii Foothill Yellow-legged Frog	Streams with pools	No	No	Potential for presence in Napa River. Unlikely to occur on project site.
Rana draytonii California Red-legged Frog	Creeks, Rivers, permanent flowing water.	No	No	Requisite habitat absent on project site.
Strix occidentalis caurina Northern Spotted Owl	Old growth, forested deep canyons.	No	No	Requisite habitat absent. Not associated with project.

Scientific Name Common Name	Habitat	Potential for Property	Obs. or Potential for Project Site	Analysis of habitat on project site for presence or absence.
Stygobromus cherylae Barr's Amphipod	Aquatic	No	No	Requisite habitat absent on project site.
Syncaris pacifica California Freshwater Shrimp	Creeks and Estuaries below 300 ft.	No	No	Requisite habitat required for presence lacking.
Taxidea taxus American Badger	Grasslands with food source of ground squirrels	No	No	Absence of food sources required for presence. No burrows observed

C.4 Discussion of Sensitive Habitat Types

The Napa County Baseline Data Report defines Biotic communities as the characteristic assemblages of plants and animals that are found in a given range of soil, climate, and topographic conditions across a region. Sensitive biotic communities in the County were identified using a two-step process for the Napa County Baseline Data Report. The two steps were:

1. An existing list of sensitive biotic communities prepared by the California Department of Fish and Wildlife (DFW) (2003a) was first reviewed by senior Jones & Stokes biologists, and those communities that may occur in the County were identified. Because the community names in the DFW list (2003a) did not correspond directly with the names used in the Land Cover Layer, a determination was made as to which land cover types on the Land Cover Layer correspond to the communities on the DFW list.

2. The aerial extent of each land cover types mapped in the County was generated from the land cover layer. Those biotic communities with an areal extent of less than 500 acres in the County (approximately 0.1% of the County) were identified. These communities were discussed with local experts and their conservation importance established. Those that were not already on the original DFW list and that were determined to be worthy of conservation were added to the list.

The Napa County Baseline Data Report as well as the California Department of Fish and Wildlife Natural Diversity Data Base (DFW CNDDB) lists recognized Sensitive Biotic Communities. The Napa County Baseline Data Report lists twenty-three communities which are considered sensitive by DFW due to their rarity, high biological diversity, and/or susceptibility to disturbance or destruction. The CNDDB communities in Napa County are the following:

Serpentine bunchgrass grassland,
Wildflower field (located within native grassland),
Creeping ryegrass grassland,
Purple Needlegrass grassland,
One-sided bluegrass grassland,
Mixed serpentine chaparral,

McNab cypress woodland,
Oregon white oak woodland,
California bay forests and woodlands,
Fremont cottonwood riparian forests,
Arroyo willow riparian forests,
Black willow riparian forests,
Pacific willow riparian forests,
Red willow riparian forests,
Narrow willow riparian forests,
Mixed willow riparian forests,
Sargent cypress woodland,
Douglas-fir-ponderosa pine forest (old-growth),
Redwood forest,
Coastal and valley freshwater marsh,
Coastal brackish marsh,
Northern coastal salt marsh, and
Northern vernal pool.

Napa County biotic communities of limited distribution that are sensitive include:
Native grassland;
Tanbark oak alliance;
Brewer willow alliance;
Ponderosa pine alliance;
Riverine, lacustrine, and tidal mudflats; and
Wet meadow grasses super alliance.

The grasslands within the footprint of the project do not consist of any of the sensitive grassland communities listed by the County Baseline Data Report of DFW.

The California Department of Fish and Wildlife Natural Diversity Database five-mile search shows that Serpentine Bunchgrass and Valley Needlegrass Grassland are present near the project site. There are no marshes or wetlands associated with the project footprint or the property.

D. POTENTIAL BIOLOGICAL IMPACTS

The project's effect on onsite or regional biological resources is considered to be significant if the project results in:

- Alteration of unique characteristics of the area, such as sensitive plant communities and habitats (i.e. serpentine habitat, wetlands, riparian habitat);
- Adverse impacts to special-status plant and animal species;
- Adverse impacts to important or vulnerable resources as determined by scientific opinion or resource agency concerns (i.e. sensitive biotic communities, special status habitats; e.g. wetlands);
- Loss of critical breeding, feeding or roosting habitat; and
- Interference with migratory routes or habitat connectivity.

In the sections below a discussion of potential impacts of the project on the biological resources is presented.

D.1 Analysis of Potential Impacts to Special-status Species

The proposed project is primarily within a previously developed landscape. There is no reason to expect any impacts to special-status species provided BMP's.

Western Pond Turtle ***(Emys marmorata)*** The pond turtle is found throughout California and is listed by the State as a Species of Concern. It does not have Federal status. Suitable habitat consists of any permanent or nearly permanent body of water or slow moving stream with suitable refuge, basking sites and nesting sites. Refuge sites include partially submerged logs or rocks or mats of floating vegetation. Basking sites can be partially submerged rocks or logs, as well as shallow-sloping banks with little or no cover. Nesting occurs in sandy banks or in soils up to 100 meters away from aquatic habitat.

It is unlikely that turtles would move in the area proposed for winery site. The disturbed area and vineyard do not provide potential nesting habitat, due to soil compaction dry ground with no cover or vegetated cover. Turtles most likely have moved in from the adjacent pond southeast of the property.

The **Calistoga Popcorn-Flower** ***(Plagiobothrys strictus)*** is shown with a confidence interval that overlaps that of the study area . This is a species that is limited in nature and is historically known from sites on the west side of State Highway 29. It is associated with geothermal springs or swales in clay loam soil. There is no habitat on the property that would support this species. We found no evidence that would indicate any potential for presence on the property. The other species known for the quadrangle and surrounding quadrangles and those listed in the table above are reasonably precluded by the historic use of the property and the hardscape present.

Pallid Bat (***Antrozous pallidus***)**:** The Pallid Bat occupies a wide variety of habitats, such as grasslands, shrublands, and forested areas of oak and pine, but prefer rocky outcrops with desert scrub. The pallid bat roosts in caves, mines, crevices, and occasionally in hollow trees or buildings.

They forage over open country and within woodlands. No roosts or evidence of their presence was observed within the proposed project area potential. . The project and property do not contain potential roosting habitat.

Northern Spotted Owl (*Strix occidentalis caurina*): Northern spotted owls require mature forest patches with permanent water and suitable nesting trees and snags (Zeiner et al. 1990a). Northern spotted owls use dense, old-growth forests, or mid- to late- seral stage forests, with a multi-layered canopy for breeding (Remsen 1978). Mixed conifer, redwood, and Douglas-fir habitats are required for nesting and roosting. The project and property do not contain potential nesting habitat and the project sited do not contain potential foraging habitat.

Our fieldwork did not find any habitat for any special-status animal species known for the Quadrangle surrounding Quadrangles or for the region that would be impacted by the proposed project. The present conditions of the project site and historic use is such that there is little reason to expect the occurrence of any special-status animal species on the property or within the footprint of the project.

Habitat impacted by the proposed project is such that it will not substantially reduce or restrict the range of listed animals.

D.2 Analysis of Potential Impacts on Sensitive Habitat

There are no DFW Sensitive Communities or Napa County Sensitive Biotic Communities present on project site. The project footprint is primarily within a historically developed landscape.

Native Grassland - The project will not impact any populations of native grasslands.

Seasonal Wetland generally denotes areas where the soil is seasonally saturated and/or inundated by fresh water for a significant portion of the wet season, and then seasonally dry during the dry season. To be classified as "Wetland," the duration of saturation and/or inundation must be long enough to cause the soils and vegetation to become altered and adapted to the wetland conditions. Varying degrees of pooling or ponding, and saturation will produce different edaphic and vegetative responses. These soil and vegetative clues, as well as hydrological features, are used to define the wetland type. Seasonal wetlands typically take the form of shallow depressions and swales that may be intermixed with a variety of upland habitat types. Seasonal wetlands fall under the jurisdiction of the U.S. Army Corps of Engineers. There are no potential seasonal wetlands or vernal pools associated with the project footprint.

"Waters of the State" include drainages which are characterized by the presence of definable bed and bank that meet ACOE, and RWQCB definitions and or jurisdiction. Any direct discharge of storm water into "Waters of the State" will require ACOE, DFW, and RWQCB permits. There are no drainages or creeks associated with the project.

Riparian Vegetation is by all standards considered sensitive. Riparian Vegetation functions to control water temperature, regulate nutrient supply (biofilters), bank stabilization, rate of runoff, wildlife habitat (shelter and food), release of allochthonous material, release of woody debris which functions as habitat and slow nutrient release, and protection for aquatic organisms.

Riparian vegetation is also a moderator of water temperature has a cascade effect in that it relates to oxygen availability. The project will not impact any riparian vegetation.

Trees The project will not remove any native trees. Domestic walnuts along Dunaweal Lane will be removed by the proposed entrance.

Wildlife Habitat and Wildlife Corridors

Are natural areas interspersed with developed areas are important for animal movement, increasing genetic variation in plant and animal populations, reduction of population fluctuations, and retention of predators of agricultural pests and for movement of wildlife and plant populations. Wildlife corridors have been demonstrated to not only increase the range of vertebrates including avifauna between patches of habitat but also facilitate two key plant-animal interactions: pollination and seed dispersal. Corridor users can be grouped into two types: passage species and corridor dwellers. The data from various studies indicate that corridors should be at least 100 feet wide to provide adequate movement for passage species and corridor dwellers in the landscape. There are no identifiable wildlife corridors through the property.

Raptor Nests, Bird Rookeries, Bat Roosts, Wildlife Dens or Burrows

No raptor nests were identified during our survey. We found no indications of nesting raptors on the property or in the near vicinity of the project sites. We did not observe any nests, whitewash or nest droppings, perching associated with the project site or trees along Dunaweal lane or adjoining parcels. No bird rookeries were present on the property or within the project footprint.

Very few burrows were observed, but small mammals and songbirds likely utilize habitats on the project site for foraging and cover. No significant wildlife dens or burrows were observed.

Unique Species that are Endemic, Rare or Atypical for the Area

No unique or unusual populations of plants or animals were present on the property or the project site.

The flora and fauna present are typical for the developed landscape of the region. There were no unique species, endemic populations of plants or animals or species that are rare or atypical for the area present on the project site or property.

Habitat Fragmentation

The proposed project is within a historically developed landscape. The project will not result in habitat fragmentation.

D.3 Potential Off-site Impacts of the Project

There is no expected impact to biological resources by the proposed project. BMP's during development of the site will prevent any significant off-site impacts.

D.4 Potential Cumulative Impacts

Cumulative biological effects are the result of incremental losses of biological resources within a region. The site location, historic development and use of the area within the footprint of the project negate the potential for cumulative biological resource effects. The project development is proposed for an area of the property that has had a long historic use. There is nothing to indicate that there will be any cumulative biological impacts of the project provided.

D.5 State and Federal Permit

Any impact to wetlands or drainages will require agency consultation and permits from the California Department of Fish and Wildlife, U.S. Army Corps of Engineers, and Regional Water Quality Control Boards for impacts to "Waters of the State."

The project as proposedwill not impact any wetlands or seasonal drainages.

E. RECOMMENDATIONS TO AVOID IMPACTS

E.1 Significance

The significance of potential impacts is a function of the scope and scale of the proposed project within the existing Federal, State and Local regulations and management practices. The determination of significance of impacts to biological resources consists of an understanding of the project as proposed and an evaluation of the context in which the impact may occur. The extent and degree of any impact on-site or off-site must be evaluated consistent with known or expected site conditions. Therefore, the significance of potential impacts is assessed relevant to a site-specific scale and the larger regional context.

E.2 Recommendations

The historic use of the property and project site conditions are such that there is no reason to expect any impacts to special-status species on-site or off-site provided standard construction practices are utilized. The project must comply with Napa County SWPPP requirements to ensure that best management practices are adopted in order to minimize the amount of sediment and other pollutants leaving the site during construction activities.

F. SUMMARY

This study is provided as background information necessary for evaluating potential impacts of the project on local Biological Resources.

We find that the proposed project following BMPs will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

The site is primarily developed landscape, and the history of use reasonably preclude presence of any special-status plant species on the project site.

We find that the project as proposed will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.

We find that the project as proposed will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. No wetlands or vernal pools are associated with the proposed project.

We find that the proposed project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

We find that the proposed project will not conflict with any local policies or ordinances protecting biological resources.

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G.2 Qualifications of Field Investigators

Chris K. Kjeldsen, Ph.D., Botany, Oregon State University, Corvallis, Oregon. He has over forty years of professional experience in the study of California flora. He was a member of the Sonoma County Planning Commission and Board of Zoning (1972 to 1976). He has over thirty years of experience in managing and conducting environmental projects involving impact assessment and preparation of compliance documents, Biological Assessments, DFW Habitat Assessments, DFW Mitigation projects, ACOE Mitigation projects and State Parks and Recreation Biological Resource Studies. Experience includes conducting special-status species surveys, jurisdictional wetland delineations, general biological surveys, 404 and 1600 permitting, and consulting on various projects. He taught Plant Taxonomy at Oregon State University and numerous botanical science and aquatic botany courses at Sonoma State University including sections on wetlands and wetland delineation techniques. He has supervised numerous graduate theses, NSF, DOE and local agency grants and served as a university administrator. He has a valid DFW collecting permit.

Daniel T. Kjeldsen, B. S., Natural Resource Management, California Polytechnic State University, San Luis Obispo, California. He spent 1994 to 1996 in the Peace Corps managing natural resources in Honduras, Central America. His work for the Peace Corps in Central America focused on watershed inventory, mapping and the development and implementation of a protection plan. He has over ten years of experience in conducting Biological Assessments, DFW Habitat Assessments, ACOE wetland delineations, wetland rehabilitation, and development of and implementation of mitigation projects and mitigation monitoring. He has received 3.2 continuing education units MCLE 27 hours in Determining Federal Wetlands Jurisdiction from the University of California Berkeley Extension. Attended Wildlife Society Workshop Falconiformes of Northern California Natural History and Management California Tiger Salamander 2003, Natural History and Management of Bats Symposium 2005, Western Pond Turtle Workshop 2007, and Western Section Bat Workshop 2011. Laguna Foundation & The Wildlife Project Rare Pond Species Survey Techniques 2009. A full resume is available upon request.

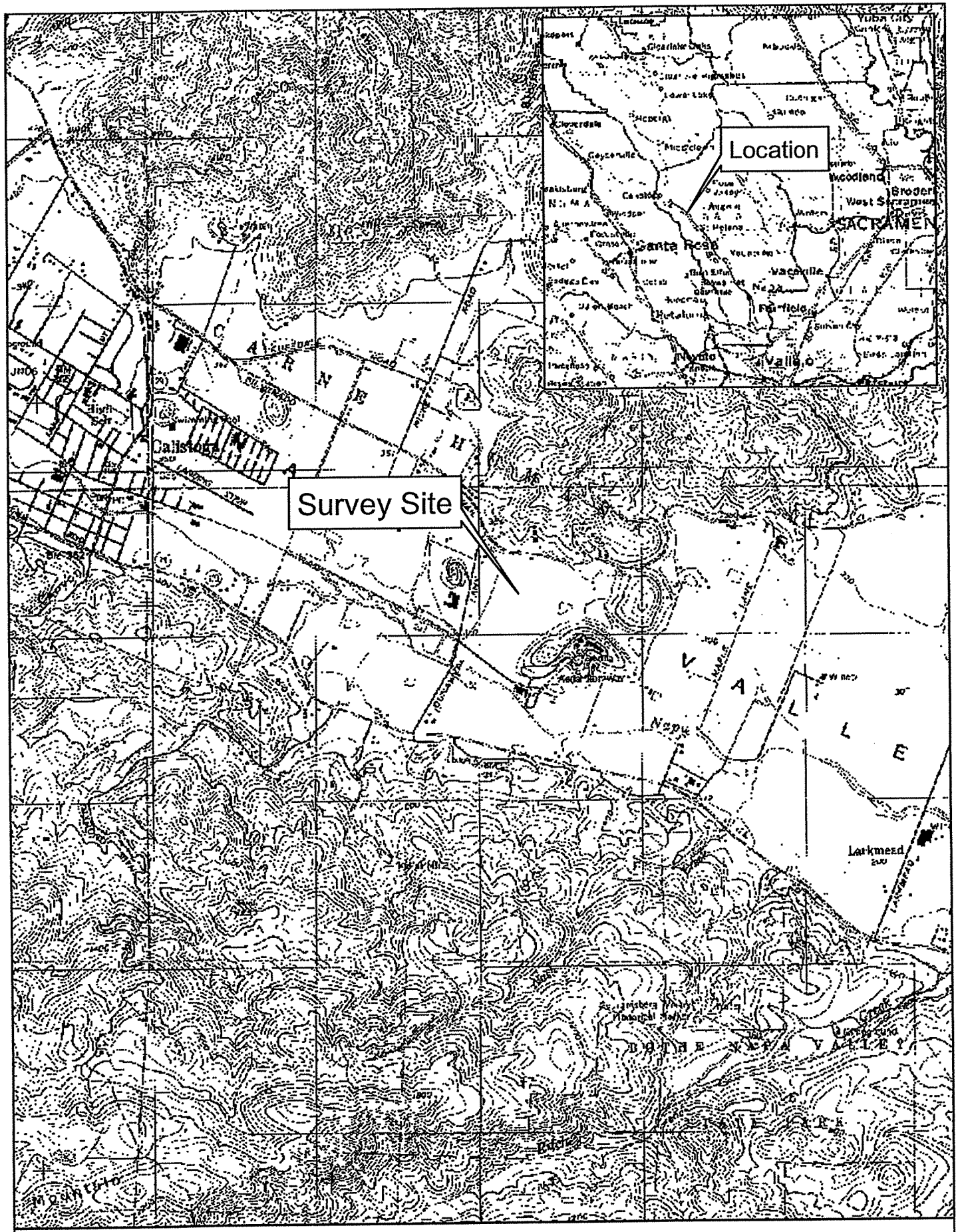
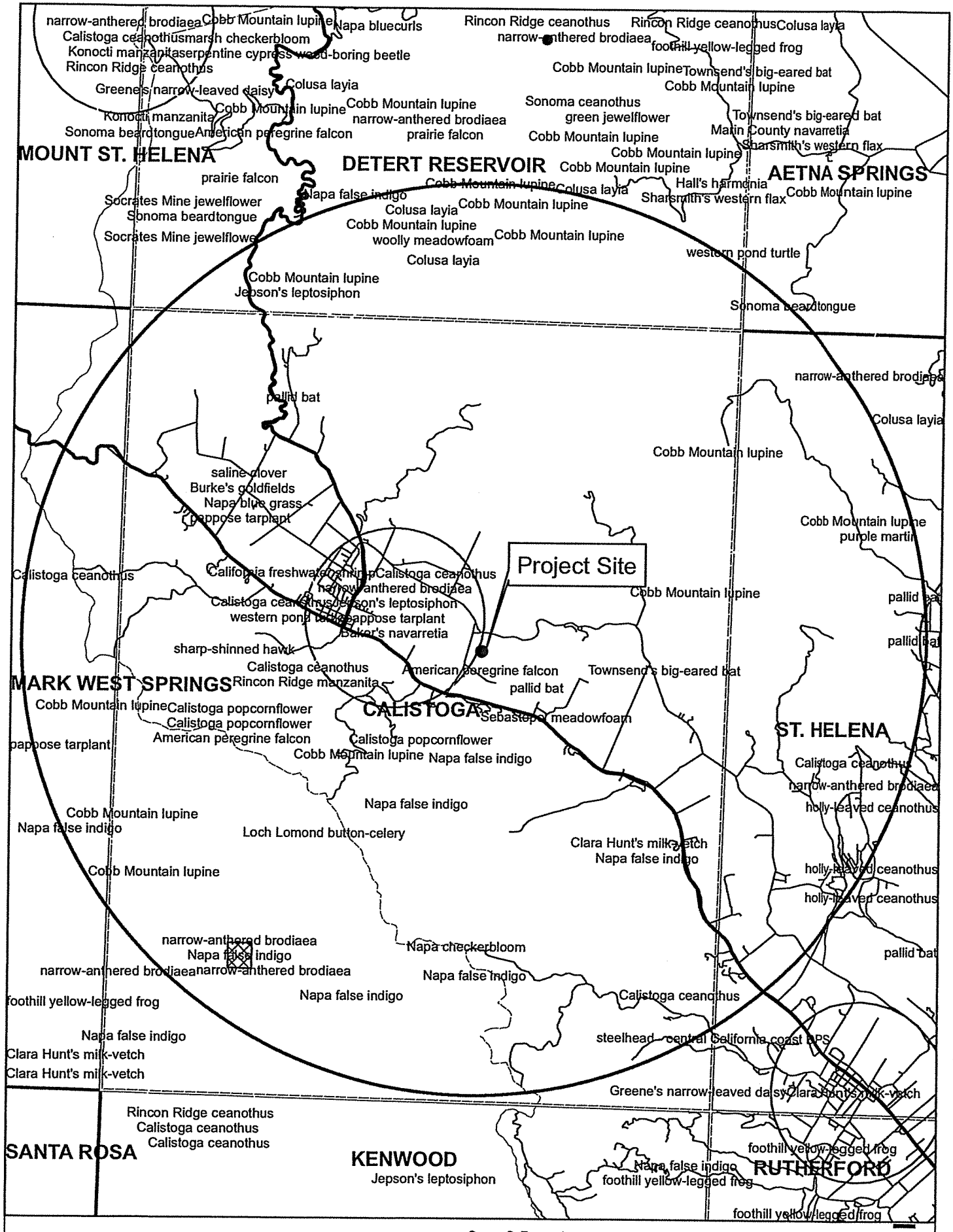


Plate I. Site / Location Map (Calistoga Quadrangle)


narrow-anthered brodiaea
Cobb Mountain lupine
Napa bluecurls
Calistoga ceanothus
marsh checkerbloom
Konocti manzanita
serpentine cypress wood-boring beetle
Rincon Ridge ceanothus
Greene's narrow-leaved daisy
Colusa layia
Konocti manzanita
Cobb Mountain lupine
Cobb Mountain lupine
narrow-anthered brodiaea
Sonoma beardtongue
American peregrine falcon
prairie falcon
MOUNT ST. HELENA
DETERT RESERVOIR
prairie falcon
Napa false indigo
Socrates Mine jewelflower
Sonoma beardtongue
Colusa layia
Cobb Mountain lupine
Cobb Mountain lupine
woolly meadowfoam
Cobb Mountain lupine
Colusa layia
Socrates Mine jewelflower
Cobb Mountain lupine
Jepson's leptosiphon
Rincon Ridge ceanothus
narrow-anthered brodiaea
Rincon Ridge ceanothus
Colusa layia
foothill yellow-legged frog
Cobb Mountain lupine
Townsend's big-eared bat
Cobb Mountain lupine
Sonoma ceanothus
green jewelflower
Townsend's big-eared bat
Marin County navarretia
Cobb Mountain lupine
Sharsmith's western flax
Cobb Mountain lupine
Cobb Mountain lupine
AETNA SPRINGS
Hall's harmonia
Sharsmith's western flax
Cobb Mountain lupine
western pond turtle
Sonoma beardtongue
pallid bat
narrow-anthered brodiaea
Colusa layia
Cobb Mountain lupine
saline clover
Burke's goldfields
Napa blue grass
pappose tarplant
Cobb Mountain lupine
purple martin
Project Site
Calistoga ceanothus
California freshwater shrimp
Calistoga ceanothus
narrow-anthered brodiaea
Calistoga ceanothus
Jepson's leptosiphon
western pond turtle
pappose tarplant
Baker's navarretia
Cobb Mountain lupine
pallid bat
pallid bat
sharp-shinned hawk
Calistoga ceanothus
Rincon Ridge manzanita
American peregrine falcon
Townsend's big-eared bat
pallid bat
MARK WEST SPRINGS
Cobb Mountain lupine
Calistoga popcornflower
Calistoga popcornflower
American peregrine falcon
CALISTOGA
Sebastopol meadowfoam
ST. HELENA
pappose tarplant
Calistoga popcornflower
Cobb Mountain lupine
Napa false indigo
Calistoga ceanothus
narrow-anthered brodiaea
holly-leaved ceanothus
Napa false indigo
Cobb Mountain lupine
Napa false indigo
Loch Lomond button-celery
Clara Hunt's milk-vetch
Napa false indigo
Cobb Mountain lupine
holly-leaved ceanothus
holly-leaved ceanothus
narrow-anthered brodiaea
Napa false indigo
narrow-anthered brodiaea
narrow-anthered brodiaea
Napa checkerbloom
Napa false indigo
pallid bat
Napa false indigo
foothill yellow-legged frog
Calistoga ceanothus
Napa false indigo
steelhead - central California coast DPS
Clara Hunt's milk-vetch
Clara Hunt's milk-vetch
Greene's narrow-leaved daisy
Clara Hunt's milk-vetch
Rincon Ridge ceanothus
Calistoga ceanothus
Calistoga ceanothus
SANTA ROSA
KENWOOD
Jepson's leptosiphon
foothill yellow-legged frog
Napa false indigo
RUTHERFORD
foothill yellow-legged frog
foothill yellow-legged frog
Plate II DFG CNDDB 5-Mile Search
0
0.5
1
2 Miles
(Data Date July 2014)

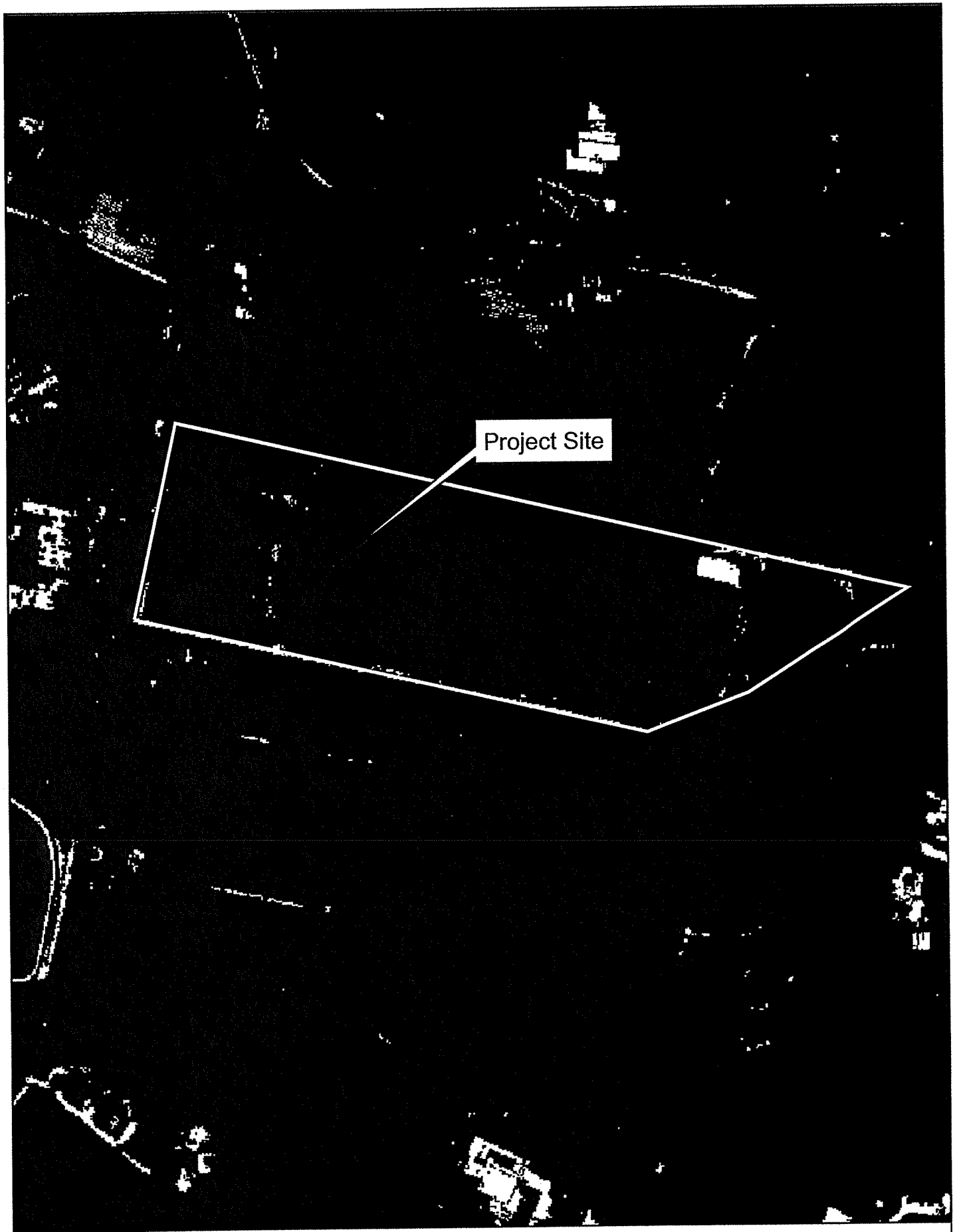


Plate III. Aerial Photo / Survey Area

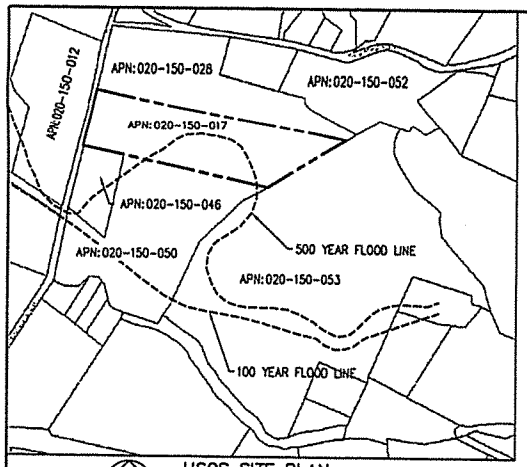
GIRARD WINERY

1077 Dunaweal Ln.

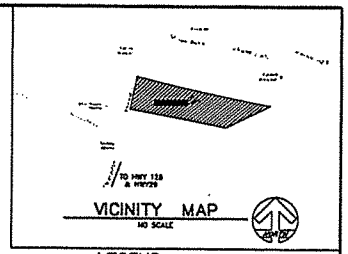
Calistoga, California 94515

APN 022-150-017

USE PERMIT APPLICATION



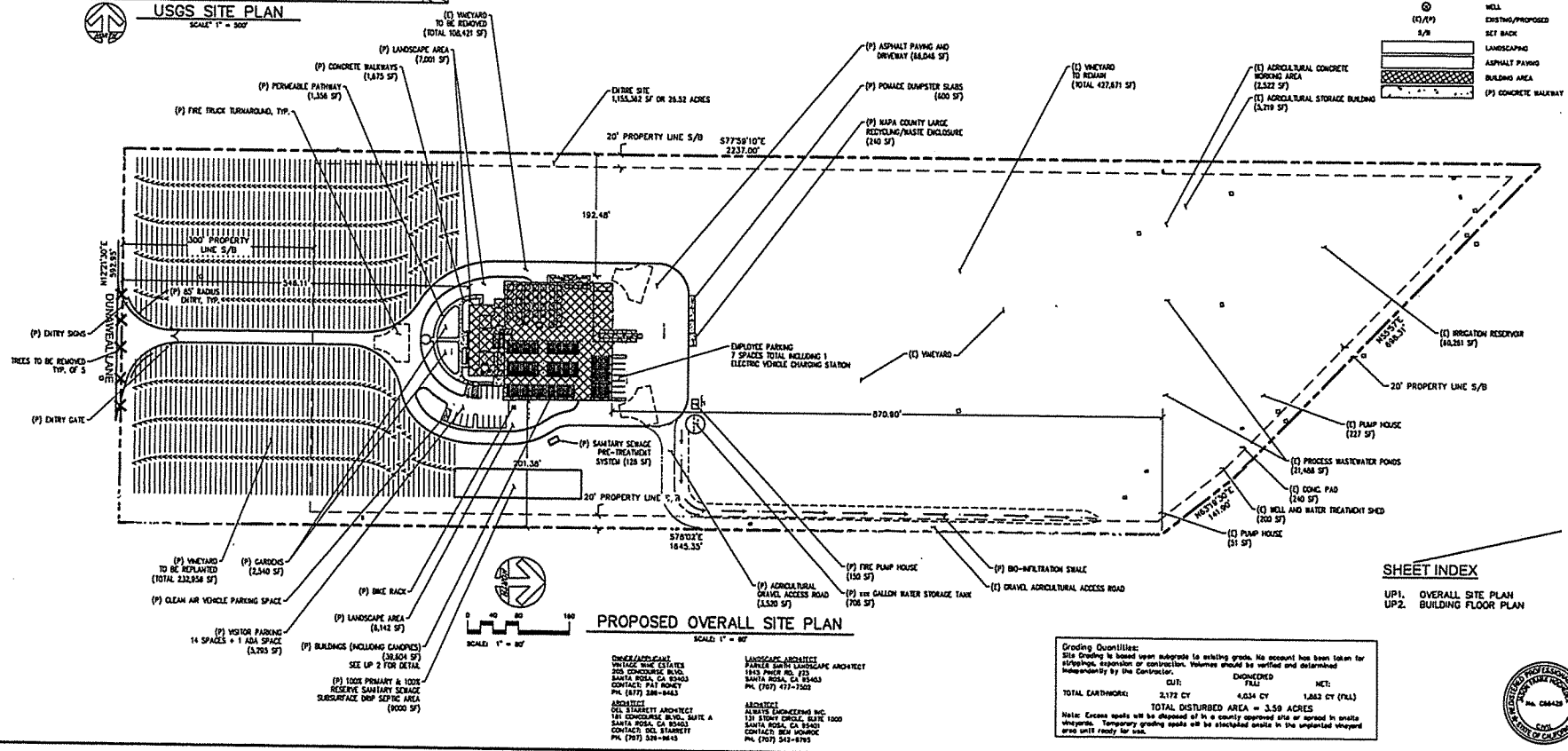
USGS SITE PLAN
SCALE: 1" = 500'



VICINITY MAP
NO SCALE

LEGEND

- APPROXIMATE PROPERTY LINE
- FENCE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL DRIVEWAY
- DRAINAGE COURSE FLOWLINE
- WINDROW
- OVERHEAD UTILITIES
- SETBACK
- 100 YEAR FLOOD PLAIN
- 500 YEAR FLOOD PLAIN
- 20 — 5 FOOT INDEX
- 15 — 1' INTERVAL CONTOURS
- WELL
- (E)/(P) EXISTING/PROPOSED
- S/B SET BACK
- LANDSCAPING
- ASPHALT PAVING
- BUILDING AREA
- (P) CONCRETE WALKWAY



PROPOSED OVERALL SITE PLAN
SCALE: 1" = 80'

SHEET INDEX

UP1. OVERALL SITE PLAN
UP2. BUILDING FLOOR PLAN

OWNER/APPLICANT
VINTAGE WINE ESTATES
205 CONCOURSE BLVD.
SANTA ROSA, CA 95403
CONTACT: PAT ROney
PH. (877) 286-8463

ARCHITECT
DEL STARRETT ARCHITECT
181 CONCOURSE BLVD., SUITE A
SANTA ROSA, CA 95403
CONTACT: DEL STARRETT
PH. (707) 539-9643

LANDSCAPE ARCHITECT
PARKER SMITH LANDSCAPE ARCHITECT
1845 PINER RD., #25
SANTA ROSA, CA 95403
PH. (707) 477-7500

ARCHITECT
ALWAYS ENGINEERING INC.
131 STONY CIRCLE, SUITE 1000
SANTA ROSA, CA 95401
CONTACT: BEN MONROE
PH. (707) 542-8795

Grading Quantities:
Site Grading is based upon subgrade to existing grade. No account has been taken for stripping, expansion or contraction. Volumes should be verified and determined independently by the Contractor.

	CUT:	ENGINEERED FILL:	NET:
TOTAL EARTHWORK:	2,172 CY	4,034 CY	1,862 CY (FILL)

TOTAL DISTURBED AREA = 3.59 ACRES

Note: Excess spoils will be disposed of in a county approved site or spread in onsite vineyards. Temporary grading spoils will be stockpiled onsite in the unplanted vineyard area until ready for use.

REGISTERED PROFESSIONAL ENGINEER — BENJAMIN PAUL MONROE — No. C66429 — CIVIL — STATE OF CALIFORNIA

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REVISION	DESCRIPTION	BY	DATE

Always Engineering, Inc.
Civil Engineering & Topographic Surveying
3358 Progress Court, Suite 1000
Santa Rosa, CA 95403 Fax: (707) 542-8795
(707) 542-8795
www.alwaysengineering.com

Prepared for: GIRARD WINERY
1077 DUNAWEAL LN., CALISTOGA, CA

Prepared on: February 4, 2014

USE PERMIT
OVERALL SITE PLAN
1077 DUNAWEAL LN., CALISTOGA, CA
APN:020-150-017

JOB # 13530
SHEET
UP1 OF UP2

APPENDIX A

Plants and Animals Observed Associated With The Project Site

PLANTS

The nomenclature for the list of plants found on the project site and the immediate vicinity follows: Brodo, Irwin M., Sylvia Duran Sharnoff and Stephen Sharnoff, 2001, for the lichens;; S Norris and Shevrock - 2004, for the mosses; and Baldwin, B.G., D.H. Goldman, D.J.Keil, R.Patterson, T.J.Rosati, and D.H.Wilkens, editors, 2012 - for the vascular plants.. The plant list is organized by major plant group.

Habitat type indicates the general associated occurrence of the taxon on the project site or in nature.
Abundance refers to the relative number of individuals on the project site or in the region.

MAJOR PLANT GROUP **Family** **Genus**	**Habitat Type**	**Abundance**
Common Name		

NCN = No Common Name, * = Non-native, @= Voucher Specimen

MINACEAE		
Alsia californica (W.J.Hooker&Arnott) Sullivant NCN	Epiphytic on Trees	Common
Dendroalsia abietina (Hook.) Brit. NCN	Epiphytic on Trees	Common
Homalothecium nuttallii (Wilson) Jaeger NCN	Epiphytic on Trees	Common
Orthotrichum lyellii Hook & Tayl. NCN	Epiphytic on Trees	Common
Scleropodium touretii (Brid.) L Koch. NCN	Epiphytic on Trees	Common
LICHENS		
FOLIOSE		
Flavoparmelia caperata (L.) Hale NCN	Epiphytic on Trees	Common
Flavopunctilia flaventor (Stirt.) Hale NCN	Epiphytic on Trees	Common
Parmelia sulcata Taylor NCN	Epiphytic on Trees	Common
Xanthoria polycarpa (Hoffm.) Rieber Pin-cushion Sunburst Lichen	Epiphytic on Trees	Common

MAJOR PLANT GROUP Family Genus Common Name	Habitat Type	Abundance

NCN = No Common Name, * = Non-native, @= Voucher Specimen

FRUTICOSE

Evernia prunastri (L.) Ach. NCN	Epiphytic on Trees	Common
Ramalina farinacea (L.) Ach. NCN	Epiphytic on Trees	Common

VASCULAR PLANTS DIVISION CONIFEROPHYTA--GYMNOSPERMS

PINACEAE

Pseudotsuga menziesii (Vassey) Mayr var. *menziesii* Douglas-fir	On Property Line	Common

TAXODIACEAE

Sequoia sempervirens (D.Don) Endl. Redwood	Planted	Common

VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS
CLASS--DICOTYLEDONAE- TREES

MAGNOLIIDS

LAURACEAE

Umbellularia californica (Hook.&Arn.) Nutt. California Laurel, Sweet Bay, Pepperwood, California Bay	On Property Line	Occasional

EUDICOTS

ERICACEAE Heath Family

Arbutus menziesii Pursh Madrone	On Property Line	Common

FAGACEAE Oak Family

Quercus agrifolia Nee Live Oak	On Property Line	Common
Quercus kelloggii Newb. Black Oak	On Property Line	Common
Quercus lobata Nee. Valley Oak	On Property Line	Common

JUGLANDACEAE Walnut Family

**Juglans nigra* L. Black Walnut	Planted	Common
**Juglans regia* L. English Walnut	Planted	Common

OLEACEAE Olive Family

**Olea europaea* L. Olive	Domestic Ruderal	Occasional

MAJOR PLANT GROUP Family Genus Common Name	Habitat Type	Abundance

NCN = No Common Name, * = Non-native, @= Voucher Specimen

PLATANACEAE Sycamore Family		
*_Platanus acerifolia_ Wild London Plane Tree, Sycamore	Domestic Introduction	Occasional
ROSACEAE Rose Family		
*_Pyrus communis_ (L.) Pear	Escape or Domestic	Occasional
SALICACEAE Willow Family		
Populus fremontii S.Watson ssp. _fremontii_ Fremont Cottonwood	Along property Line	Occasional
Salix laevigata Bebb. Red Willow	On Property Line	Common
SAPINDACEAE Soapberry Family		
Acer macrophyllum Prush Big-leaf Maple	On Property Line	Common

VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS
CLASS--DICOTYLEDONAE-SHRUBS AND WOODY VINES

MAGNOLIIDS

EUDICOTS

ASTERACEAE (Compositae) Sunflower Family		
Baccharis pilularis deCandolle Coyote Brush	On Property Line	Common
ROSACEAE Rose Family		
*_Rubus armeniacus_ Focke Himalayan Blackberry	On Property Line	Common

VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS
CLASS--DICOTYLEDONAE-HERBS

EUDICOTS

APIACEAE (Umbelliferae) Carrot Family		
*_Dacus carota_ L. Wild Carrot, Queen Anne's Lace	Ruderal	Common
ASTERACEAE (Compositae) Sunflower Family		
*_Anthemis cotula_ L. Mayweed, Stinkweed, Dog-fennel	Ruderal	Common
*_Calendula arvensis_ L. Field Marigold	Ruderal	Occasional
*_Helminthotheca echioides_ (L.) Holub Ox-tongue (=_Picris echioides_)	Ruderal	Common
*_Lactuca serriola_ L. Prickly Lettuce	Ruderal	Occasional

MAJOR PLANT GROUP Family Genus Common Name	Habitat Type	Abundance

NCN = No Common Name, * = Non-native, @= Voucher Specimen

**Senecio vulgaris* L. NCN	Ruderal	Occasional
**Taraxacum officinale* F.H.Wigg Dandelion	Ruderal	Common
Xanthium strumarium L. Cocklebur	Ruderal	Occasional
BRASSICACEAE Mustard Family		
**Brassica nigra* (L.) Koch Black Mustard	Ruderal	Common
DIPSACACEAE Teasel Family		
**Dipsacus sativus* L. Fuller's Teasel	Ruderal	Common
FABACEAE (Leguminosae) Legum Family		
**Vicia sativa* L. subsp. *nigra* Narrow Leaved-vetch	Ruderal	Common
GERANIACEAE Geranium Family		
**Erodium botrys* (Cav.) Bertol. Broadleaf Filaree, Long-beaked Filaree	Ruderal	Common
MALVACEAE Mallow Family		
**Malva parviflora* L. Cheeseweed, Mallow	Ruderal	Common
ONAGRACEAE Evening-primrose Family		
Epilobium brachycarpum C.Presl Willow Herb	Ruderal Dry Areas	Common
PLANTAGINACEAE Plantain Family		
**Plantago lanceolata* L. English Plantain	Ruderal	Common
POLYGONACEAE Buckwheat Family		
**Polygonum aviculare* L. subsp. *depressum* Common Prostrate Knotweed (=*P. arenastrum)*	Ruderal	Common
**Rumex crispus* L. Curly Dock	Ruderal	Common
VISCACEAE Misteltoe Family		
Phoradendron serotinum (Raf.) Johnst. subsp. *tomentosum* Oak Mistletoe (=*P. villosum)*	Woodlands	Common

MAJOR PLANT GROUP Family Genus Common Name	Habitat Type	Abundance

NCN = No Common Name, * = Non-native, @= Voucher Specimen

VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS
CLASS--MONOCOTYLEDONAE-GRASSES

POACEAE Grass Family		
**Avena barbata* Link. Slender Wild Oat	Rudera	Common
**Bromus diandrus* Roth Ripgut Grass	Ruderal	Common
Elymus glaucus Buckley ssp. *glaucus* Blue Wildrye	Ruderal	Common
Festuca microstachys Nutt. NCN (=*Vulpia microstachys)*	Ruderal	Common
**Festuca myuros* L. Rattail Fescue,Zorro Annual Fescue (=*Vulpia myuros)*	Ruderal s	Common
**Phalaris aquatica* L. Harding Grass	Grasslands	Common

VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS
CLASS--MONOCOTYLEDONAE-SEDGES AND RUSHES

CYPERACEAE Sedge Family		
Cyperus eragrostis Lam. Nut-grass	Ruderal Moist Areas	Common

Fauna Species Observed in the Vicinity of the Project Site

The nomenclature for the animals found on the project site and in the immediate vicinity follows: Mc Ginnis –1984, for the fresh water fishes; Stebbins -1985, for the reptiles and amphibians; and Udvardy and Farrand – 1998, for the birds; and Jameson and Peeters -1988 for the mammals.

AMPHIBIA AND REPTILIA ORDER Common Name	Genus	Observed
CHELONIA		
Northwestern Pond Turtle	*Actinemys marmorata marmorata*	X

AVES ORDER Common Name	Genus	Observed
AVES		
California Quail	*Callipepla californica*	X
Canada Goose	*Branta canadensis*	X
Common Crow	*Corvus brachyrhynchos*	X
European Starling	*Sturnus vulgaris*	X
CHELONIA		
Western Pond Turtle	*Emys marmorata*	X

MAMMALS ORDER Common Name	Genus	Observed
LAGOMORPHA		
Black-tailed Jackrabbit	*Lepus californicus*	Scat
RODENTIA		
Pocket Gopher	*Thomomys bottae*	Sight

APPENDIX B

Definitions (Not all are relevant to this project)

Absolute Cover. The percentage of ground covered by the vertical projection of the plant crowns of a species or defined set of plants as viewed from above The absolute cover of herbaceous plants includes any standing (attached to a living palnt, and not lying on the grouns) plant parts, whether alive or dead; this deviniton escludes litter and other searated plant material. The cover may include mosses, lichens and recognizable cryptogamic crusts.

Best Management Practices. Best management practices represent the construction or agricultural practices that are consistent with regulatory laws or industry standards which are prudent and consistent with site conditions.

Confidence Interval. The California Department of Fish and Wildlife (DFW) California Natural Diversity Data Base (CNDDB) uses map polygon projections for indicating potential for occurrence of special-status plant populations around a recorded occurrence.

Critical Habitat. Critical habitat is by definition a designated by U.S. Fish and Wildlife Service as essential for the existence of a particular population of species. The U.S. Fish and Wildlife Service designates critical habitat for special-status species as an area or region within which a species may be found. "Critical habitat" is defined as areas essential for the "conservation" of the species in question.

Habitat Fragmentation. The issue of habitat fragmentation is of concern locally, nationally, and globally. The term habitat fragmentation refers to the loss of connections within the biosphere such that the movement, genetic exchange, and dispersal of native populations is restricted or prevented. Anthropogenic habitat fragmentation can be the result of a road construction, logging, agriculture, or urban growth. The practice of retaining or planning for "Corridors" is an attempt to address this issue. Corridors that allow movement of wildlife through and around a site include stream and riparian areas and also areas that connect two or more sites of critical wildlife habitat.

Habitat Types. Habitat types are used by DFW to categorize elements of nature associated with the physical and biological conditions in an area. These are of particular importance for the wildlife they support, and they are important as indicators of the potential for special-status species.

Relative Cover. A measure of the cover of a species in relation to that of other species within a set area or sample of vegetation. This is usually calculated for species that occur in the same layer (stratum) of vegetation, and this measure can be calculated across a group of samples.

Riparian Corridor. Riparian corridors can be defined as the stream channel between the low-water and high-water marks plus the terrestrial landscape above the high water-mark (where vegetation may be influenced by elevated water tables or extreme flooding and by the ability of the soils to hold water; Naiman, et. al. 1993).

Riparian Corridor or Riparian Ecosystem. Riparian ecosystems occupy the ecotone between upland and lotic aquatic realms. Riparian corridors can be defined as the stream channel between the low- and high-water marks plus the terrestrial landscape above the high water-mark (where vegetation may be influenced by elevated water tables or extreme flooding and by the ability of the soils to hold water; Naiman, et. al. 1993).

Ruderal Habitat. Ruderal habitat is characterized by disturbance and the establishment and dominance of non-native introduced weed species. Ruderal plant communities are a function of or result of agricultural or logging practices. This habitat is typically found along graded roads, erosional surfaces or sites influenced by agricultural animal populations.

Sensitive Habitat. DFW Natural Diversity Data Base uses environmentally sensitive plant communities for plant populations that are rare or threatened in nature. Sensitive habitat is defined as any area in which plant or animal life or their habitats are either rare or especially valuable and any area which meets one of the following criteria: (1) habitats containing or supporting "rare and endangered" species as defined by the State Fish and Wildlife Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes. Sensitive Habitat also includes wetlands and tributaries to "Waters of the US" as defined by the Corps of Engineers (ACOE) and DFW seasonal streams DFW.

Serpentinite. Serpentinite or serpentine consists of ultramafic rock outcrops that due to the unique mineral composition support a unique flora often of endemics. Kruckeberg, 1984, indicates that the taxonomy and evolutionary responses to serpentines include "1) taxa endemic to serpentine, 2) local or regional indicator taxa, largely confined to serpentine in parts of their ranges, 3) indifferent or "bodenvag" taxa that range on and off serpentine, and 4) taxa that are excluded from serpentine." Serpentine outcrops or serpentinites support numerous special-status plant taxa.

Special-status Species. Special-status organisms are plants or animals that have been designated by Federal or State agencies as rare, endangered, or threatened. We have also included plant species listed by the CNPS. Section 15380 of the California Environmental Quality Act [CEQA (September, 1983)] has a discussion regarding non-listed (State) taxa. This section states that a plant (or animal) must be treated as Rare or Endangered even if it is not officially listed as such. If a person (or organization provides information showing that a taxa meets the State's definitions and criteria, then the taxa should be treated as such.

Standard Agricultural Practices. Standard agricultural practices are best management practices which are prudent as applied in the agricultural industry such as the use of regulated pesticides,

methods of and timing of weed control, appropriate fertilizer application, irrigation management, frost protection, erosion control and soil conservation and management, and dust control among other practices.

Streams. The DFW definition of stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports wildlife, fish, or other aquatic life. This includes watercourses having a surface or subsurface flow that support or have supported riparian vegetation. DFW's jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife.

Target organisms. Special-status species that are listed by: the California Department of Fish and recorded in the Natural Diversity Data Base for the Quadrangle and surrounding Quadrangles of the project site; the California Native Plant Society for the habitat present on the project site Quadrangle and surrounding Quadrangles; Federal Endangered and Threatened Species that Occur in the U.S.G.S. 7 1/2 Minute Quadrangle; our experience with the local flora and fauna; any species identified by local individuals that are considered to be rare in the region; and DFW Five Mile radius CNDDB Rarefind search (See Plate II).

Wetlands. Wetlands are defined as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Many surface waters and wetlands in California meet the criteria for waters of the United States, including intermittent streams and seasonal lakes and wetlands.

Vernal Pools. Vernal pools are a type of seasonal wetland distinct for California and the western US. Typically they are associated with seasonal rainfall or "Mediterranean climate" and have a distinct flora and fauna, an impermeable or slowly permeable substrate and contain standing water for a portion of the year. They are characterized by a variable aquatic and dry regime with standing water during the spring plant growth regime. They have a high degree of endemism of flora and fauna.

Federal Regulations

Federal Endangered Species Act Pursuant to the federal Endangered Species Act (ESA), the U.S. Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration (NOAA), have authority over projects that may affect the continued existence of a species that is federally listed as threatened or endangered. Section 9 of ESA prohibits the take of a federally listed species; take is defined, in part, as killing, harming, or harassment and includes habitat modification or degradation where it actually results in death or injury to wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering.

Section 404 of the Clean Water Act Section 404 of the Clean Water Act establishes a requirement to obtain a permit before any activity that involves any discharge of dredged or fill material into "waters of the United States," including wetlands. Waters of the United States include navigable waters of the United States, interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce,

tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries.

Army Corps of Engineers (ACOE) regulates and issues 404 permits for activities that involve the discharge of dredged or fill materials into waters of the United States. A Water Quality Certification 401 permit must also be obtain from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Board to the nine Regional Water Quality Control Boards (RWQCBs).

State Regulations

California Endangered Species Act Pursuant to the California Endangered Species Act (CESA) and Section 2081 of the Fish and Wildlife Code, a permit from Department of Fish and Wildlife (DFW) is required for projects that could result in the take of a state listed threatened or endangered species. Under CESA, "take" is defined as an activity that would directly or indirectly kill an individual of a species, but the definition does not include "harm" or "harass," as the ESA does. As a result, the threshold for a take under CESA is higher than that under the ESA.

California Fish and Wildlife Code Section 1600 – Lake and Streambed Alteration Permit. All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by DFW pursuant to Section 1600 of the California Fish and Wildlife Code. Section 1600 states that it is unlawful for any person, government agency, state, local, or any public utility to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake or deposit or dispose of waste, debris, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake without first notifying DFW of such activity.

Porter-Cologne Water Quality Control Act Under the Porter-Cologne Water Quality Control Act, "waters of the state" fall under the jurisdiction of the RWQCB. Under the act, the RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control non-point and point sources of pollution to achieve and maintain these standards. Projects that affect wetlands or waters must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the Clean Water Act.

APPENDIX C

CNPS Special Status-species Listed for the Project Quadrangle and Surrounding Quadrangles

DFW CNDDB Rare Find Special-status Species Listed for the Quadrangle and Surrounding Quadrangles

U.S. Fish and Wildlife Service Listed Species for the Quadrangle

Inventory of Rare and Endangered Plants - 7th edition interface

v7-14jun 6-11-14

Status: search results - Wed, Jul. 16, 2014 16:06 ET c

Your Quad Selection: Calistoga (517D) 3812255, Kenwood (501A) 3812245, Santa Rosa (501B) 3812246, Aetna Springs (516B) 3812264, St. Helena (516C) 3812254, Rutherford (500B) 3812244, Detert Reservoir (517A) 3812265, Mount St. Helena (517B) 3812266, Mark West Springs (517C) 3812256

scientific	common	family	CNPS
Allium peninsulare var. franciscanum	Franciscan onion	Alliaceae	List 1B.2
Alopecurus aequalis var. sonomensis	Sonoma alopecurus	Poaceae	List 1B.1
Amorpha californica var. napensis	Napa false indigo	Fabaceae	List 1B.2
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	List 1B.2
Anomobryum julaceum	slender silver moss	Bryaceae	List 2B.2
Arctostaphylos canescens ssp. sonomensis	Sonoma canescent manzanita	Ericaceae	List 1B.2
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	Ericaceae	List 1B.3
Arctostaphylos stanfordiana ssp. decumbens	Rincon Ridge manzanita	Ericaceae	List 1B.1
Astragalus claranus	Clara Hunt's milk-vetch	Fabaceae	List 1B.1
Astragalus rattanii var. jepsonianus	Jepson's milk-vetch	Fabaceae	List 1B.2
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	List 1B.2
Blennosperma bakeri	Sonoma sunshine	Asteraceae	List 1B.1
Brodiaea leptandra	narrow-anthered brodiaea	Themidaceae	List 1B.2

Ceanothus confusus	Rincon Ridge ceanothus	Rhamnaceae	List 1B.1
Ceanothus divergens	Calistoga ceanothus	Rhamnaceae	List 1B.2
Ceanothus purpureus	holly-leaved ceanothus	Rhamnaceae	List 1B.2
Ceanothus sonomensis	Sonoma ceanothus	Rhamnaceae	List 1B.2
Centromadia parryi ssp. parryi	pappose tarplant	Asteraceae	List 1B.2
Cryptantha dissita	serpentine cryptantha	Boraginaceae	List 1B.2
Downingia pusilla	dwarf downingia	Campanulaceae	List 2B.2
Erigeron biolettii	streamside daisy	Asteraceae	List 3
Erigeron greenei	Greene's narrow-leaved daisy	Asteraceae	List 1B.2
Eriogonum nervulosum	Snow Mountain buckwheat	Polygonaceae	List 1B.2
Eryngium constancei	Loch Lomond button-celery	Apiaceae	List 1B.1
Fritillaria liliacea	fragrant fritillary	Liliaceae	List 1B.2
Fritillaria pluriflora	adobe-lily	Liliaceae	List 1B.2
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	List 1B.2
Harmonia hallii	Hall's harmonia	Asteraceae	List 1B.2
Hemizonia congesta ssp. congesta	white seaside tarplant	Asteraceae	List 1B.2
Hesperolinon bicarpellatum	two-carpellate western flax	Linaceae	List 1B.2
Hesperolinon sharsmithiae	Sharsmith's western	Linaceae	List

	flax		1B.2
Juncus luciensis	Santa Lucia dwarf rush	Juncaceae	List 1B.2
Lasthenia burkei	Burke's goldfields	Asteraceae	List 1B.1
Lasthenia conjugens	Contra Costa goldfields	Asteraceae	List 1B.1
Layia septentrionalis	Colusa layia	Asteraceae	List 1B.2
Leptosiphon jepsonii	Jepson's leptosiphon	Polemoniaceae	List 1B.2
Lessingia hololeuca	woolly-headed lessingia	Asteraceae	List 3
Limnanthes vinculans	Sebastopol meadowfoam	Limnanthaceae	List 1B.1
Lupinus sericatus	Cobb Mountain lupine	Fabaceae	List 1B.2
Micropus amphibolus	Mt. Diablo cottonweed	Asteraceae	List 3.2
Microseris paludosa	marsh microseris	Asteraceae	List 1B.2
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Polemoniaceae	List 1B.1
Navarretia leucocephala ssp. plieantha	many-flowered navarretia	Polemoniaceae	List 1B.2
Navarretia myersii ssp. deminuta	small pincushion navarretia	Polemoniaceae	List 1B.1
Navarretia rosulata	Marin County navarretia	Polemoniaceae	List 1B.2
Penstemon newberryi var. sonomensis	Sonoma beardtongue	Plantaginaceae	List 1B.3
Plagiobothrys strictus	Calistoga popcorn-flower	Boraginaceae	List 1B.1
Poa napensis	Napa blue grass	Poaceae	List

			1B.1
Sidalcea hickmanii ssp. napensis	Napa checkerbloom	Malvaceae	List 1B.1
Sidalcea oregana ssp. hydrophila	marsh checkerbloom	Malvaceae	List 1B.2
Sidalcea oregana ssp. valida	Kenwood Marsh checkerbloom	Malvaceae	List 1B.1
Streptanthus batrachopus 📷	Tamalpais jewel-flower	Brassicaceae	List 1B.3
Streptanthus brachiatus ssp. brachiatus	Socrates Mine jewel-flower	Brassicaceae	List 1B.2
Streptanthus brachiatus ssp. hoffmanii 📷	Freed's jewel-flower	Brassicaceae	List 1B.2
Streptanthus hesperidis	green jewel-flower	Brassicaceae	List 1B.2
Streptanthus morrisonii ssp. elatus 📷	Three Peaks jewel-flower	Brassicaceae	List 1B.2
Streptanthus morrisonii ssp. kruckebergii	Kruckeberg's jewel-flower	Brassicaceae	List 1B.2
Streptanthus vernalis 📷	early jewel-flower	Brassicaceae	List 1B.2
Stuckenia filiformis ssp. alpina	slender-leaved pondweed	Potamogetonaceae	List 2B.2
Trichostema ruygtii 📷	Napa bluecurls	Lamiaceae	List 1B.2
Trifolium amoenum 📷	two-fork clover	Fabaceae	List 1B.1
Trifolium hydrophilum	saline clover	Fabaceae	List 1B.2
Triquetrella californica 📷	coastal triquetrella	Pottiaceae	List 1B.2
Viburnum ellipticum 📷	oval-leaved viburnum	Adoxaceae	List 2B.3

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the CALISTOGA (517D) U.S.G.S. 7 1/2 Minute Quad

Report Date: July 16, 2014

Listed Species

Invertebrates

Syncaris pacifica
California freshwater shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus kisutch
coho salmon - central CA coast (E) (NMFS)

Oncorhynchus mykiss
Central California Coastal steelhead (T) (NMFS)
Central Valley steelhead (T) (NMFS)
Critical habitat, Central California coastal steelhead (X) (NMFS)

Oncorhynchus tshawytscha
California coastal chinook salmon (T) (NMFS)
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana draytonii
California red-legged frog (T)

Birds

Strix occidentalis caurina
northern spotted owl (T)

Plants

Astragalus clarianus
Clara Hunt's milk-vetch (E)

Eryngium constancei
Loch Lomond coyote-thistle (=button-celery) (E)

Lasthenia burkei
Burke's goldfields (E)

Plagiobothrys strictus
Calistoga allocarya (popcorn-flower) (E)

Poa napensis
Napa bluegrass (E)

Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the . Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Five Mile

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1	*Accipiter striatus* sharp-shinned hawk	ABNKC12020			G5	S3	
2	*Amorpha californica var. napensis* Napa false indigo	PDFAB08012			G4T2	S2	1B.2
3	*Antrozous pallidus* pallid bat	AMACC10010			G5	S3	SC
4	*Arctostaphylos stanfordiana ssp. decumbens* Rincon Ridge manzanita	PDERI041G4			G3T1	S1	1B.1
5	*Astragalus claranus* Clara Hunt's milk-vetch	PDFAB0F240	Endangered	Threatened	G1	S1	1B.1
6	*Brodiaea leptandra* narrow-anthered brodiaea	PMLIL0C022			G3?	S3?	1B.2
7	*Ceanothus confusus* Rincon Ridge ceanothus	PDRHA04220			G1	S1	1B.1
8	*Ceanothus divergens* Calistoga ceanothus	PDRHA04240			G2	S2	1B.2
9	*Ceanothus purpureus* holly-leaved ceanothus	PDRHA04160			G2	S2	1B.2
10	*Centromadia parryi ssp. parryi* pappose tarplant	PDAST4R0P2			G3T1	S1	1B.2
11	*Coastal and Valley Freshwater Marsh*	CTT52410CA			G3	S2.1	
12	*Corynorhinus townsendii* Townsend's big-eared bat	AMACC08010		Candidate Threatened	G3G4	S2S3	SC
13	*Emys marmorata* western pond turtle	ARAAD02030			G3G4	S3	SC
14	*Eryngium constancei* Loch Lomond button-celery	PDAPI0Z0W0	Endangered	Endangered	G1	S1	1B.1
15	*Falco mexicanus* prairie falcon	ABNKD06090			G5	S4	
16	*Falco peregrinus anatum* American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
17	*Juncus luciensis* Santa Lucia dwarf rush	PMJUN013J0			G2G3	S2S3	1B.2
18	*Lasthenia burkei* Burke's goldfields	PDAST5L010	Endangered	Endangered	G1	S1	1B.1
19	*Layia septentrionalis* Colusa layia	PDAST5N0F0			G2	S2	1B.2
20	*Leptosiphon jepsonii* Jepson's leptosiphon	PDPLM09140			G2	S2	1B.2
21	*Limnanthes floccosa ssp. floccosa* woolly meadowfoam	PDLIM02043			G4T4	S3.2	4.2
22	*Limnanthes vinculans* Sebastopol meadowfoam	PDLIM02090	Endangered	Endangered	G1	S1	1B.1
23	*Lupinus sericatus* Cobb Mountain lupine	PDFAB2B3J0			G2	S2	1B.2

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
24	*Myotis thysanodes* fringed myotis	AMACC01090			G4	S4	
25	*Navarretia leucocephala ssp. bakeri* Baker's navarretia	PDPLM0C0E1			G4T2	S2	1B.1
26	*Oncorhynchus mykiss irideus* steelhead - central California coast DPS	AFCHA0209G	Threatened		G5T2Q	S2	
27	*Penstemon newberryi var. sonomensis* Sonoma beardtongue	PDSCR1L483			G4T1	S2	1B.3
28	*Plagiobothrys strictus* Calistoga popcornflower	PDBOR0V120	Endangered	Threatened	G1	S1	1B.1
29	*Poa napensis* Napa blue grass	PMPOA4Z1R0	Endangered	Endangered	G1	S1	1B.1
30	*Progne subis* purple martin	ABPAU01010			G5	S3	SC
31	*Sidalcea hickmanii ssp. napensis* Napa checkerbloom	PDMAL110A6			G3T1	S1	1B.1
32	*Sidalcea oregana ssp. hydrophila* marsh checkerbloom	PDMAL110K2			G5T3	S3	1B.2
33	*Syncaris pacifica* California freshwater shrimp	ICMAL27010	Endangered	Endangered	G1	S1	
34	*Trifolium hydrophilum* saline clover	PDFAB400R5			G2	S2	1B.2

CALIFORNIA DEPARTMENT OF

RareFind

Query Summary:
Quad (Calistoga (3812255) Kenwood (3812245) Santa Rosa (3812246) Aetna Springs (3812264) St. Helena (3812254) Rutherford (3812244) Detert Reservoir (3812265) Mount St. Helena (3812266) Mark West Springs (3812256))
Habitat (Valley & foothill grassland Aquatic)

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Allium peninsulare var. franciscanum	Franciscan onion	Monocots	PMLIL021R1	14	1	None	None	G5T1	S1	1B.2	null	Cismontane woodland | Ultramafic | Valley & foothill grassland
Ambystoma californiense	California tiger salamander	Amphibians	AAAAA01180	1094	25	Threatened	Threatened	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Cismontane woodland | Meadow & seep | Riparian woodland | Valley & foothill grassland | Vernal pool | Wetland
Amsinckia lunaris	bent-flowered fiddleneck	Dicots	PDBOR01070	64	2	None	None	G2?	S2?	1B.2	BLM_S-Sensitive	Cismontane woodland | Valley & foothill grassland
Antrozous pallidus	pallid bat	Mammals	AMACC10010	402	10	None	None	G5	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland
Astragalus claranus	Clara Hunt's milk-vetch	Dicots	PDFAB0F240	6	6	Endangered	Threatened	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Valley & foothill grassland
Astragalus rattanii var. jepsonianus	Jepson's milk-vetch	Dicots	PDFAB0F7E1	47	1	None	None	G4T3	S3	1B.2	BLM_S-Sensitive	Cismontane woodland | Ultramafic | Valley & foothill grassland
Balsamorhiza macrolepis	big-scale balsamroot	Dicots	PDAST11061	43	2	None	None	G2	S2	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	Chaparral | Cismontane woodland | Ultramafic | Valley & foothill grassland
Blennosperma bakeri	Sonoma sunshine	Dicots	PDAST1A010	23	4	Endangered	Endangered	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Valley & foothill grassland | Vernal pool | Wetland
												Broadleaved upland forest | Chaparral |

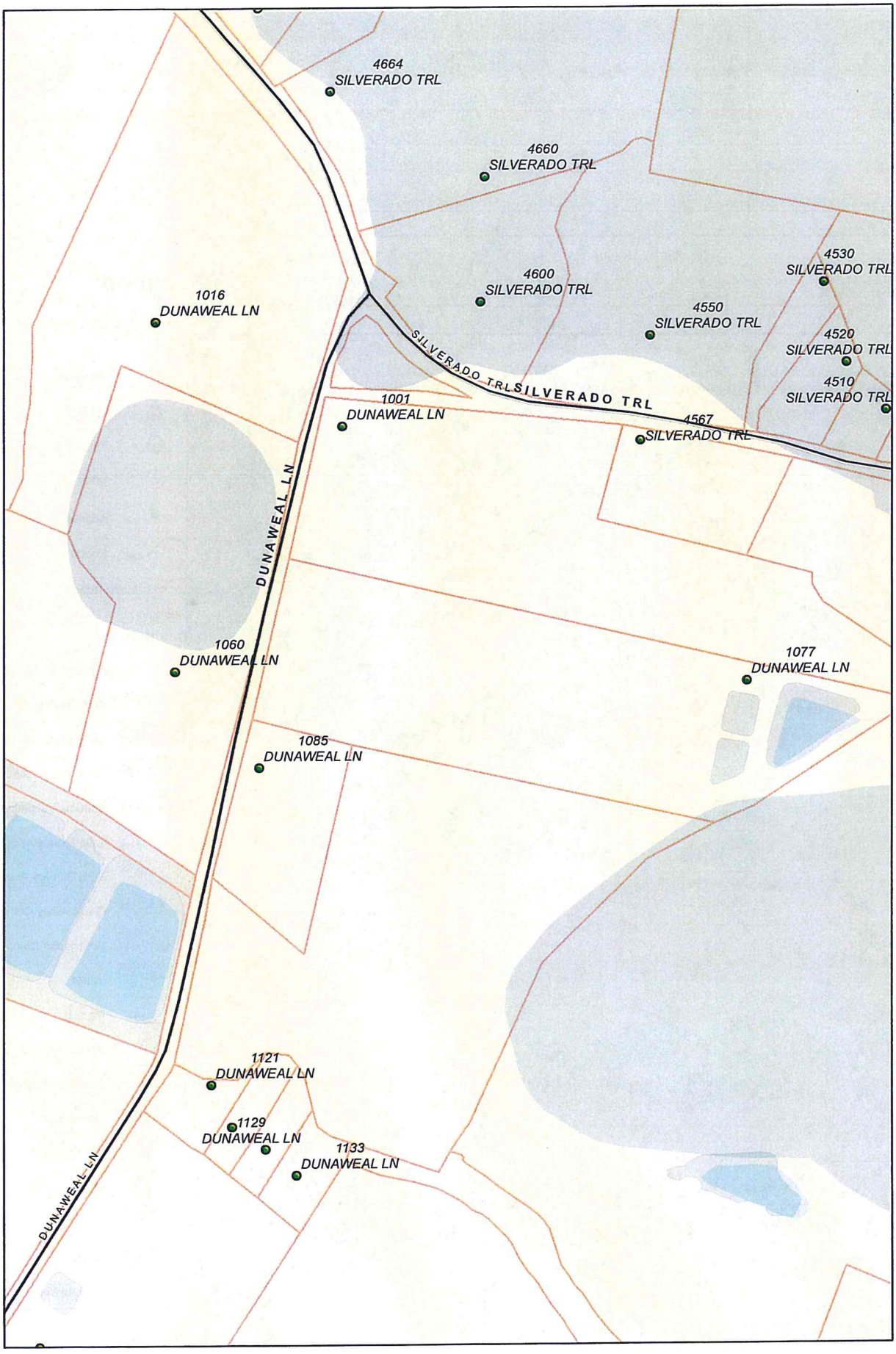
Brodiaea leptandra	narrow-anthered brodiaea	Monocots	PMLIL0C022	29	19	None	None	G3?	S3?	1B.2	null	Cismontane woodland | Lower montane coniferous forest | Valley & foothill grassland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2394	1	None	Threatened	G5	S3	null	ABC_WLBCC-Watch List of Birds of Conservation Concem | BLM_S-Sensitive | IUCN_LC-Least Concem | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concem	Great Basin grassland | Riparian forest | Riparian woodland | Valley & foothill grassland
Centromadia parryi ssp. parryi	pappose tarplant	Dicots	PDAST4R0P2	29	4	None	None	G3T1	S1	1B.2	BLM_S-Sensitive	Coastal prairie | Marsh & swamp | Meadow & seep | Valley & foothill grassland
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	487	10	None	Candidate Threatened	G3G4	S2S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concem | IUCN_LC-Least Concem | USFS_S-Sensitive | WBWG_H-High Priority	Broadleaved upland forest | Chaparral | Chenopod scrub | Great Basin grassland | Great Basin scrub | Joshua tree woodland | Lower montane coniferous forest | Meadow & seep | Mojavean desert scrub | Riparian forest | Riparian woodland | Sonoran desert scrub | Sonoran thorn woodland | Upper montane coniferous forest | Valley & foothill grassland
Downingia pusilla	dwarf downingia	Dicots	PDCAM060C0	127	1	None	None	GU	S2	2B.2	null	Valley & foothill grassland | Vernal pool | Wetland
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	158	1	None	None	G5	S3	null	BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concem	Cismontane woodland | Marsh & swamp | Riparian woodland | Valley & foothill grassland | Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1136	23	None	None	G3G4	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concem | IUCN_VU-Vulnerable |	Aquatic | Artificial flowing waters | Klamath/North coast flowing waters | Klamath/North coast standing waters | Marsh & swamp | Sacramento/San Joaquin flowing waters |

											USFS_S-Sensitive	Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland
Falco mexicanus	prairie falcon	Birds	ABNKD06090	457	2	None	None	G5	S4	null	CDFW_WL-Watch List | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland
Fritillaria liliacea	fragrant fritillary	Monocots	PMLIL0V0C0	69	6	None	None	G2	S2	1B.2	USFS_S-Sensitive	Coastal prairie | Coastal scrub | Ultramafic | Valley & foothill grassland
Fritillaria pluriflora	adobe-lily	Monocots	PMLIL0V0F0	107	1	None	None	G3	S3	1B.2	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Ultramafic | Valley & foothill grassland
Hemizonia congesta ssp. congesta	white seaside tarplant	Dicots	PDAST4R065	33	1	None	None	G5T2T3	S2S3	1B.2	null	Coastal scrub | Valley & foothill grassland
Hydrochara ricksecker	Ricksecker's water scavenger beetle	Insects	IICOL5V010	13	1	None	None	G2?	S2?	null	null	Aquatic | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters
Hydroporus leechi	Leech's skyline diving beetle	Insects	IICOL55040	13	1	None	None	G1?	S1?	null	null	Aquatic
Hysterocarpus traski pomo	Russian River tule perch	Fish	AFCQK02011	4	1	None	None	G5T2	S2	null	AFS_VU-Vulnerable | CDFW_SSC-Species of Special Concern	Aquatic | Klamath/North coast flowing waters
Lavinia symmetricus navarroensis	Navarro roach	Fish	AFCJB19023	4	1	None	None	G4T1T2	S1S2	null	CDFW_SSC-Species of Special Concern	Aquatic | Sacramento/San Joaquin flowing waters
Layia septentrionalis	Colusa layia	Dicots	PDAST5N0F0	46	11	None	None	G2	S2	1B.2	BLM_S-Sensitive	Chaparral | Cismontane woodland | Ultramafic | Valley & foothill grassland
Limnanthes floccosa ssp. floccosa	woolly meadowfoam	Dicots	PDLIM02043	54	1	None	None	G4T4	S3.2	4.2	null	Chaparral | Cismontane woodland | Valley & foothill grassland | Vernal pool | Wetland
Limnanthes vinculans	Sebastopol meadowfoam	Dicots	PDLIM02090	43	8	Endangered	Endangered	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Meadow & seep | Valley & foothill grassland | Vernal pool | Wetland
Microseris	marsh											Cismontane woodland | Closed-cone

paludosa	microseris	Dicots	PDAST6E0D0	31	1	None	None	G2	S2	1B.2	null	coniferous forest | Coastal scrub | Valley & foothill grassland
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Dicots	PDPLM0C0E1	58	8	None	None	G4T2	S2	1B.1	BLM_S-Sensitive	Cismontane woodland | Lower montane coniferous forest | Meadow & seep | Valley & foothill grassland | Vernal pool | Wetland
Oncorhynchus mykiss irideus	steelhead - central California coast DPS	Fish	AFCHA0209G	38	2	Threatened	None	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic | Sacramento/San Joaquin flowing waters
Plagiobothrys strictus	Calistoga popcornflower	Dicots	PDBOR0V120	3	3	Endangered	Threatened	G1	S1	1B.1	SB_UCBBG-UC Berkeley Botanical Garden	Meadow & seep | Valley & foothill grassland | Vernal pool | Wetland
Poa napensis	Napa blue grass	Monocots	PMPOA4Z1R0	2	2	Endangered	Endangered	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Meadow & seep | Valley & foothill grassland | Wetland
Rana boylii	foothill yellow-legged frog	Amphibians	AAABH01050	805	19	None	None	G3	S2S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened | USFS_S-Sensitive	Aquatic | Chaparral | Cismontane woodland | Coastal scrub | Klamath/North coast flowing waters | Lower montane coniferous forest | Meadow & seep | Riparian forest | Riparian woodland | Sacramento/San Joaquin flowing waters
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1335	3	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Aquatic | Artificial flowing waters | Artificial standing waters | Freshwater marsh | Marsh & swamp | Riparian forest | Riparian scrub | Riparian woodland | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland
Serpentine Bunchgrass	Serpentine Bunchgrass	Herbaceous	CTT42130CA	22	1	None	None	G2	S2.2	null	null	Valley & foothill grassland
Stygobromus cherylae	Barr's amphipod	Crustaceans	ICMAL05D60	1	1	None	None	G1	S1	null	null	Aquatic
Syncaris pacifica	California freshwater shrimp	Crustaceans	ICMAL27010	18	3	Endangered	Endangered	G1	S1	null	IUCN_EN-Endangered	Aquatic | Sacramento/San Joaquin flowing waters

												Alkali marsh | Alkali playa | Alpine | Alpine dwarf scrub | Bog & fen | Brackish marsh | Broadleaved upland forest | Chaparral | Chenopod scrub | Cismontane woodland | Closed-cone coniferous forest | Coastal bluff scrub | Coastal dunes | Coastal prairie | Coastal scrub | Desert dunes | Desert wash | Freshwater marsh | Great Basin grassland | Great Basin scrub | Interior dunes | Ione formation | Joshua tree woodland | Limestone | Lower montane coniferous forest | Marsh & swamp | Meadow & seep | Mojavean desert scrub | Montane dwarf scrub | North coast coniferous forest | Oldgrowth | Pavement plain | Redwood | Riparian forest | Riparian scrub | Riparian woodland | Salt marsh | Sonoran desert scrub | Sonoran thorn woodland | Ultramafic | Upper montane coniferous forest | Upper Sonoran scrub | Valley & foothill grassland
Taxidea taxus	American badger	Mammals	AMAJF04010	476	1	None	None	G5	S4	null	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	
Trichostema ruygtii	Napa bluecurls	Dicots	PDLAM220H0	19	2	None	None	G2	S2	1B.2	null	Chaparral | Cismontane woodland | Lower montane coniferous forest | Valley & foothill grassland | Vernal pool | Wetland
Trifolium amoenum	showy rancheria clover	Dicots	PDFAB40040	26	2	Endangered	None	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden | SB_USDA-US Dept of Agriculture	Coastal bluff scrub | Ultramafic | Valley & foothill grassland
Trifolium												Marsh & swamp | Valley & foothill

hydrophilum	saline clover	Dicots	PDFAB400R5	49	4	None	None	G2	S2	1B.2	null	grassland | Vernal pool | Wetland
Triquetrella californica	coastal triquetrella	Bryophytes	NBMUS7S010	11	1	None	None	G1	S1	1B.2	USFS_S-Sensitive	Coastal bluff scrub | Coastal scrub | Valley & foothill grassland
Valley Needlegrass Grassland	Valley Needlegrass Grassland	Herbaceous	CTT42110CA	45	2	None	None	G3	S3.1	null	null	Valley & foothill grassland
Wildflower Field	Wildflower Field	Herbaceous	CTT42300CA	5	1	None	None	G2	S2.2	null	null	Valley & foothill grassland



A Tradition of Stewardship
A Commitment to Service

Legend

- Address Points
- Roads
- Major Roads

Geology

GEO_UNIT

- Artificial fill (historic)
- Surficial deposits (Qua
- Clear Lake Volcanics (I
- Other Pleistocene - Plic
- Sonoma Volcanics (Plic
- Late Tertiary Assembla
- Early Tertiary Assembla
- Great Valley Complex (
- Franciscan Complex (C
- Water
- Parcels
- Water Bodies
- American Canyon
- Calistoga
- County
- Napa
- St Helena
- Yountville
- County Boundary

County of Napa

Conservation, Development & Planning

Planning General

Revised Date: 8/25/2011

Horizontal Datum: NAD 83,
CA State Plane Coordinates,
Zone II, feet

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0 250 500 1,000 1,500 2,000 Feet



NAPA COUNTY CALIFORNIA

A Tradition of Stewardship
A Commitment to Service

Legend

Wineries in Vicinity

Status

- Approved
- Pending
- Producing
- Unknown

- Address Points
- Roads
- Major Roads

Geology

GEO_UNIT

- Artificial fill (historic)
- Surficial deposits (Quate
- Clear Lake Volcanics (Pl
- Other Pleistocene - Plioc
- Sonoma Volcanics (Plioc
- Late Tertiary Assemblag
- Early Tertiary Assemblag
- Great Valley Complex (C
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- Water

- Parcels
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- American Canyon
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- County
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- Yountville
- County Boundary

County of Napa

Conservation, Development & Planning

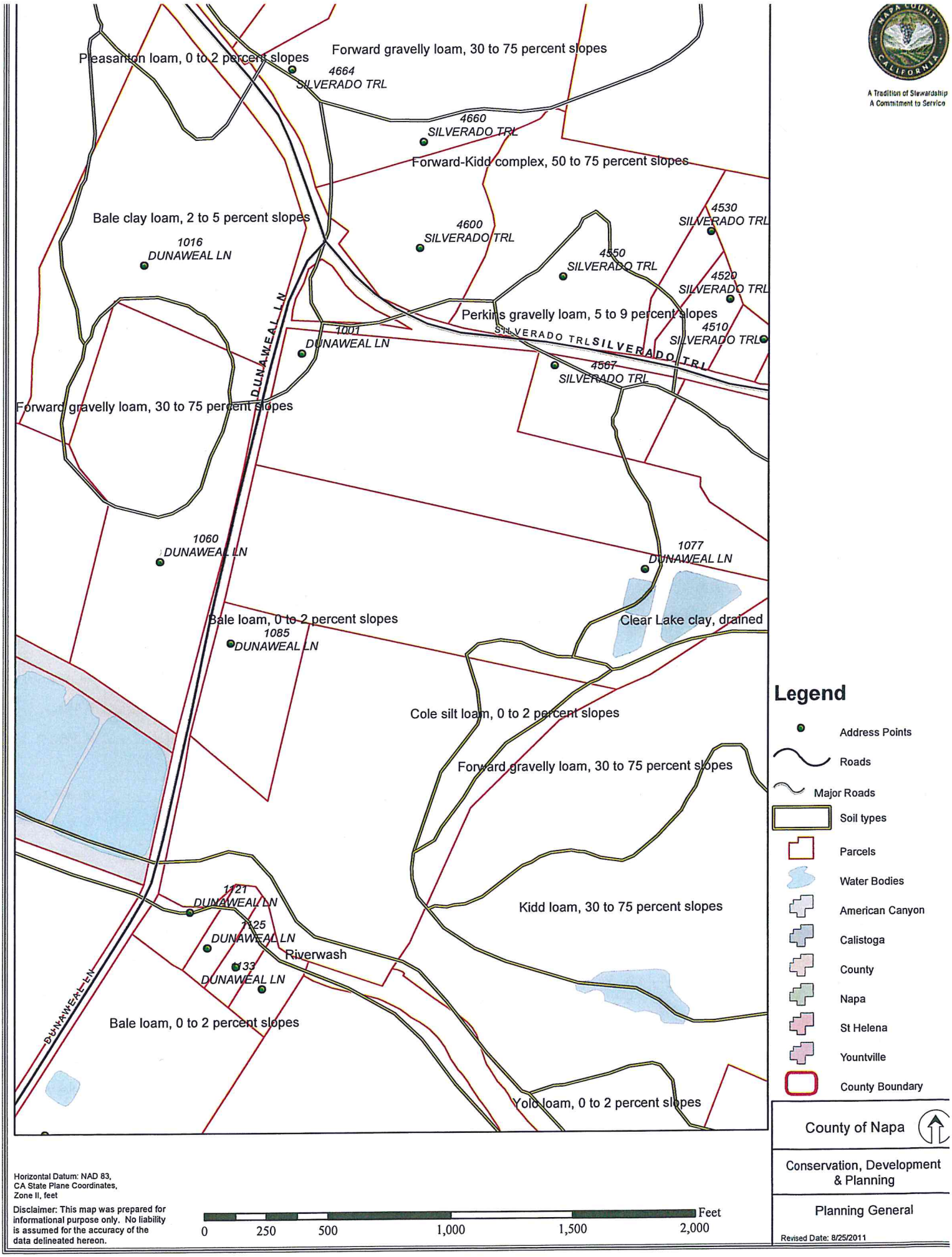
Planning General

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CA State Plane Coordinates,
Zone II, feet

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0 550 1,100 2,200 3,300 4,400 Feet



A Tradition of Stewardship
A Commitment to Service

Legend

- Address Points
- Roads
- Major Roads
- Soil types
- Parcels
- Water Bodies
- American Canyon
- Calistoga
- County
- Napa
- St Helena
- Yountville
- County Boundary

County of Napa

Conservation, Development & Planning

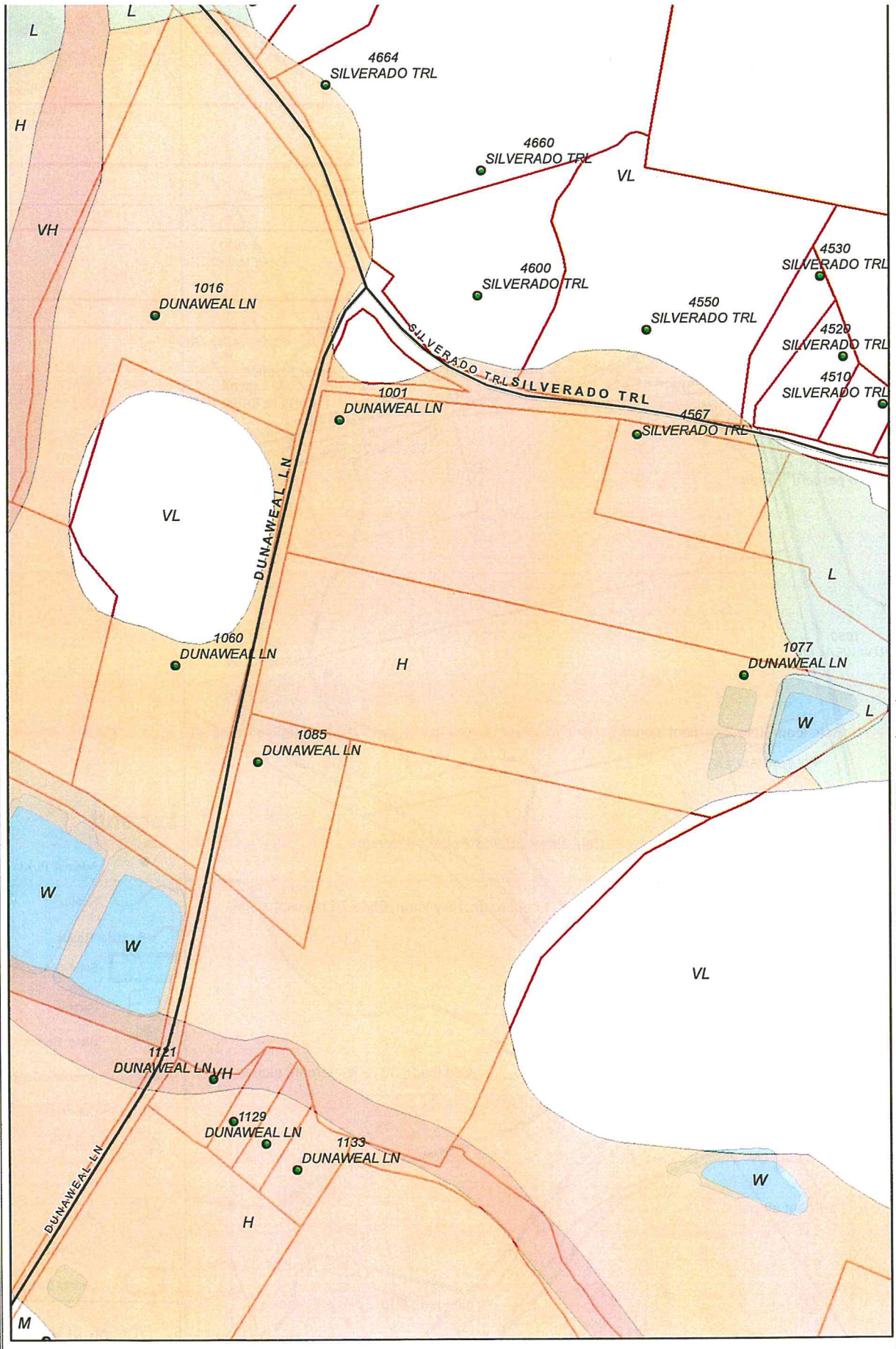
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0 250 500 1,000 1,500 2,000 Feet



A Tradition of Stewardship
A Commitment to Service

Legend

- Address Points
- Roads
- Major Roads

Liquefaction

- VH Very High
- H High
- M Medium
- L Low
- VL Very Low
- W Water

- Parcels
- Water Bodies
- American Canyon
- Calistoga
- County
- Napa
- St Helena
- Yountville
- County Boundary

County of Napa

Conservation, Development & Planning

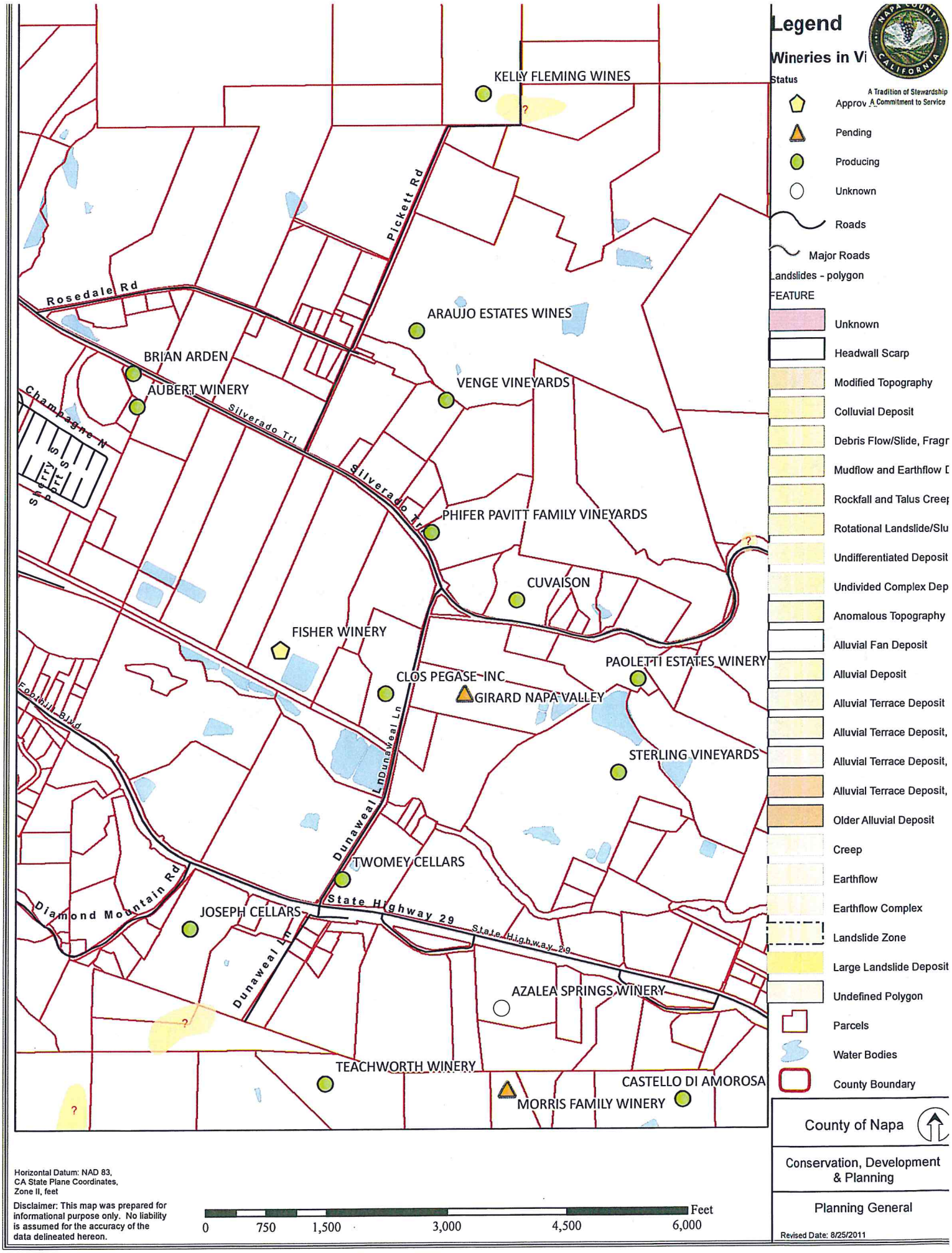
Planning General

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CA State Plane Coordinates,
Zone II, feet

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0 250 500 1,000 1,500 2,000 Feet



Legend

Wineries in Vi

Status

- Approv
- Pending
- Producing
- Unknown

- Roads
- Major Roads

Landslides - polygon

FEATURE

- Unknown
- Headwall Scarp
- Modified Topography
- Colluvial Deposit
- Debris Flow/Slide, Fragr
- Mudflow and Earthflow D
- Rockfall and Talus Creep
- Rotational Landslide/Slu
- Undifferentiated Deposit
- Undivided Complex Dep
- Anomalous Topography
- Alluvial Fan Deposit
- Alluvial Deposit
- Alluvial Terrace Deposit
- Alluvial Terrace Deposit,
- Alluvial Terrace Deposit,
- Alluvial Terrace Deposit,
- Older Alluvial Deposit
- Creep
- Earthflow
- Earthflow Complex
- Landslide Zone
- Large Landslide Deposit
- Undefined Polygon

- Parcels
- Water Bodies
- County Boundary

A Tradition of Stewardship
A Commitment to Service

Horizontal Datum: NAD 83,
CA State Plane Coordinates,
Zone II, feet

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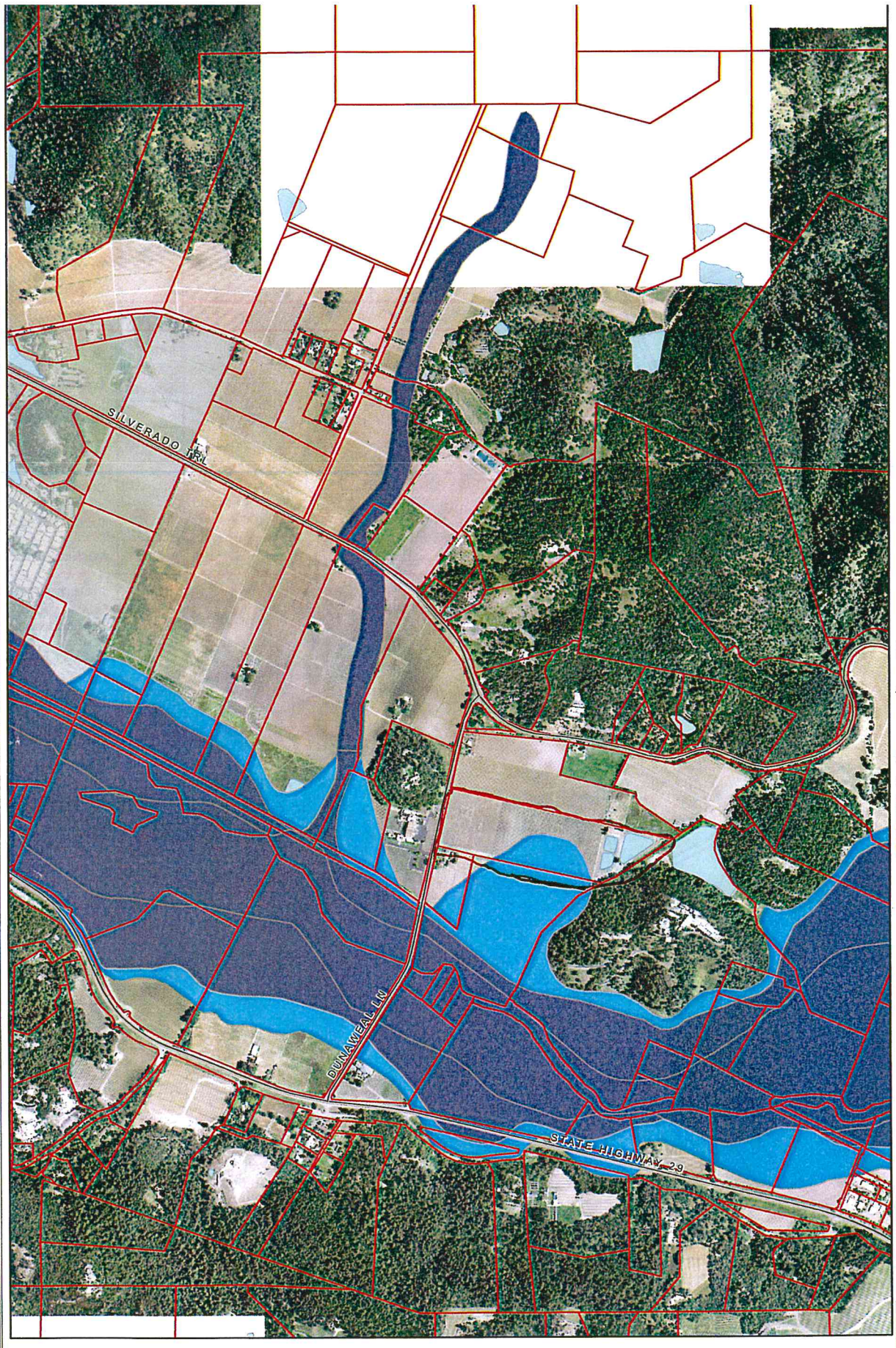
0 750 1,500 3,000 4,500 6,000 Feet

County of Napa

Conservation, Development & Planning

Planning General

Revised Date: 8/25/2011



A Tradition of Stewardship
A Commitment to Service

Legend

- Major Roads
- Parcels

Flood Zones

FLD_ZONE

- 100 year zone
- 500 year zone
- Water Bodies
- American Canyon
- Calistoga
- County
- Napa
- St Helena
- Yountville
- County Boundary

2011 Air Photos Napa V

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

Horizontal Datum: NAD 83,
CA State Plane Coordinates,
Zone II, feet

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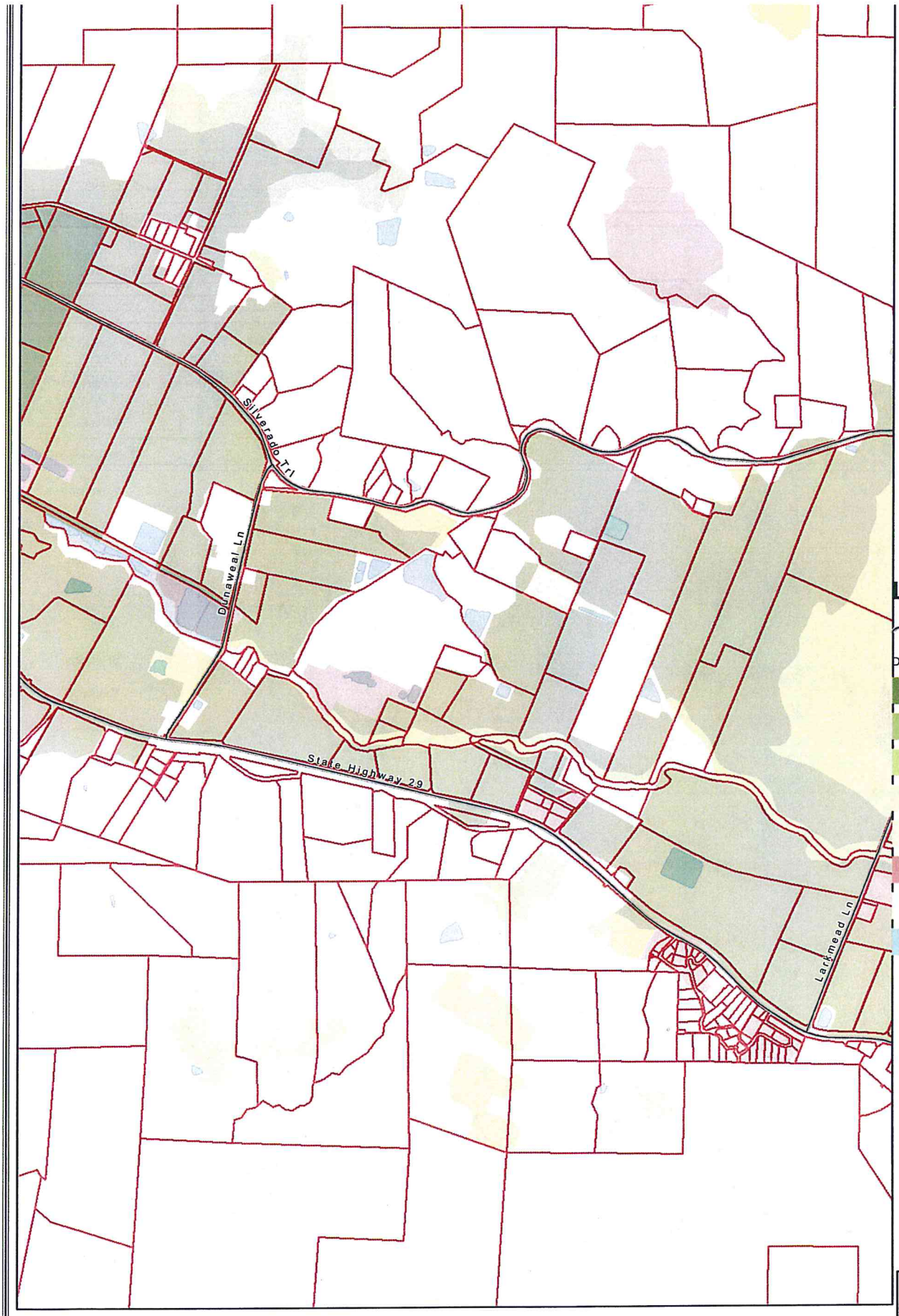
0 700 1,400 2,800 4,200 5,600 Feet

County of Napa

Conservation, Development & Planning

Planning General

Revised Date: 8/25/2011



A Tradition of Stewardship
A Commitment to Service

Legend

- Major Roads

Dept of Conserv. Farmlands 2012

- Prime Farmland (P)
- Farmland of Statewide Importance
- Unique Farmland (U)
- Farmland of Local Importance (L)
- Grazing Land (G)
- Urban and Built up Land (D)
- Other Land (X)
- Water (W)
- Parcels
- Water Bodies
- American Canyon
- Calistoga
- County
- Napa
- St Helena
- Yountville
- County Boundary

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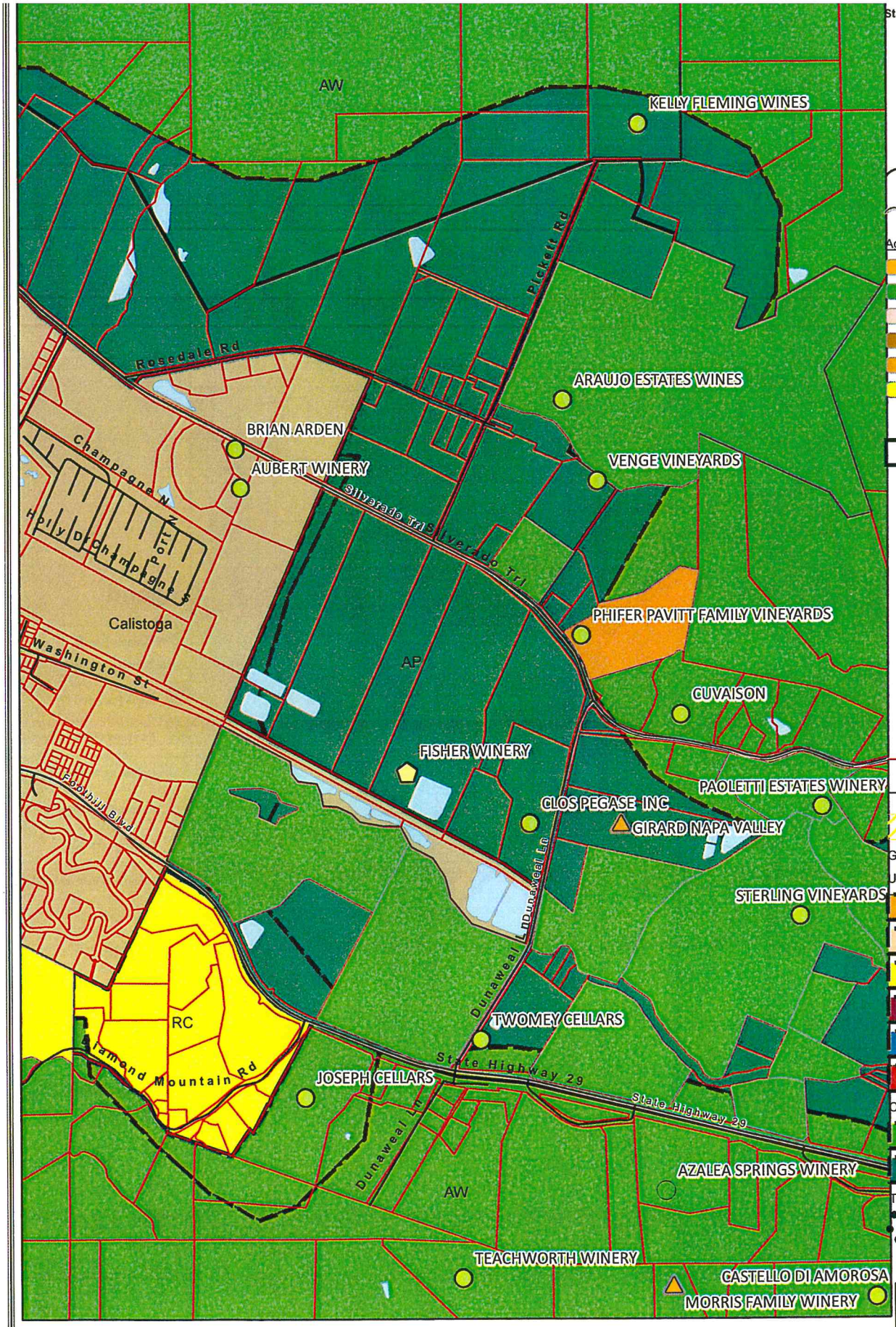
0 1,000 2,000 4,000 6,000 8,000 Feet

County of Napa

Conservation, Development & Planning

Planning General

Revised Date: 8/25/2011



Status
- Approv
- Pendin
- Produc

A Tradition of Stewardship
A Commitment to Service

- Unknown
- Roads
- Major Roads

Ag Contracts
- unknown type
- A
- C
- E
- F
- H
- Parcels
- Zoning (outline)
- Water Bodies
- American Canyon
- Calistoga
- County
- Napa
- St Helena
- Yountville
- Landfill - General Plan
- Airport
- Railroad
- Airport Clear Zone

General Plan 2008-2030

URBANIZED OR NON-AGRICULTURA
- Cities
- Urban Residential
- Rural Residential
- Industrial
- Public-Institutional
- Study Area

OPEN SPACE
- Agriculture, Watershed &
- Agricultural Resource

TRANSPORTATION
- Mineral Resource
- County Boundary

Horizontal Datum: NAD 83,
CA State Plane Coordinates,
Zone II, feet

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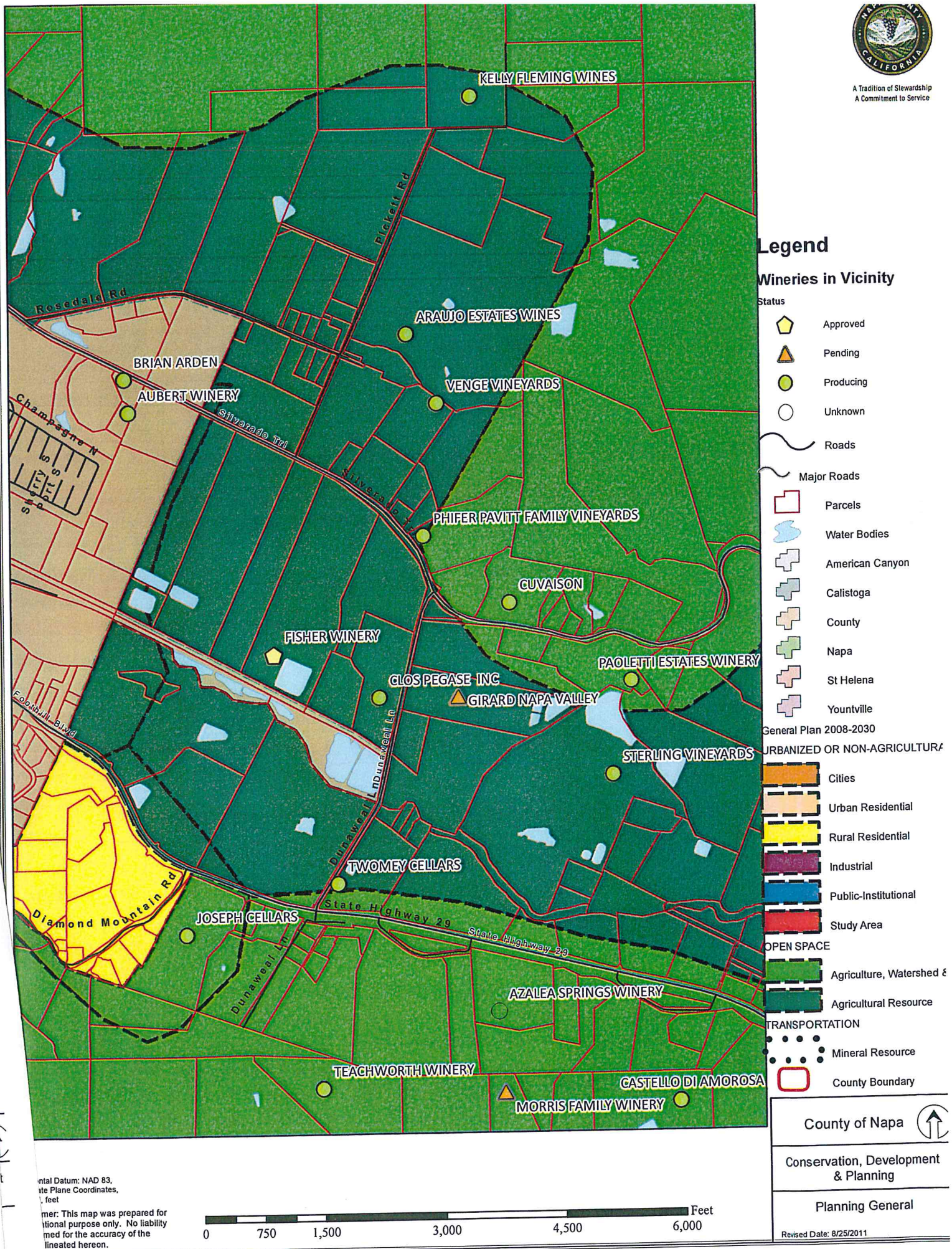
0 750 1,500 3,000 4,500 6,000 Feet

County of Napa

Conservation, Development & Planning

Planning General

Revised Date: 8/25/2011



A Tradition of Stewardship
A Commitment to Service

Legend

Wineries in Vicinity

Status

- Approved
- Pending
- Producing
- Unknown

Roads

Major Roads

- Parcels
- Water Bodies
- American Canyon
- Calistoga
- County
- Napa
- St Helena
- Yountville

General Plan 2008-2030

URBANIZED OR NON-AGRICULTURA

- Cities
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- Study Area

OPEN SPACE

- Agriculture, Watershed &
- Agricultural Resource

TRANSPORTATION

- Mineral Resource
- County Boundary

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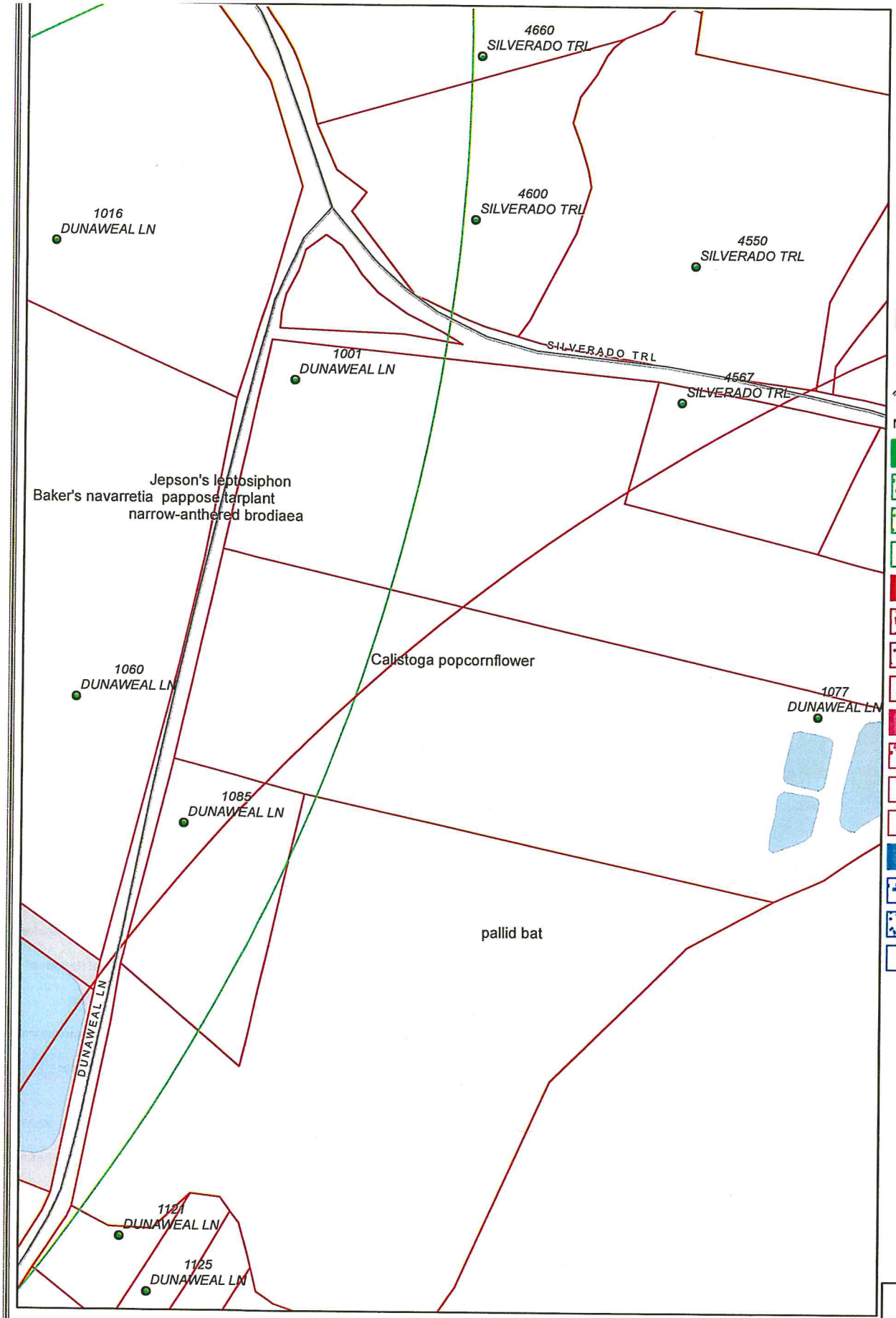
0 750 1,500 3,000 4,500 6,000 Feet

County of Napa

Conservation, Development & Planning

Planning General

Revised Date: 8/25/2011



A Tradition of Stewardship
A Commitment to Service

Legend

- Address Points
- Major Roads

Natural Diversity Database (F&G)

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terr. Comm. (80)
- Terr. Comm. (specific)
- Terr. Comm. (non-spec
- Terr. Comm. (circular)
- Aqu. Comm. (80)
- Aqu. Comm. (specific)
- Aqu. Comm. (non-spec
- Aqu. Comm. (circular)
- Parcels
- Water Bodies
- American Canyon
- Calistoga
- County
- Napa
- St Helena
- Yountville
- County Boundary

Horizontal Datum: NAD 83,
CA State Plane Coordinates,
Zone II, feet

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0 187.5 375 750 1,125 1,500 Feet

County of Napa

Conservation, Development & Planning

Planning General

Revised Date: 8/25/2011

Middletown Rancheria
Tribal Historic Preservation Department
P.O. Box 1035
Middletown, CA 95461

July 30, 2015

Napa County Planning, Building, & Environmental Services Department
Wyntress Balcher, Planner
1195 Third Street, Suite 210
Napa, CA 94559

RECEIVED
AUG 03 2015
Napa County Planning, Building
& Environmental Services

RE: Girard Winery – Use Permit P14-00053

Dear Ms. Balcher:

The Middletown Rancheria Tribal Historic Preservation Department has received your request of July 17, 2015 requesting information/comment on the Girard Winery – Use Permit P14-00053. Our comment on this project and its potential to affect historic, archaeological, Traditional Cultural Properties (TCP) or sacred Lake Miwok sites or properties is required by Section 106 of the National Historic Preservation Act of 1966 (NHPA), and 36 CFR Part 800. We thank you for submitting your project proposal for our review and comment.

Given the information provided, you are hereby notified that there should be no Lake Miwok archaeological, historic, TCP's or sacred sites in or near your proposed project site to be adversely affected by your project. Therefore, in accordance with 36 CFR 800.4(d)(1), please proceed with your proposed project. However, please be aware that you may encounter undiscovered properties or remains which must be immediately reported to us under both NHPA and NAGPRA regulations.

This information is provided at your request to assist you in complying with 36 CFR 800 for Section 106 consultation procedures. Please retain this correspondence to show compliance with Section 106. Should you have any questions regarding your request and or our comments you may contact me at the address or telephone number listed herein.

Sincerely,

Stephanie L. Reyes
Tribal Historic Preservation Officer
Middletown Rancheria

Phone (707) 987-3670 ext 115 *Fax (707) 987-9091*

DICKENSON PEATMAN & FOGARTY

1455 First Street, Suite 301
Napa, CA 94559

T: 707.252.7122
F: 707.255.6876

SCOTT GREENWOOD-MEINERT
scottgm@dpf-law.com

March 12, 2015

Napa County Planning Commission
1195 Third Street, Room 210
Napa, CA 94559

David Morrison, Director
Napa County Planning, Building and
Environmental Services Department
1195 Third Street, Room 210
Napa, CA 94559

RECEIVED
MAR 12 2015
Napa County Planning, Building
& Environmental Services

John McDowell, Deputy Planning Director
Napa County Planning, Building and
Environmental Services Department
1195 Third Street, Room 210
Napa, CA 94559

Re: Response to Single Parcel Argument Set Forth in January 20, 2015 Shute, Mihaly & Weinberger Letter

Ladies and Gentlemen:

This letter is submitted on behalf of Girard Winery, who has submitted Conditional Use Application P14-00053 for a winery use permit. The Planning Commission initially heard this Application on December 17, 2014 and conducted another hearing on the matter on January 21, 2015. On January 20, 2015, Shute, Mihaly & Weinberger LLP attorney Ellison Folk and urban planner Laurel Impett submitted a letter to you regarding the Application on behalf of the Tofanelli family (the "Tofanelli Letter"). The Tofanelli Letter provided comments on the Initial Study and proposed Negative Declaration. At the January 21, 2015 hearing, County staff and the Applicant requested a further continuance of the matter in order to review and address those comments. This letter addresses one such comment.

On page 14 of the Tofanelli Letter, the author provides: "The Girard Parcel and The Clos Pegase Winery Parcel Should be Treated as a Single Parcel." The text of this Comment is attached for your review. Fermented, the Comment asserts that the Girard Parcel and the Clos Pegase Parcel should be treated as one parcel because (i) Girard and Clos Pegase have common ownership, and (ii) the Girard Parcel has a well and wastewater facility used by Clos Pegase.

The entirety of Napa County's Conditional Use Permit regulatory process for wineries exists to ensure that a project (like that proposed by Girard) meets stringent standards, with review governed under a comprehensive CEQA analysis. The process does not involve the Planning Commission analyzing ownership structures of the parcel to be improved. If the Girard winery meets those established standards—standards that were adopted by the people of the County of Napa for permitting wineries--and also complies with CEQA, the Commission will only then permit it.

Sharing water facilities is efficient and an example of good planning. It should be encouraged because it protects agriculture and natural resources. Napa Valley is full of situations where common ownership of adjacent parcels has resulted in a winery on one parcel and where water and wastewater facilities, roads, caves, and so forth are located on another parcel or parcels. In doing so, Napa County actively seeks to

ensure that proper easements are recorded so that the rights incumbent with such facilities can survive a transfer of the burdened parcels (as is the case here).

It would be a sea change indeed, if a wastewater pond and a well, on a parcel serving a winery on another parcel were to preclude the development of a winery on the burdened parcel merely because of common ownership. Such a flawed policy, if it were legal, and adopted by the Board of Supervisors or by a vote of the citizens, would force families and business entities holding multiple parcels under common ownership into protecting their property rights by engaging in elaborate, expensive corporate ownership structures (sometimes referred to as "Christmas Trees") like those implemented by certain farmers trying to take advantage of federal Farm Bill subsidies. It is hard to comprehend how that would benefit agriculture here in Napa County.

Additionally, the case of *Forest Properties, Inc v. United States*, which the Tofanelli Letter cites to in the Comment, is inapplicable. That case is a federal court claims case arising from a federal Section 404 permit application to the Army Corps of Engineers pursuant to the Clean Water Act. The court's ruling does not interpret or apply any California law relevant to Girard's Application.

The Comment states that the "Clos Pegase winery could not operate without the water and wastewater disposal provided by the Girard parcel." This is presumptive because Clos Pegase could indeed continue to operate. But, developing a separate wastewater disposal system on the Clos Pegase parcel would destroy and be a wasteful use of natural and agricultural resources, something antithetical to the owners of Close Pegase and Girard.

It must be emphasized that the Girard Application does not propose to remove any existing vineyard on the Girard parcel. The Application seeks to enhance the parcel to its highest and best use (also it most efficient use), and at the same time preserve existing agriculture by making wine on-site from the grapes grown there.

Thank you for your attention.

Sincerely,

DICKENSON, PEATMAN & FOGARTY

Scott Greenwood-Meinert

cc: Patrick Roney

SHUTE, MIHALY
& WEINBERGER LLP

396 HAYES STREET, SAN FRANCISCO, CA 94102
T: (415) 552-7272 F: (415) 552-5816
www.smwlaw.com

Planning Commission Mtg.
JAN 21 2015
Agenda Item # 9A

January 20, 2015

Via E-Mail

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

Attn: David Morrison, Department Director
David.Morrison@countyofnapa.org

Re: Girard Winery Use Permit P14-00053 Initial Study/Proposed Negative Declaration.

Dear Commissioners:

On behalf of the Tofanelli family, we submit these comments on the Initial Study/proposed Negative Declaration ("IS") for the proposed Girard Winery Use Permit ("Project"). Substantial evidence shows that the Project could have a number of potentially significant impacts on the environment. Accordingly, and as a matter of law, the Planning Commission would be in violation of 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 extensive project-specific and cumulative environmental impacts that will accompany the Project. The document lacks the necessary evidentiary support that the Project will not adversely impact water supply, water quality, transportation, parking, noise, and visual resources. Furthermore, the mitigation measures the IS relies on are vague, deferred and unenforceable. In the absence of an enforceable and proven plan for mitigation for the extensive significant environmental impacts, there remains more than a fair argument that the Project will have significant environmental effects not analyzed nor acknowledged in the IS.

In addition to these CEQA deficiencies, the Project violates the Winery Definition Ordinance and significant provisions of the Napa County General Plan. 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 an initial matter, we request that the Planning Commission delay consideration of this Project for a minimum of 30 days. The abbreviated public review period for a project of this magnitude, and with such potentially severe environmental consequences, is particularly troubling. As we explained in our December 15, 2014 letter to the Commission, the County released the IS on November 25, 2014, just two days before Thanksgiving with an initial public hearing date of December 17, 2014. The County granted a brief extension of the comment period –till January 21, 2014 -- but the extension included the holiday season when members of the public were otherwise occupied. In essence, therefore, the County is providing only 12 additional days since the end of the holiday season to complete our review, retain experts and prepare a letter for submission. Of critical importance, the Commission is being asked to consider approval of this Project, without having the opportunity to review the public comment on the IS.

This letter, along with the hydrologic report prepared by Tom Myers, Ph.D., (Exhibit 1), as well as a separate letter and/or oral testimony to be submitted by the Tofanelli family, constitute the Tofanelli family's comments on the IS.

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

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

negative 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] As discussed below, there is a fair argument that the proposed Project will have potentially significant environmental impacts.

B. The IS's Hydrology and Water Quality Analysis is Inadequate, and There is a Fair Argument That These Impacts Are Potentially Significant.

1. Water Supply Impacts

The IS asserts that groundwater levels in the Napa Valley Floor exhibit stable long-term trends with shallow depth to water. IS at 13. It then asserts that "because the water demand for the Clos Pegase Winery and the Girald Winery is below the minimum threshold for water use, the Project would not substantially deplete

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

groundwater supplies or interfere substantially with groundwater recharge. *Id.* at 13. As the Myers Report explains, the IS is wrong on both counts. Groundwater pumping for the Project may exceed the rate that groundwater is replenished because the IS appears to substantially overstate groundwater recharge. This pumping would cause depletion of the groundwater table and water to be drawn from the Napa River. In addition, the well proposed to be used for the Project may cause sufficient drawdown which would adversely affect neighboring wells.

(a) There is No Evidence that Napa Valley Has Stable Long Term Water Supply Trends.

According to Tom Myers, hydrographs for a nearby Project well (8N/6W-06L4) show declining groundwater levels commencing in about 2007. Myers Report at 2. In addition, at least four of eleven well hydrographs in the Calistoga area show downward trends in groundwater elevation. *Id.* at 3. Inasmuch as the drought has effectively continued since 2007, the groundwater level may have continued to decrease. *Id.* As Myers explains, in the absence of a detailed hydrogeologic study, there is insufficient support for the IS's determination that Napa Valley has stable long term water supply trends.

(b) Pumping For the Project Could Unacceptably Lower Groundwater Levels Because There is Not as Much Recharge in the Area as the County Assumes.

The Myers' report demonstrates that recharge for the area is likely overestimated. Myers Report pgs. 2 through 9. Consequently, it is possible that the County's water use criteria of 1.0 acre foot per acre per year ("af/y") is too high and that pumping at that rate, or even at a fraction of that rate, will draw down the groundwater table. Drawdown occurs when the pumping rate exceeds the rate recharge is replenishing the water table. Drawdown will also eventually change the flow gradient for discharge to the Napa River and pumping will affect the river. *Id.*

Myers' Report goes on to explain that the well proposed to be used for the Project may also cause sufficient drawdown, thereby potentially affecting neighboring wells. The Project applicant reports that the well that will provide water for the Project, currently serving the Clos Pegase Winery, has a yield of 23 gallons per minute (gpm) but has been fitted with a pump that will provide 18 gpm, or 9,460,800 gallons per year if

operated full time[3], which is 29 af/y. Myers examined the log for this well and determined it is doubtful that this well could actually pump at 18 gpm and yield 29 af/y without going dry. Myers Report at 7,8. "The drawdown shown on the well log, if maintained for a significant period, would likely cause substantial drawdown of neighboring wells." *Id.*

C. Water Quality Impacts

In addition to depleting groundwater levels, the pumping associated with the Project could cause boron and arsenic plumes to expand through the area. According to the Myers Report, very high concentrations of each contaminant exist northwest of the Project site area and along the base of the mountains south of the site. Myers Report at 9 through 11. Pumping groundwater for the Project, especially if it causes substantial drawdown due to too little recharge, could create a drawdown which pulls contaminants toward the Project.

Most boron is due to relatively shallow geothermal water being drawn into the alluvial aquifers. Myers Report at 9. Just northwest of the Project site, the boron concentrations are quite high, as much as 14,000 ug/l, or almost five times the health advisory level of 3 mg/l. Arsenic concentrations range from 40 to 85 ug/l in the same area which are four to eight and a half times the maximum contaminant level. *Id.* One arsenic observation just south of the project site is 75 ug/l. Groundwater water quality in the Project area also shows that chloride, specific conductance, nitrate and total dissolved solids also occasionally exceed standards in the Calistoga area. *Id.*

Cumulative pumping in the Calistoga area controls the flow directions in the area. Additional pumping downgradient of the high concentrations, in what appears to be both an arsenic and boron plume, will draw the contaminants further into Calistoga and beyond to the southeast. *Id.* Additionally, pumping in surface aquifers which increases the gradient from depth to more shallow aquifers may draw boron or metals from geothermal water into shallow waters, thereby increasing the boron concentration.

Ample evidence exists that the Project could deplete groundwater supplies and contaminate groundwater in the Project vicinity. The County must thoroughly analyze these significant impacts in an EIR and identify mitigation measures capable of minimizing these impacts.

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[3] Letter from Robert Osborn, Ben Monroe, Always Engineering, to Stacey Harrington, Napa County Planning, Building and Environmental Services, Project: Girard Wintery – New Winery and Tasting Room Use Permit. February 21, 2014. P 2.

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

The IS concedes that the Project will have significant impacts relating to the Project's increase in traffic. IS at 20. However, as discussed below, the document fails to adequately identify or analyze these impacts and fails to propose feasible mitigation. Consequently, the IS lacks the evidentiary support to conclude that these impacts would be mitigated to less than significant levels.

First, the IS's traffic analysis fails from its inception because it contains an inadequate study area for determining the Project's traffic impacts as it includes only two intersections -- Silverado Trail/Dunaweal Lane and SR 29/Dunaweal Lane. *Id.* at 20. By focusing only on these two intersections, the IS ignores the Project's contribution to traffic congestion north and south of Dunaweal Lane on both Silverado Trail and SR 29. Visitors to the proposed winery would, of course, not stop at these two intersections but would travel well beyond these points – north to Calistoga or south to Marin, San Francisco or Oakland.[4]

An analysis of other intersections and roadway segments along SR 29 and Silverado Trail is critical because these roadways are projected to operate at LOS F and LOS C, respectively, in 2030. *Id.* at 20. There is no doubt that traffic from the Project will contribute to these deficient service levels. Consequently, the County must evaluate the specific effect the Project's traffic will have along roadway segments and intersections north and south of Dunaweal on Silverado Trail and SR 29 and identify feasible mitigation for these impacts.

Second, the IS does not establish proper thresholds of significance for determining whether traffic from the Project will result in significant impacts on the two intersections it does analyze. The document merely recites the CEQA Appendix G checklist, which, among other things, requires the County to determine whether added traffic is "substantial in relation to the existing traffic load or capacity of the street system." IS at 19. 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

[4] The County's General Plan also requires impacts at unsignalized intersections (like those surrounding the Project site) to be evaluated on a case-by-case basis. General Plan at CIR-16.

impossible for the public and County decision makers to evaluate the Project's traffic impact.

Third, notwithstanding the IS's failure to identify proper thresholds of significance, the IS does acknowledge that the Project would contribute to significant impacts at the two intersections it analyzes. Under future (2030) traffic conditions, the northbound Dunaweal approach to Silverado Trail is expected to operate at LOS E and the southbound Dunaweal Lane approach to SR 29 is expected to operate at LOS F in the P.M. peak hour. *Id.* at 20. Unfortunately, the IS relies on vague and unenforceable mitigation measures to conclude the Project's impacts would be reduced to a less than significant level. *Id.*

The IS asserts that these impacts could be mitigated merely by altering employee shifts and the finish times of the nine scheduled events and by installing directional signs at the winery exit directing traffic to turn-right. The document concludes, absent evidence or analysis, that these measures would reduce the Project's traffic impacts to less than significant levels. *Id.* at 20. Yet these measures would be ineffective for numerous reasons. First, by focusing on traffic during the winery's nine marketing events, it does nothing to ensure that the Project's traffic will not impact area intersections and roadways on routine days of winery operation, i.e., the remaining 356 days of operation. Second, the provision calling for the winery to shift finish times during the winery's numerous events is vague and unenforceable. It does not describe how the winery will ensure that all traffic leaves the winery by 4:00 P.M. Indeed such an assertion is nonsensical inasmuch as the hours of operation and visitation extend until 6:00 P.M. daily. Finally, while the installation of directional signs may result in certain visitor's following these directions, unless the traffic is monitored and enforced, visitors will travel in the direction they find most convenient.

Fourth, the IS addresses only average trip generation and ignores the effect that traffic from the winery's events would have on nearby roadways and intersections. Nine marketing events per year are proposed: four with maximum 75 guests; four events with a maximum 200 guests and one harvest event with a maximum 500 guests. *Id.* While the winery would generate 74 weekday trips on an average day, it would generate a substantially greater number of trips during the winery's nine marketing events and during the crush. In fact, according to the IS's traffic study, the harvest event is projected to generate 437 daily trips. Traffic Study at 15. Furthermore, it is not clear if this figure includes the 242 daily truck trips associated with the crush days. *Id.* While we understand that these events would not occur on a daily basis, the IS may not simply ignore the severe traffic congestion that will accompany these events. Moreover, inasmuch as all of the wineries harvest during the same week or two, the cumulative effect of harvest truck trips and harvest events must be taken into account.

It is also critical to note that the Clos Pegase Winery routinely holds weddings despite the fact that such events are explicitly prohibited. Inasmuch as the proposed Project would be operated by the owner of Clos Pegase, the IS must acknowledge the potential for weddings at the Girard Winery and analyze the associated traffic impacts. Alternatively, the County must prohibit weddings as a condition of approval.

Finally, the IS fails entirely to examine the cumulative transportation impacts that will result from the Project and planned or recently approved projects in the County. Notably, the Yountville Hill Winery's September 2013 traffic study identifies 12 planned or approved new wineries or winery expansions that could have cumulatively significant traffic impacts. *See* Yountville Hill Winery's September 2013 Traffic Study, attached as Exhibit 2. But even the Yountville Winery traffic study does not include all of the new or modified wineries. In fact, the County has approved at least 19 new wineries or significant modifications to existing permits since the applicant released its traffic study last September. *See* List of Winery Projects, attached as Exhibit 3. The Girard Winery IS's failure to take into account traffic from any of these winery projects, let alone other planned land use development, is a fatal flaw. The County must properly analyze the Project-specific and cumulative traffic impacts. The appropriate forum for such an analysis is in an EIR.

E. The IS Fails to Adequately Consider Parking-related Impacts From the Project, and There is a Fair Argument That These Impacts Will Be Significant.

The IS ignores aspects of the Project that could worsen parking in the area. For instance, the proposed winery will only contain 22 parking spaces to accommodate 90 visitors and 25 employees per day, an unspecified number of trucks delivering grapes and to be used for bottling purposes, and even marketing events of up to 500 people. IS at 1, 20. The IS never considers whether this amount of parking is adequate to accommodate the maximum number of daily visitors, staff, and trucks serving the winery. Instead, it simply asserts that additional parking at the rear of the winery is available or visitors can be shuttled from off-site lots. *Id.* at 20.

The IS fails as an informational document because it does not identify how many extra vehicles the paved area at the rear of the winery could hold, or whether emergency vehicles will have adequate access with vehicles parked throughout the property. Even if the winery would have extra parking space, the County must condition the approval of the Project or adopt a mitigation measure requiring the applicant to use such space for overflow parking. *See* Guidelines § 15126.4(a) ("Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding

instruments"). The IS must fully analyze the parking issue to adequately inform the public about this potential environmental impact. *Taxpayers for Accountable School Bond Spending v. San Diego Unified School District* 215 Cal.App.4th 1013, 1052-54 (2013).

The IS errs further because it does not identify or analyze the transportation – or other environmental impacts – that would result from these shuttle bus operations. For example, it does not identify the location or size of the off-site parking lot, the number of shuttle buses that would be in operation, or the effect that motorists and buses accessing this parking lot would have on roadway operations. The IS's failure to identify and analyze these impacts is a fatal flaw.

Finally for reasons relating to overflow parking and other nuisances (e.g., noise, litter, vandalism) from visitors to the winery, it is imperative that a secure fence or wall be constructed between the winery and the Tofanelli family property. Such a fence or wall must be included as a condition of approval.

F. The IS's Noise and Air Quality Analyses Are Inadequate, and There is a Fair Argument That These Impacts Would Be Significant.

A particularly glaring inadequacy of the IS is its analysis of and mitigation for 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 16,17. To conclude as the IS does that an impact is less than significant, the analysis must be 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 as to the Project's environmental setting, other than to state that the nearest residences are located about 400 feet to the south. IS at 17. An environmental document "must include a description of the physical environmental conditions in the vicinity of the project." CEQA Guidelines § 15125(a). "Without a determination and description of the existing physical conditions on the property at the start of the environmental review process, [an environmental document] 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). Moreover, as discussed above, 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. Due to the surrounding hills and knolls, the area acts as a natural amphitheater. Noise reverberates from hill to hill. Here, without any information on the area's acoustical setting, including an identification of existing ambient noise levels, an impacts analysis or proposed mitigation become meaningless.

Nor does the IS identify the standard or threshold of significance for determining a significant noise impact.[5] This is critical; without a significance threshold, there is no means by which to conclude 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 at nearby sensitive 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 4. The 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. Finally, as discussed above, unless weddings are prohibited as a condition of approval, the County is obligated to analyze the increase in noise from wedding-related activities.

The IS also errs in its analysis of air quality impacts because it fails to analyze the threat to neighboring farms from the dust that will accompany Project construction. Dust from Clos Pegase' vineyard operations is already harmful to the Tofanelli family's organic farms. The IS must evaluate the effect that the dust from the

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[5] 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 17), but since the proposed Project will not normally be operating during those hours, this information is not relevant.

Project's construction and operation would have on nearby properties and identify mitigation to reduce these impacts to a less than significant level.

G. The IS's Visual Resources Analysis is Inadequate, and There is a Fair Argument That the Project May Have Significant Aesthetic Impacts.

The proposed Project will result in potentially significant visual impacts. Project construction and operation will require the installation of additional lighting. IS at 4. This light pollution will dramatically alter the visual character of the site and further erode dark skies in the area. Nevertheless, instead of grappling with these readily-apparent aesthetic impacts, the IS largely dismisses them. First, the IS fails to establish a proper baseline for lighting impacts, a flaw that is fatal to any purported analysis of light pollution impacts.

Even if it had established a proper baseline, the IS effectively concedes that light pollution from the Project could create significant impacts: "the installation of additional lighting may have the potential to impact nighttime views." IS at 4. The IS assumes that certain design features for outside lighting could reduce the significance of such impacts (*Id.*), but offers no analysis of how much these measures will reduce light and glare on the Project site. In fact, the IS cannot offer this analysis because the applicant has not even disclosed which types of outdoor lighting it will use or where it will be placed. *See* Conditions of Approval at 7, indicating that a lighting plan has yet to be prepared. This approach directly violates CEQA. An agency is required to fully evaluate potentially significant environmental impacts before it approves a project. *See Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* 6 Cal.4th 1112, 1123 (1993).

The IS identifies measures intended to reduce light and glare such as the use of motion detectors and the low-level lighting. But the record contains no evidence that these measures will be adequate to reduce the site's light pollution to less-than-significant levels. Indeed, the IS does not even adopt a threshold of significance for making this determination, much less account for how much light pollution the building will generate with these lighting techniques. Moreover the use of these lighting techniques are voluntary and unenforceable since they include language such as "to the greatest extent practical." *Id.* Consequently, the IS provides no evidence that the light and glare from the Project would be reduced to a less than significant level.

In addition, the IS concludes that the Project would result in less than significant visual impacts because "the buildings will not obstruct the scenic distant hillsides." IS at 4. Here too, the document does not include any thresholds for

determining the significance of these impacts. Nor does it provide any photographs of the site or any photo simulations of how the Project would look superimposed on the landscape. Consequently, the IS provides no basis whatsoever for this less than significant conclusion. Had the IS included a proper analysis, it would have disclosed that the 35-foot building plus the 45-foot cupola will forever degrade one of the most beautiful parts of the downvalley scenic view. The County must provide a comprehensive analysis of these impacts. The appropriate forum for such an analysis is an EIR.

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.

The Project is inconsistent with the WDO provisions that restrict the scope and maximum square footage of "accessory uses" such as "marketing of wine" and "tours and tastings." Specifically, 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., 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.").

In addition to the 3,800 square feet of accessory uses identified in the staff report, the Project also includes a 13,000 square foot outdoor garden and tasting area, as well as a 2,600 square foot covered veranda.[6] Together these uses constitute 67 percent

[6] It is unclear how the County concludes that the Project's accessory uses comprise only 10.2 percent of the production area. The staff report states that the production area is 28,955 square feet. Other uses identified in the staff report do not meet the definition of production facilities in the WDO and should not be included in that area when determining the total percentage of the Project that is dedicated to accessory, tourist serving uses.

of the area of the production facility – far in excess of the 40 percent limit in the WDO. Both areas are clearly intended to serve visitors. The architect's drawing of the covered veranda depicts tables and chairs in the area and the applicant has designated the 13,000 square foot garden area as a tasting area under AB 2004. Accordingly, excluding them from the 40 percent calculation is inconsistent with NCC section 18.104.200. This exclusion is also inconsistent with the manner in which the Planning Commission calculated accessory use square footage in two recent actions concerning the B Cellars and Titus Vineyards projects. For both projects, the outdoor terraced spaces were counted as part of the percentage of the project used for accessory uses. The County should treat the present Project in the same manner.

Moreover, it is clear from the past activity of the Clos Pegase Winery that the Girard Winery will use these areas for tourist serving uses and other activities that are prohibited by the WDO. As discussed above, the Clos Pegase Winery (which also owns the Girard Winery) holds weddings at its facility throughout the year, even though weddings are not permitted under the WDO. NCC § 18.08.370 (social events are only permitted to the extent they are "directly" related to the education and development of potential customers and only as part of an approved marketing plan.) In adopting the WDO in 1990, the Board of Supervisors made an express factual finding that "[t]he interspersing of non-agricultural structures and activities throughout agricultural areas in excess of what already exists will result in significant increase in the problems and costs of maintaining vineyards and discourage continued use of the land for agricultural purposes." The Board acknowledged this same concern when it amended the WDO just four years ago, finding that the WDO had been successful in achieving its purposes, in part by "limiting commercial uses in agricultural areas by ensuring that wineries remain focused on the business of producing wines, and by ensuring that tours and tastings and marketing of wine play an accessory role."

In addition to violating the letter of the WDO, the Project contravenes the intent expressed in these findings 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, these nonagricultural uses are the Project's core purpose.

Therefore, the Project cannot be approved unless it is modified to reduce the amount of accessory uses and the County expressly prohibits any weddings or social events that are not directly related to the education and development of customers at the facility.

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 provisions including but not limited to: 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 land use, where uses incompatible with agriculture should be precluded . . .". In short, the offices, tasting rooms, retail storage, catered food prep area, veranda and garden bar are commercial uses, not agricultural ones. Accordingly, they are inconsistent with the General Plan and may not lawfully be approved.

C. The Girard Parcel and The Clos Pegase Winery Parcel Should be Treated as a Single Parcel.

Finally, the County is not required to approve the Project in order to assure the owner an economic use of its property. The Girard parcel is part of a larger holding by the owner of the adjacent Clos Pegase winery, which relies on the Girard property to provide potable water and waste water disposal. Waste water is pumped from Clos Pegase under Dunaweal Road to the Girard Parcel, where it is treated. In addition, the well on the Girard parcel provides water to the Clos Pegase Winery. The well on the Clos Pegase winery is utilized only as back up irrigation water. As a result, the Girard parcel is inextricably linked to the Clos Pegase winery parcel. Indeed, the Clos Pegase winery could not operate without the water and waste disposal provided by the Girard

parcel. Where a "developer treats several legally distinct parcels as a single economic unit, together they may constitute the relevant parcel." *See Forest Props., Inc. v. United States,* 177 F.3d 1360, 1365 (Fed. Cir. 1999) (holding relevant parcel included 53 upland acres and 9 acres of lake bottom where tracts were acquired at different times but "economic reality" was that owner treated the property as single integrated project). Because the Girard parcel and the Clos Pegase parcel are under single ownership and operate as a single unit, the County is not required to approve any development on the Girard property, much less a proposal of the scope and intensity proposed here.

III. Conclusion

For the reasons set forth above, the Tofanelli family requests that the County defer action on the proposed Project until an EIR is prepared that fully complies with CEQA. As described above, there is substantial evidence to indicate that the proposed Project may have a number of significant environmental impacts. Under CEQA, the County must provide an adequate analysis of these adverse effects and include feasible measures to mitigate impacts.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Ellison Folk

Laurel L. Impett, AICP, Urban Planner

Exhibits:

Exhibit 1: Hydrologic Report prepared by Tom Myers, Hydrologic Consultant
Exhibit 2: Yountville Hill Winery's September 2013 Traffic Study
Exhibit 3: List of Winery Projects
Exhibit 4: OSHA Construction-Related Noise Levels

cc: Norma Tofanelli
Vince Tofanelli

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Exhibit 1



Exhibit 1

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Technical Memorandum

Review of Girard Winery Use Permit P14-00053

January 20, 2015

Prepared for:

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Summary

The proposed expansion of pumping for the Girard Winery project could possibly have two potentially significant impacts. First, the pumping could unacceptably lower the groundwater levels because there is not as much recharge in the area as the County assumes. This memorandum considers the river baseflow and suggests that existing recharge estimates may be too high. Pumping could also draw water from the river.

Second, the pumping could affect groundwater flow directions and cause boron and arsenic plumes to expand through a larger portion of the Calistoga area. There are very high concentrations of each contaminant northwest of the project site and along the base of the mountains south of the site. The project pumping, especially if it causes substantial drawdown due to too little recharge, could create a drawdown which pulls contaminants toward the project.

Because of these potentially significant impacts, the project should not be permitted until a much more detailed hydrogeologic study is completed. This would include the completion of a flow and transport model to assess the change in groundwater levels, flow paths, and the extent of the boron and arsenic plumes. If the project goes forward after such a study, the flow and transport model should be used to determine where monitoring is necessary to detect the movement of the plumes.

Introduction

This memorandum reviews the negative declaration for the Girard Winery Use Permit P14-00053 (hereinafter NegDec) and various supporting documents, county studies, and letters, as cited in the reference section or in a footnote. Specifically, this review is of section IX, Hydrology and Water Quality, questions b and f. The review considers whether the project will pump more water than is available, thereby causing a deficit in aquifer volume and the potential for the project to increase pollution in the area under question f.

My experience includes a Ph.D. and M.S. in Hydrology/Hydrogeology from the University of Nevada, Reno, and a B.S. in Civil Engineering from the University of Colorado. I have approximately 20 years of experience consulting and researching hydrogeology, including groundwater modeling and contaminant transport. My curriculum vitae is attached after the reference section.

The project area is on the Napa Valley Floor, Calistoga district (L&S 2013, 2011). Based on the location map, the project is very near a constriction on the valley floor about one mile downvalley from the town of Calistoga (southeast of town). Based on the topographic map, there is a bedrock high just downgradient from the project site. The geology map (L&S 2013) shows this outcrop to be Tst, or tuffs and sediments.

The following sections describe and review questions b and f in detail.

Question b

The statement in the NegDec (p 13) that "recent studies have found that groundwater levels in the Napa Valley Floor exhibit stable long-term trends with shallow depth to water" is incorrect. Figure 4-2 in L&S (2011) shows hydrographs for wells throughout Napa Valley; of relevance to this review is the hydrograph for well 8N/6W-06L4 (129) which shows declining groundwater levels commencing in about 2007 (this hydrograph is reproduced here as Figure 1). Considering that the drought has effectively continued since 2007 through the present, the water level may have continued to decrease. The County should have attempted to obtain a more complete data set for this well.

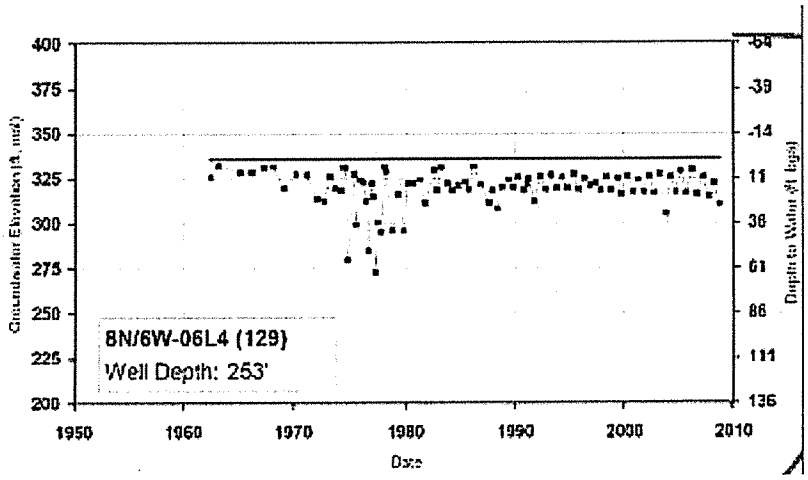


Figure 1: Snapshot of a hydrograph from Figure 4-2 from L&S (2011).

Also, at least four of eleven well hydrographs in the Calistoga area presented in the appendix of L&S (2011) show downward trends in groundwater elevation. In addition to the well cited above (NapaCounty-129), well 08N06W06LL04M decreased from more than 330 ft above mean sea level (AMSL) in the 1960s to near 320 ft amsl around 2008. Well NapaCounty-128 decreased from above 337 ft amsl in the 1960s to about 328 ft amsl in 2008. Well NapaCounty-127 decreased from about 378 in the 1960s to about 365 in 2008. Additionally, well 09N06W31Q001M appears to decrease but the elevations cannot be correct; the hydrograph shows groundwater elevations in the 100s of feet amsl in an area that the ground surface elevation exceeds 300 feet amsl and the depth to water is just two to twelve feet. Also, several well hydrographs have too short a period of record to analyze.

The water level maps in L&S (2011, Figures 4.8 and 4.9) are not sufficiently detailed to compare changes between the 1940s and 2008. Figures 7-1 and 7-2 in L&S (2013) should provide a comparison between 2008 and 2010 but in the Calistoga area appear to be based on different sets of wells so the contours in that area are not comparable.

Additionally, the statement that well levels "recover from dry periods during subsequent wet or normal periods" is not supported by the data shown in the well hydrographs. In fact, several of the wells showed a lack of recovery from the 1970s drought period. The additional statement that wells are "more affected by climatic conditions" is correct based on the seasonal changes shown on the graphs but there is no evidence that the long-term trends are based on climate, except for the drought in the 1970s, but rather based on pumping.

The NegDec also indicates the allotment for the project is 26.53 af/y, based on its area multiplied by the 1 af/y/acre "fair share water use factor" which is also called the allotment for a Napa Valley bottom acre. This allotment is compared with recharge in the area. The average

recharge for the Napa River near Calistoga watershed is 10,500 af/y (L&S 2013)[1], although this is based on the 1975 through 1983 period which includes very dry and very wet years (Figure 2). The recharge averages 19% of precipitation, but that should probably not be considered an annual value but only applied to the overall average. The gage is USGS gage #11455900 and the drainage area is 21.9 square miles. Distributing the entire recharge estimate of 10,500 af/y over the area above the gage yields an average recharge of 0.75 ft/y, which is less than the allotment. However, L&S (2013) notes that recharge varies by surface geology type; their Table 8-10 suggests that only 5867 acres or 42% of the total basin will accept recharge. If that is correct, the recharge is about 1.79 ft/y and the allotment value is conservative.

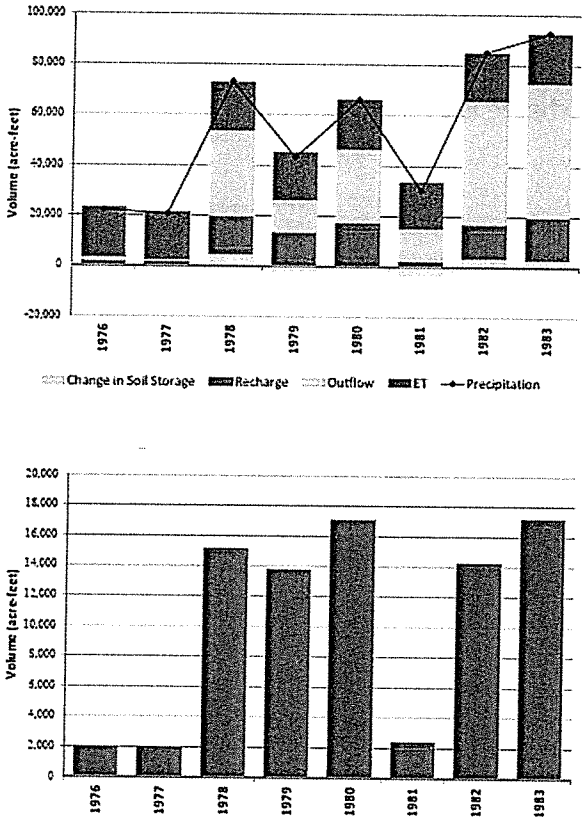


Figure 8-7. Annual Results for Napa River near Calistoga Watershed

Figure 2: Snapshot of Figure 8-7 from L&S (2013) showing the annual water balance (top) and recharge (bottom) for the Napa River near Calistoga watershed.

Recharge for the watershed above the Napa River at Calistoga gage may however be overestimated. The hydrograph for the gage is shown in Figure 3. Average flow is 32.5 cfs or

[1] Reviewing the development of this recharge value is beyond the scope of this review.

23,556 af/y, so the estimated recharge, 14 cfs, equals 44% of the average flow. Recharge is commonly considered to equal baseflow in a river, because groundwater discharge supports a river during baseflow (Cherkauer 2004, Scanlon et al. 2002). For much of the period of record the flow for months is below 0.1 cfs (Figure 3); when the flow is that low it is without doubt baseflow especially since these low flows primarily occur during summer and early fall when there has not been substantial rainfall for months. During 1977, the highest flow was 9.9 cfs (Figure 3) or lower than the estimated recharge for the basin. Observed streamflow is often below the recharge average which indicates that the watershed had dried substantially since the previous significant recharge period; the basin is draining and the gradient for flow entering the river is decreasing as is the discharge to the river. However, even during the driest year with a peak flow of 9.9 cfs, it is likely that some flow is runoff. In summary, because of the wide range in flows at this gage and that very high flows control the average and likely the calculated recharge, it is likely that recharge is overestimated.

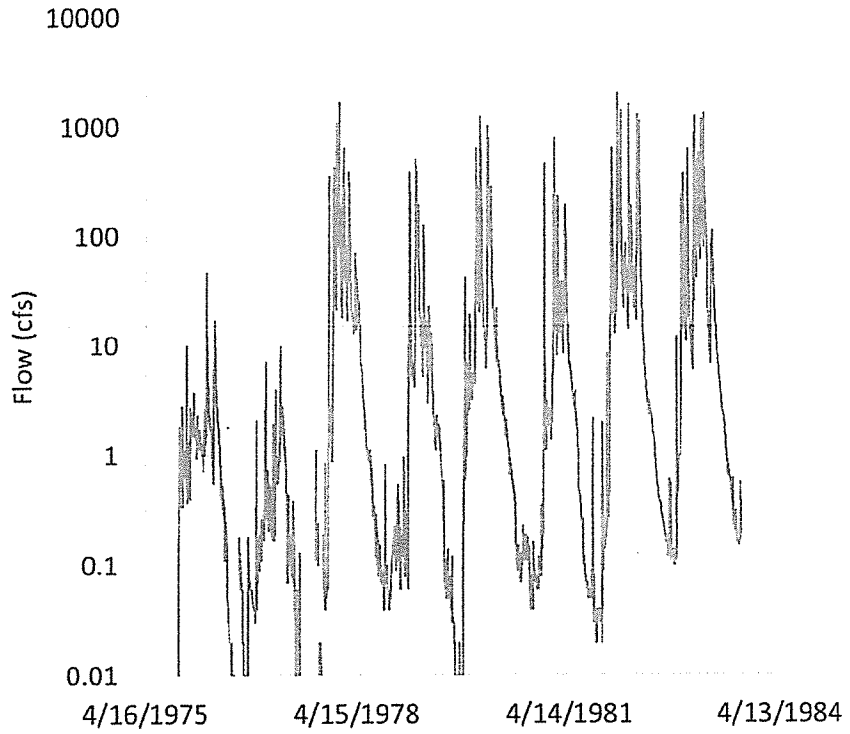


Figure 3: Hydrograph for Napa River at Calistoga gage # 11455900

Because recharge is likely overestimated, it is possible that the allotment of 1 af/y/acre is too high and that pumping at that rate, or even at a fraction of that rate, will draw down the groundwater table. Drawdown occurs when the pumping rate exceeds the rate recharge is replenishing the water table. Also, drawdown will eventually change the flow gradient for discharge to the Napa River and pumping will affect the river.

The groundwater level is above the thalweg[2] of the river through most of the Calistoga section of the valley based on measurements during spring 2010 (Figure 7-8 in L&S 2013). During spring, groundwater levels are at their seasonal highest and the groundwater is likely to discharge to the river. It is not possible to say with certainty that it does, however, because river water level is above the thalweg and the gradient for flow depends on the difference between groundwater and river water level. At times the river flow is very low, the water level would be only a few inches deep, so the approximation is that the locations on Figure 7-8 where the groundwater level exceeds the thalweg are likely locations where the groundwater discharges to the river. However, drawdown of wells, especially near the river, equaling just a few feet could reverse the flow. The effect of pumping on groundwater levels near the river is a cumulative effect based on all of the wells in the area, but it is certain that pumping this project will either prevent groundwater from discharging into the river or at worst will cause river water to enter the aquifer.

The applicant reports that the well that will provide water for the project, currently serving the Clos Pegase Winery, has a yield of 23 gallons per minute (gpm) but has been fitted with a pump that will provide 18 gpm, or 9,460,800 gallons per year if operated full time[3], which is 29 af/y. Presumably, this well is the log attached to the revised permit application[4]. This log shows the well to be 220 feet deep, screened from 80 to 220 feet, in clay or grey ash. It shows an air lift well test with 30 gpm discharge for 3 hours caused drawdown from 25 to 200 feet. This is a significant drawdown and there is no indication whether the well had reached an equilibrium after the three hours. Clay and grey ash do not likely have a high conductivity. Faye (1973) shows the alluvium has conductivity (K) from 30 to 50 ft/d and less than 100 feet thick. Faye's K value seems high based on the description provided on the well log.

There are too many unknown variables for detailed modeling of potential drawdown, but standard Theis computations (Fetter 2001) for a confined aquifer can be completed to consider the order of magnitude of potential drawdown. Treating the aquifer as confined is preferable based on the low conductivity clay in the upper part of the log. Figures 4 through 7 show drawdown with time for pumping 22, 18, 10, and 5 gpm at a radius of 1, 100, 1000, and 10,000 ft to demonstrate drawdown what could occur for continuous pumping. Radius equal to 1 approximates the drawdown at the pumping well and the analysis assumes the pumping is continuous. The transmissivity is 3000 ft^2/d, based on Faye (1973) and storage coefficient of

[2] The thalweg is the lowest point of a river's cross-section. A line drawn along this point is the plan of the thalweg and the elevation is the profilt.

[3] Letter from Robert Osborn, Ben Monroe, Always Engineering, to Stacey Harrington, Napa County Planning, Building and Environmental Services, Project: Girard Wintery – New Winery and Tasting Room Use Permit. February 21, 2014. P 2.

[4] Letter from Always Engineering, to John McDowell, Deputy Planning Direct, Project: Girard Winery Use Permit Application, Revised November 25, 2014.

0.0001. A sensitivity analysis of storage coefficient suggested that an increase to 0.0008 would decrease the drawdown by about 20 feet.

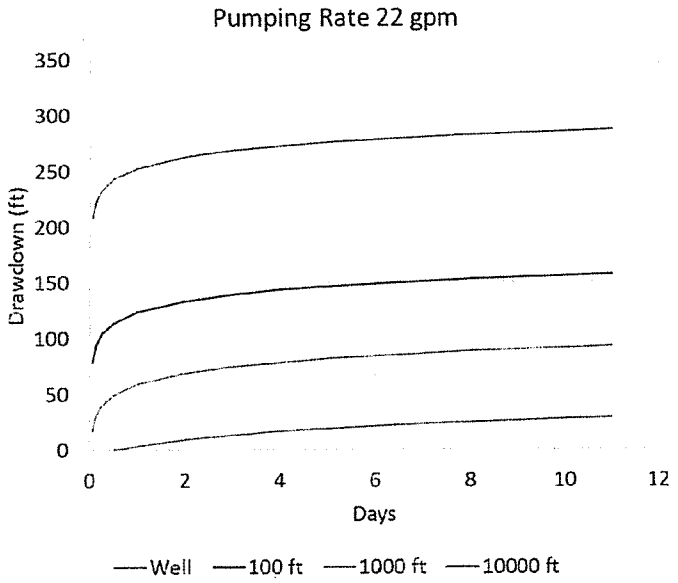


Figure 4: Drawdown for a well pumping 22 gpm in a confined aquifer for S=0.0001 and T=3000 ft2/d at specified radii.

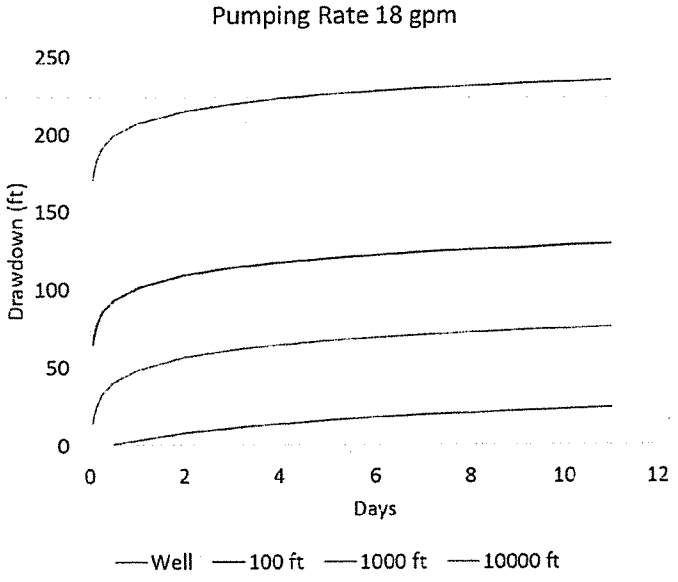


Figure 5: Drawdown for a well pumping 18 gpm in a confined aquifer for S=0.0001 and T=3000 ft2/d at specified radii.

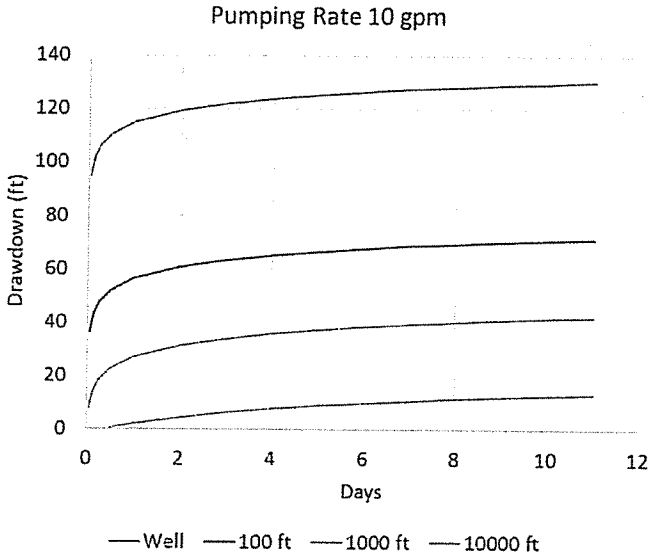


Figure 6: Drawdown for a well pumping 10 gpm in a confined aquifer for S=0.0001 and T=3000 ft2/d at specified radii.

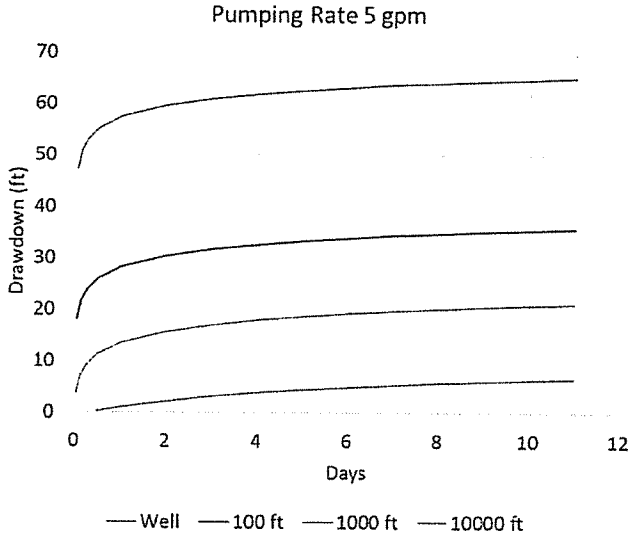


Figure 7: Drawdown for a well pumping 5 gpm in a confined aquifer for S=0.0001 and T=3000 ft2/d at specified radii.

It is doubtful that this well could actually pump at 18 gpm and yield 29 af/y without going dry. The drawdown shown on the well log, if maintained for a significant period, would likely cause substantial drawdown at the neighbors' wells. The results of this simplified analytical modeling are similar to those observed in the pump test; after three hours pumping at 22 gpm the simulated drawdown at the well was over 200 feet. This justifies the confined aquifer assumption.

Figures 4 and 5 indicate that drawdown at the well will exceed the distance from the water table to the bottom of the screen for pumping at 22 or 18 gpm. At 10 and 5 gpm, the drawdown at the well remains within the screen for the simulation period. Based on these simple hydraulic calculations, it does not appear that the well can pump at 22 or 18 gpm continuously without going dry. Also, at 22 gpm and 1000 and 10,000 feet, the drawdown would approach 100 feet and 25 feet (Figure 4) which would certainly affect nearby neighbors more than should be considered reasonable. Drawdown is progressively decreased as pumping rate decreases and the radius to the point of interest increases. However, even pumping at 10 and 5 gpm will impact neighboring wells; at 1000 and 10,000 feet from the well, the calculations suggest that pumping 10 gpm will cause drawdown to exceed 40 and 15 feet at 1000 and 10,000 feet, respectively, and for pumping 5 gpm, drawdown could exceed 20 and 8 feet at 1000 and 10,000 feet, respectively. Pumping from the proposed well for long-term periods at rates projected for the combined projects will cause significant drawdown at neighboring wells up to at least 10,000 feet away. The County should require a much more extensive pump test with monitoring of neighboring wells prior to granting this permit.

In summary, the NegDec's conclusion that the project will have "less than significant impact" is wrong because the pumping may exceed the rate that groundwater is replenished, based on the potential that recharge is less than the allotment. This would cause the groundwater table to be depleted and water to be drawn from the river. These impacts would be "potentially significant". The well proposed to be used may also cause sufficient drawdown to affect the neighbors' wells more than would be considered reasonable, which could also be a "potentially significant impact".

Question f

The NegDec declares the project will have a "less than significant" impact on water quality, but this is incorrect. The primary reason for this is that the project pumping will draw contaminated water from the northwest in the Calistoga area. The primary contamination is very high boron and arsenic concentrations, as seen on Figures 4 and 5, reproduced from L&S (2011). Most boron is due to relatively shallow geothermal water being drawn into the alluvial aquifers (L&S 2011, Faye 1973). The project site is at about the number 120 just southeast of Calistoga on Figure 4. The number 120 is a concentration in ug/l, which is much less than critical values for boron[5]. However, just northwest of the project site the boron concentrations are much higher, as much as 14,000 ug/l, or almost five times the health advisory level of 3 mg/l. Arsenic concentrations range from 40 to 85 ug/l in the same area which are four to eight

[5] Boron has no MCL, but there is a health advisory for 3 mg/l (http://water.epa.gov/action/advisories/drinking/upload/dwstandards2012.pdf) and California sets a "notification level" at 1000 ug/l (U&S 2011).

and a half times the MCL[6]. One arsenic observation just south of the project site is 75 ug/l. L&S (2011, Table 4-2) summarizes groundwater water quality showing that chloride, specific conductance, nitrate and total dissolved solids (TDS) also occasionally exceed standards in the Calistoga area.

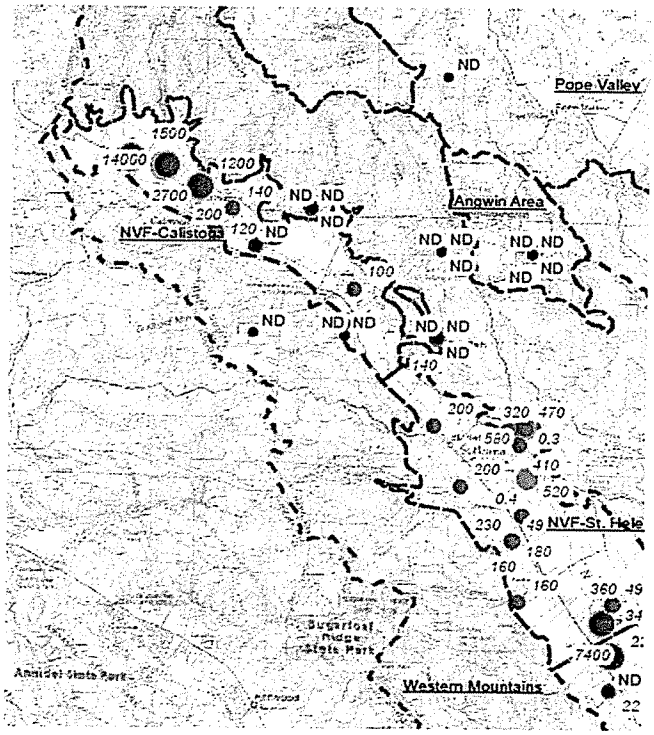


Figure 8: Snapshot of L&S (2011) Figure 4.19 showing groundwater boron concentrations in ug/l. The figure shows the northwest end of Napa Valley.

[6] The MCL for arsenic is 10 ug/l.

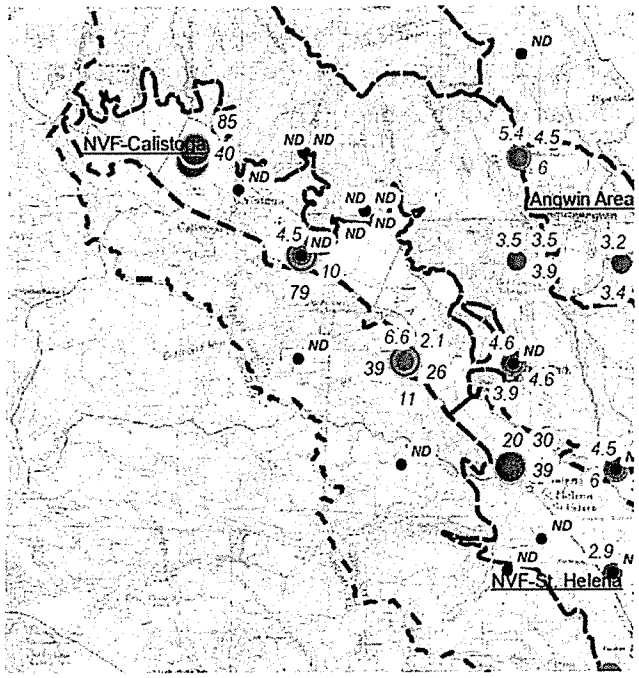


Figure 9: Snapshot of L&S (2011) Figure 4.18 showing groundwater arsenic concentrations in ug/l. The figure shows the northwest end of Napa Valley.

The higher concentrations all occur in or northwest of Calistoga or along the base of the mountains (L&S 2011). The reports do not discuss the cause of the higher values. Those of arsenic and boron are of the most significant concern.

Cumulative pumping in the Calistoga area controls the flow directions in the area. Additional pumping downgradient of the high concentrations, in what appears to be both an arsenic and boron plume, will draw the contaminants further into Calistoga and beyond to the southeast. Additionally, pumping in surface aquifers which increases the gradient from depth to more shallow aquifers may draw boron or metals from geothermal water into shallow waters, thereby increasing the boron concentration. Because of these potentials, the proposed pumping could increase the potential for water pollution to spread and cause a "potentially significant impact", contrary to the conclusion in the NegDec.

Conclusion and Recommendations

The proposed expansion of pumping for the Girard Winery could have two potentially significant impacts. First, the pumping could unacceptably lower the groundwater levels because there is not as much recharge in the area as the County assumes. This could also draw water from the river. Second, the pumping could affect groundwater flow directions and cause boron and arsenic plumes to expand through a larger portion of the Calistoga area.

Because of these potentially significant impacts, the project should not be permitted until a much more detailed hydrogeologic study is completed. This would include the completion of a flow and transport model to assess the change in groundwater levels, flow paths, and the extent of the boron and arsenic plumes. If the project goes forward after such a study, the flow and transport model should be used to determine where monitoring is necessary to detect the movement of the plumes.

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Curriculum Vitae

Objective: To provide diverse research and consulting services to nonprofit, government, legal and industry clients focusing on hydrogeology specializing in mine dewatering, contaminant transport, natural gas development, groundwater modeling, NEPA analysis, federal and state regulatory review, and fluvial morphology.

Education

Years	Degree	University
1992-96	Ph.D. Hydrology/Hydrogeology	University of Nevada, Reno Dissertation: Stochastic Structure of Rangeland Streams
1990-92		University of Arizona, Tucson AZ Classes in pursuit of Ph.D. in Hydrology.
1988-90	M.S. Hydrology/Hydrogeology	University of Nevada, Reno Thesis: Stream Morphology, Stability and Habitat in Northern Nevada
1981-83		University of Colorado, Denver, CO Graduate level water resources engineering classes.
1977-81	B.S., Civil Engineering	University of Colorado, Boulder, CO

Professional Experience

Years	Position	Duties
1993-Pr.	Hydrologic Consultant	Completion of hydrogeology studies and testimony focusing on mine dewatering, groundwater modeling, natural gas development, contaminant transport, NEPA review, and water rights for nonprofit groups and government agencies.
1999-2004	Great Basin Mine Watch, Exec Director	Responsible for reviewing and commenting on mining projects with a focus on groundwater and surface water resources, preparing appeals and litigation, organizational development and personnel management.
1992-1997	Univ of NV, Reno, Res. Assoc.	Research on riparian area and watershed management including stream morphology, aquatic habitat, cattle grazing and low-flow and flood hydrology.
1990-1992	U of AZ, Res. and Teach. Assistant	Research on rainfall/runoff processes and climate models. Taught lab sections for sophomore level "Principles of Hydrology". Received 1992 Outstanding Graduate Teaching Assistant Award in the College of Engineering
1988-1990	U of NV, Reno Res. Asst	Research on aquatic habitat, stream morphology and livestock management.
1983-1988	US Bureau of Reclamation Hydraulic Eng.	Performed hydrology planning studies on topics including floodplains, water supply, flood control, salt balance, irrigation efficiencies, sediment transport, rainfall-runoff modeling and groundwater balances.

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Special Coursework

Years	Course	Sponsor
2011	Hydraulic Fracturing of the Marcellus Shale	National Groundwater Association
2008	Fractured Rock Analysis	MidWest Geoscience
2005	Groundwater Sampling Field Course	Nielson Environmental Field School
2004	Environmental Forensics	National Groundwater Association
2004 and -5	Groundwater and Environmental Law	National Groundwater Association

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Exhibit 2



Exhibit 2

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ENGINEERS · PLANNERS

September 19, 2013

Mr. Eric Sklar
CS2 Wines, LLC
P.O. Box 47
Oakville, CA 94562

Subject: ***Focused Traffic Analysis for the Proposed Yountville Hill Winery - Located at 7400 St. Helena Highway (SR-29) in Napa County***

Dear Mr. Sklar:

This report provides a focused traffic analysis for the proposed Yountville Hill Winery project located at 7400 St. Helena Highway in Napa County (see Figure 1 for Project Vicinity Map). This study reflects our discussions with County Planning staff regarding the project analysis approach and other adjacent approved/pending projects in the study area. In addition, the analysis will build on previous work conducted by George W. Nickelson, P.E. with regard to winery access to/from State Route 29 and driveway access. Some of the key issues evaluated in this study include the following:

- Existing and future weekday PM and weekend mid-day peak hour operations at the Yountville Hill Winery Project Driveway intersection with State Route 29;
- Near-term (Year 2015) traffic conditions reflecting other approved/pending projects in the study area;
- Project trip generation from proposed winery production, employment, and/or visitors;
- Project site circulation and vehicle access at State Route 29 project driveways and truck circulation;
- Cumulative year 2030 (no project) conditions along State Route 29 based on the Napa County General Plan Update EIR.

The following sections outline existing and future traffic conditions with and without the proposed Yountville Hill Winery project. Where necessary, measures have been recommended to ensure acceptable traffic flow, circulation, and/or fair share contribution to regional cumulative traffic improvements along State Route 29. I trust that this report responds to your needs. Please review this information and call me with any questions or comments.

Sincerely,

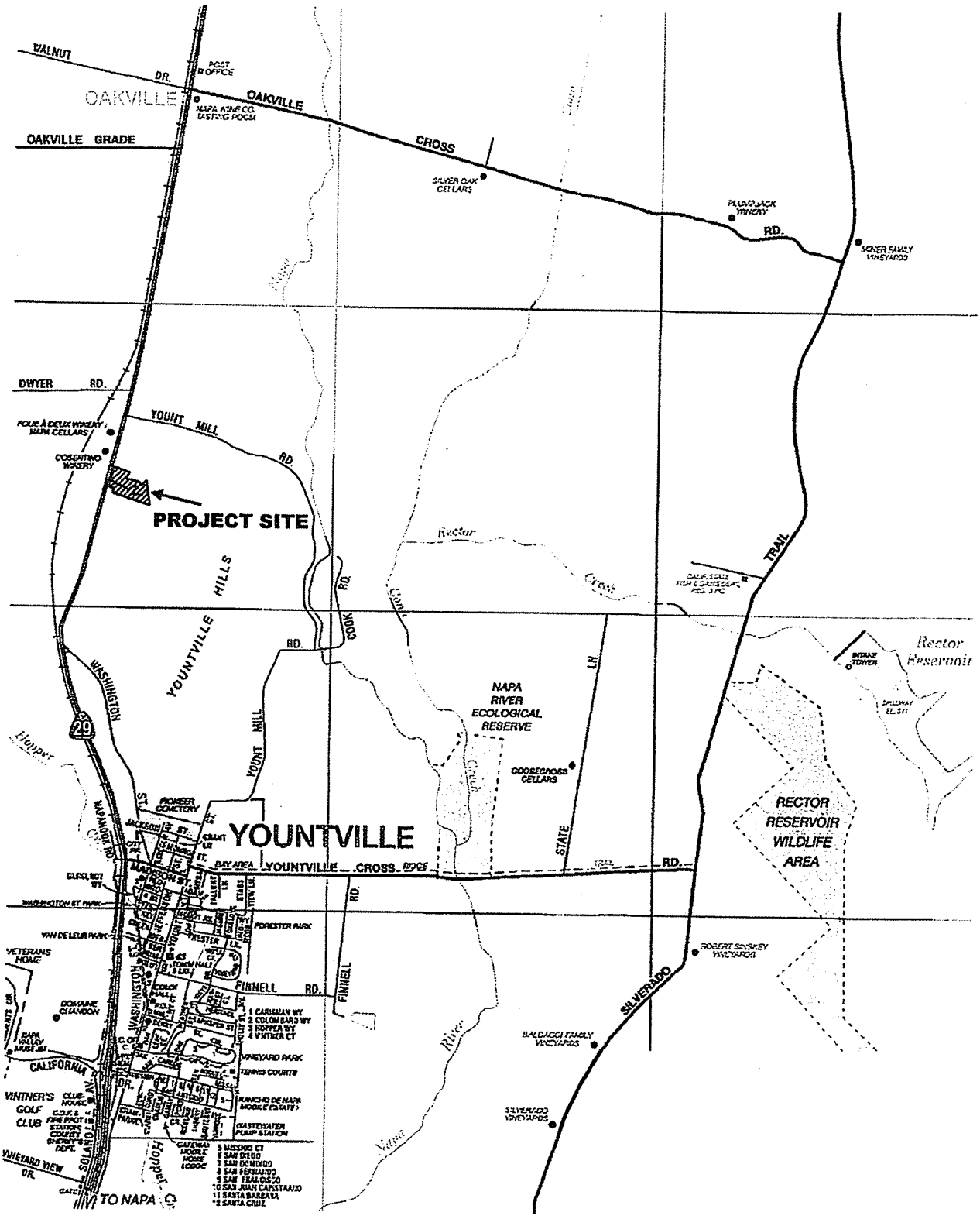
Peter J. Galloway

Peter J. Galloway, Transportation Planner
OMNI-MEANS, Ltd. Engineers & Planners

Cc: Mr. Lester Hardy, Attorney
Mr. George W. Nickelson, P.E.

Attachments: Appendices

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Project Vicinity Map

North

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figure 1

1. EXISTING TRAFFIC CONDITIONS

Roadways

The proposed Yountville Hill Winery project is located at 7400 State Route 29 (SR-29 or St. Helena Highway) on the northeast side of the highway. It is noted that SR-29 is primarily a north-south facility through the Napa Valley. However, SR-29 extends in a northwest-southeast direction immediately adjacent to the project site. A brief description of each roadway follows:

State Route 29 extends in a northwest-southeast direction between Yountville and Oakville in the project study area. Classified as a two-lane rural arterial roadway, SR-29 provides access northwest to Oakville, Rutherford, St. Helena, and Calistoga as well as southeast to Napa and American Canyon. In the immediate project site area SR-29 functions as a two-lane rural arterial road with two 12-foot travel lanes, a 12-foot two-way-left-turn-lane (TWLTL), and wide 8-10 foot shoulders (striped each side) at the project driveway intersection. The speed limit on SR-29 is 55 mph.

Yountville Hill Winery Driveway (existing configuration) extends east from SR-29 to provide access to the winery grounds and other parcels located in the project vicinity. The current driveway is paved with an 11-12 foot width and extends to an electronic access gate situated approximately 105 feet east of highway. Past the gate, the driveway continues east extending up a hill to an existing (former) Bed and Breakfast building. The driveway circles the building to create a one-way loop road that allows visitors to return via the same route. Prior to extending up the hill to the B&B building, a second driveway extends north approximately 360 feet to provide access to an existing residence.

Existing Roadway/Intersection Volumes

SR-29 acts as the primary north-south regional route through the Napa Valley and provides direct access to the project site. Based on the most recent Caltrans daily traffic counts conducted along SR-29 (south of Oakville Grade Road), SR-29 has a current annual average daily traffic volume of 22,800 vehicles.[1] During the peak month, the roadway carries 24,800 ADT. Based on Napa County roadway segment level-of-service (LOS) thresholds, these volumes are approaching the roadway capacity and represent LOS F conditions for a two-lane rural arterial roadway.[2] This would certainly be true of the peak month season (which typically occurs during the summer-fall season), and can result in southbound congestion approaching Yountville. As this heavy southbound flow approaches the traffic signal at Madison Avenue, vehicle queues can extend back towards the project area. Field observations made during peak weekday/weekend data collection at the SR-29/Project Driveway indicate relatively stable-flow conditions in both directions with occasional platoons/congestion in the southbound direction approaching Yountville.

As a part of this study, intersection turning movement counts were conducted on SR-29 at the proposed winery's access driveway during a weekday PM peak commute period (4-6 PM) and the Saturday afternoon peak period (1-3 PM).[3] (Winery visitor activity is expected to be highest during a Saturday afternoon). From these peak period counts, the "peak hour" of traffic flow was derived to calculate existing vehicle delay. These counts indicate a weekday PM peak hour flow of 1,755 vehicles and a Saturday afternoon peak hour

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[1] *Caltrans, 2012 Traffic Volumes Book, State Route 29 average annual daily traffic (AADT) and peak month average daily traffic (ADT).*
[2] *Napa County Baseline Data Report, Table 11-1; Napa County Roadway Segment Daily LOS Volume Thresholds, Transportation and Circulation, November 2005.*
[3] *Omni-Means Engineers & Planners, Weekday PM peak period (4:00-6:00 p.m.) and weekend mid-day peak period (1:00-3:00 p.m.) intersection turning movement counts, SR-29/Project Driveway, July 13 & 17, 2013.*

flow of 1,675 vehicles. The counted peak hour volumes are somewhat lower than the expected typical day peak hour flow based on Caltrans data. To simulate "typical" peak conditions as indicated by Caltrans data, the volumes counted as a part of this analysis were increased by 16.5% These volumes reflect a two-way SR 29 operation that would be categorized as in the Level of Service (LOS) "E" range. Based on Caltrans count data, the peak hour volumes would be about 9% of the daily total or about 2,050 peak hour vehicles on a typical day.

It is noted that construction for the undergrounding of utilities is occurring along segments of SR-29 northwest of the project site. Based on the Caltrans website, this construction work is currently taking place between Mee Lane and Sulphur Springs Road on SR-29 and can require lane closures, flagmen, and cause moderate to severe traffic delays. With the project site being located south of the construction area, overall vehicle flow on SR-29 was not significantly affected.

Existing weekday PM peak hour and weekend mid-day peak hour intersection volumes have been shown in Figure 2.

Project Driveway/Access Operations

At the Yountville Hill Winery site access intersection, SR-29 has two travel lanes, paved shoulders and a standard two-way-left-turn-lane (TWLTL). Just to the north of the project driveway, the TWLTL provides access to the Mustard's Grill restaurant driveway on the west side of SR-29. The distance between the north side of the project site driveway and the south side of the Mustard's Grill driveway is about 40-45 feet. Both driveways share the existing TWLTL on SR-29 that allows motorists to make left-turn movements into the driveways without interrupting through-traffic flow on the highway. This same TWLTL allows outbound motorists from the same driveways refuge on SR-29 when making a left-turn movement and merging into through-traffic. This is noted because all outbound traffic from both the proposed project driveway and Mustards Restaurant driveway must yield the right-of-way to any vehicle in the TWLTL.

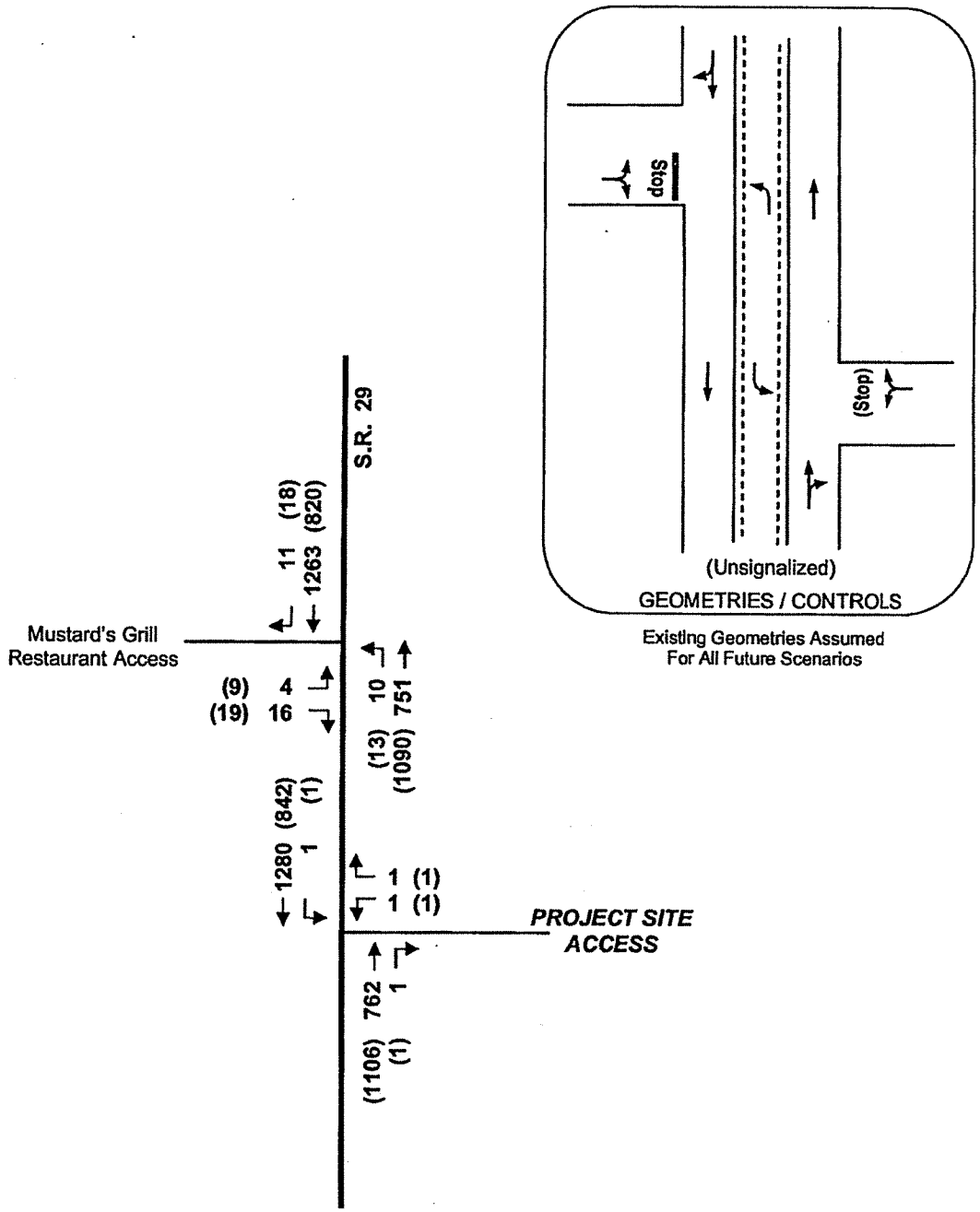
The Yountville Hill Winery project site currently has a 4-room inn (not in operation) and an off-site residence that gains access via the site driveway. The existing residence traffic activity is very low. During this study's peak period counts, only two vehicle trips in/out of the driveway occurred during the weekday PM and weekend mid-day peak hour (representing the single family dwelling). However, to provide an existing baseline for analysis, trips that would be generated by a 4-room inn were calculated and added to the driveway.[4]

Existing Intersection Operation

Intersection operation is one of the primary factors in evaluating the carrying capacity of a roadway network. Traffic conditions are measured by Level of Service (LOS), which applies a letter ranking to successive levels of intersection performance. LOS 'A' represents optimum conditions with free-flow travel and no congestion. LOS 'F' represents severe congestion with long delays at the approaches. For intersections with minor street stop control, the LOS reflects the delays experienced by the minor street approach. (LOS definitions and calculation worksheets are provided in the Appendix).

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[4] *Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition, Resort Hotel (#330), Based on 0.37 trips/room (= 2 peak hour trips) during both weekday PM and weekend mid-day peak hour, 2012.*



Existing Weekday P.M. and (Weekend Mid-day)
Peak Hour Volumes

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figure 2

The project study intersection at SR-29 is an unsignalized, minor-street stop-sign controlled intersection. Based on the Highway Capacity Manual (*HCM 2010*) operations methodology for unsignalized intersections, existing weekday PM peak and weekend mid-day peak hour existing (no project) level-of-service has been shown in Table 1. As calculated, during the weekday PM peak hour the Yountville Hill Project Driveway/SR-29 intersection is operating at LOS C (17.9 seconds delay) for the stop-sign controlled outbound turning movements onto SR-29. During the weekend (Saturday) mid-day peak hour, the same outbound turning movements are operating at LOS C (19.8 seconds of delay).

TABLE 1
EXISTING AND NEAR-TERM (NO PROJECT) CONDITIONS: INTERSECTION LEVELS-OF-SERVICE WEEKDAY PM PEAK AND WEEKEND MID-DAY PEAK HOUR

			Wkdy. PM LOS/Delay		Wknd. Mid-Day LOS/Delay	
#	Intersection	Control Type	Existing (No Project)	Near-Term (No Project)	Existing (No Project)	Near-Term (No Project)
1	Yountville Hill Driveway/SR-29	Stop	C 17.9 secs.	C 19.7 secs.	C 19.8 secs.	C 22.0 secs.

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (unsignalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

Based on the California Manual on Uniform Traffic Control Devices (CAMUTCD) peak hour signal warrant criteria, the Yountville Hill Project Driveway/SR-29 intersection was evaluated for signalization.[5] The peak hour warrants are one of several standards to help determine if installation of a traffic signal is appropriate. Qualifying for signalization using the peak hour warrants does not necessarily mean a signal should be installed. The Yountville Hill Project Driveway/SR-29 intersection does not qualify for signalization under the peak hour warrants using existing volumes (the warrant graphs are provided in the Appendix).

Vehicle Speeds/Sight Distance

The primary issues for access design are the vehicle visibility and operation relative to vehicles traveling on SR 29 and vehicles turning in/out of the winery access. The required vehicle visibility or "corner sight distance" is a function of the travel speeds on SR-29. Caltrans design standards indicate that for appropriate corner sight distance, "a substantially clear line of sight should be maintained between the driver of a vehicle waiting at the cross road and the driver of an approaching vehicle in the right lane of the main highway."[6] Based on radar surveys conducted as a part of this study, the "critical" vehicle speeds (85% of all surveyed vehicles travel at or below the critical speed) along SR-29 at the proposed project driveway were observed to be approximately 49-54 miles per hour (mph) during the weekday PM peak period and the Saturday afternoon peak period. Based on Caltrans design standards, these vehicle speeds require a sight distance of about 450-500 feet, measured along the travel lanes on SR-29.[7]

The proposed Yountville Hill winery project driveway intersection is located on a straight section of SR-29. Field observations indicate sight distances to the north and south are well in excess of the 500 feet needed for the measured vehicle speeds. However, there is an existing shrub/low tree situated on the north side of project driveway that blocks sight distance to the north. This shrub would have to be removed if/when project approval is granted.

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[5] *California Manual on Uniform Traffic Control Devices (CAMUTCD), Chapter 4C, Peak hour signal warrant (#3), 2012.*
[6] *Caltrans, Highway Design Manual, Sixth Edition, July 1, 20009.*
[7] *George W. Nickelson, P.E., Radar speed surveys on State Route 29 at Yountville Hill Winery driveway(s), October 30 and November 5, 2009.*

2. NEAR-TERM (NO PROJECT) CONDITIONS

Near-Term (Approved/Pending Projects)

Near-term (no project) conditions represent a reasonable period of time in which the proposed project could be approved and/or constructed. Based on discussions with County staff, a two-year period to the year 2015 has been established for near-term (no project) conditions representing all approved/pending projects within the study area. In addition, recent approved/pending projects within the Town of Yountville are included in the overall project list. To generate near-term (no project) conditions, approved and pending projects provided by both Napa County and Town of Yountville Planning staff for other recent traffic analyses in the area have been used.[8] [9] To the best of our knowledge, these approved/pending projects are either new wineries or existing wineries applying for use permit modifications to increase production, employees, visitors, and/or marketing events. These projects are located both north and south of the project site off of State Route 29, in the City of St. Helena, or east of the project site off northern crossroad(s) that connect SR-29 with Silverado Trail and are described as follows:

Town of Yountville

Stewart Mixed-Use 6572 Washington St. Yountville, CA 94599	Wine Tasting Rm.: 2,350 square feet Bookstore: 1,420 square feet Café: 690 square feet Apartment: One Bedroom

City of St. Helena:

Crocker & Starr Winery 700 Dowdell Lane St. Helena, CA 94574	Production: 25,000 gallons per year Visitors: 16 visitors/day Employees: 7 full-time, 3 part-time

Napa County:

Raymond Winery 849 Zinfandel Lane St. Helena, CA 94575	Production: 1,500,000 gallons per year Visitors: 500 visitors/day Employees: 90 full-time
Kelham Winery 360 Zinfandel Lane St. Helena, CA 94575	Production: 75,000 gallons per year Visitors: 140 visitors/week Employees: 6 full-time
The Ranch Winery 105 Zinfandel Lane St. Helena, CA 94575	Production: 12,500,000 gallons per year Visitors: 15 visitors/week Employees: 85 full-time
Del Dotto Family Winery 1455 St. Helena Hwy. St. Helena, CA 94575	Production: 48,000 gallons per year Visitors: 15 visitors/week Employees: 5 full-time

8 Mr. Greg Desmond, Interim Planning Director, City of St. Helena, Personal communication; Crocker & Starr Winery project, April 12, 2013.
9 Ms. Linda St. Clair, Planner III, Planning, Building, and Environmental Services Department, Personal communication, Yountville Hill Winery Use Permit Modification (dated 6-6-12), April 15, 2013.

Whitehall Lane Winery 1563 St. Helena Hwy. St. Helena, CA 94575	Production: 50,000 gallons Visitors: 500 visitors/week Employees: 5 full-time
The Sullivan Family Estate 1090 Galleron Road St. Helena, CA 94575	Production: 22,500 gallons per year Visitors: 7 visitors/week Employees: 4 full-time
Franciscan Winery 1178 Galleron Road St. Helena, CA 94575	Production: 1,200,000 gallons per year Visitors: 3,500 visitors/week Employees: 65 full-time
Flynnville Winery 1184 Maple Lane Calistoga, CA 94515	Production: 300,000 gallons per year Visitors: 500 visitors/day Employees: 30 full-time
Martini Winery 254 St. Helena Hwy. St. Helena, CA 94575	Production: 2,000,000 gallons per year Visitors: 1,400 visitors (+296 trade visitors)/week Employees: 54 full-time
Sinegal Estate Winery 2125 Inglewood Ave. St. Helena, CA 94575	Production: 60,000 gallons per year Visitors: 21 visitors/week Employees: 3 full-time

Near-Term (No Project) Trip Generation

Near-term (approved/pending) projects' weekday PM hour, weekend mid-day peak hour, and daily traffic volumes have been taken directly from previous transportation analyses performed for those projects and these include the following:

- *Omni-Means Engineers & Planners, Updated Traffic Study for the Proposed Raymond Winery Use Permit Application (#P11-00156), Napa County, Draft Report, April 5, 2013;*
- *Omni-Means Engineers & Planners, Focused Trip Generation Analysis for the Proposed Crocker & Starr Winery Project at 700 Dowdell Lane (APN 009-120-059), City of St. Helena, Draft Report, April 12, 2013;*
- *Omni-Means Engineers & Planners, Focused Traffic Analysis for the Proposed Flynnville Winery Project, Located at State Route 29/Maple Lane in Napa County, January 15, 2013:*
- *Omni-Means Engineers & Planners, Updated Focused Traffic Analysis for the Proposed Louis M. Martini Winery Master Plan—Located at 254 St. Helena Highway (SR-29) in St. Helena (Napa County), May 16, 2013.*

For all approved/pending winery projects, daily and peak hour trip generation was calculated using employee peaking factors, auto occupancy rates for visitors, and production ratios based on recent winery research conducted by the Napa County Conservation, Development, and Planning Department. For approved development in the Town of Yountville, peak hour trip generation was based on the Institute of Transportation Engineers (ITE) trip research for specialty retail and residential uses.[10] Near-term projects would generate 202 weekday PM peak hour trips and 206 mid-day weekend peak hour trips on

[10] Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition, Specialty Retail (#826) and Apartment (#210) uses, 2012.

SR-29 adjacent to the Yountville Hill Winery. On a daily basis, near-term projects would generate 845 ADT and 828 ADT on a weekday and weekend, respectively.

Near-term (no project) daily and peak hour volumes for the weekday and weekend have been added to existing intersection volumes on State Route 29 based on previous transportation analyses conducted in the area. Near-term (no project) volumes for weekday PM peak hour and weekend mid-day peak hour have been shown in Figure 3.

Near-Term (No Project) Intersection/Roadway Operation

With near-term (no project) volumes, study intersection LOS has been calculated and is shown in Table 1. During the weekday PM peak hour, the Yountville Hill Winery Driveway/SR-29 intersection would be operating at LOS C (19.7 seconds). LOS operation during the mid-day weekend peak would be similar at LOS C (22.0 seconds). Near-term (no project) intersection LOS would represent minor increases in vehicle delay for outbound traffic from the Yountville Hill winery driveway of 2-3 seconds (all referenced intersection LOS refers to the stop-sign controlled outbound turning movements from the project driveway).

Based on CAMUTCD peak hour signal warrant criteria (Warrant #3), the Yountville Hill Winery Driveway/SR-29 intersection would not qualify for signalization with near-term (no project) volumes.

AADT volumes on SR-29 would increase from 22,800 to 23,645 vehicle under near-term (no project) conditions. Based on Napa County roadway thresholds, this would continue to represent LOS F conditions as under existing conditions.

3. NAPA COUNTY SIGNIFICANCE CRITERIA

The County of Napa's significance criteria has been based on a review of the Napa County Transportation and Planning Agency and Napa County General Plan documentation on roadway and intersection operations. Specifically, the Circulation Element of the County's General Plan outlines the following significance criteria specific to intersection operation:

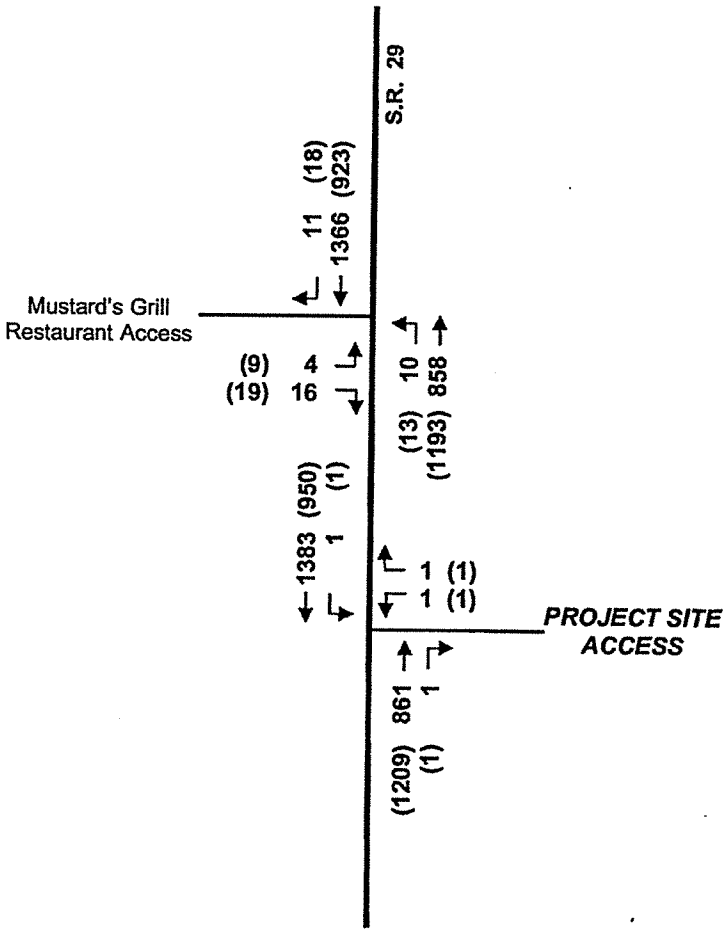
Intersections

- 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.

Further significance criteria are based on County and CEQA guidelines and apply mainly to intersection operation and access. A significant impact occurs if project traffic would result in the following:

- Cause an increase in traffic which is substantial in relation to existing traffic load and capacity of the street system (i.e. result in a substantial increase in either the number of vehicle trips, the volume capacity ratio on roads, or congestion at intersections);
- Exceed either individually or cumulatively, an LOS standard established by the county congestion management agency for designated roads or highways;
- Result in a change of traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;





NOT TO SCALE

Near Term Approved/Pending Development
Weekday P.M. and (Weekend Mid-day) Peak Hour Volumes

North

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figure 3

- Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);
- Result in inadequate emergency vehicle access;
- Project site or internal circulation on the site is not adequate to accommodate pedestrians and bicycles;

4. PROPOSED PROJECT IMPACTS

Project Components

The proposed Yountville Hill winery project would consist of wine production, full-time employees, visitation tours/tasting, and marketing events throughout the year. The project applicant's use permit application indicates there would be no part-time employees (except during Crush). Full-time employees would either work a weekday shift and/or combination of weekday/weekend shift. Proposed project components can be described as follows: [11]

• Production	Annual:	100,000 gallons
• Employees:	Weekday:	19 full-time
	Weekend:	8 full-time
• Visitors:	Weekday:	110 visitors
	Weekend:	285 visitors
• Trucks:	Weekday:	2 truck per day
	Weekend:	2 trucks per day

Daily operations for the proposed Yountville Hill Winery project would involve an all on-site winery operation with a maximum annual production of 100,000 gallons (40,500 cases). All fruit (100,000 gallons of production) would be processed on-site during the year with the majority occurring during the harvest/crush season. Visitors (by appointment only) are expected; an average of 110 daily visitors on a typical weekday and 285 daily visitors on a Saturday. Visitor hours would be limited between 10:00 a.m. – 6:00 p.m. Employment is expected to be a maximum of 19 full-time employees during weekday and/or weekend periods. Winery operations for staff would occur between 6:00 a.m. – 6:30 p.m. The employment shift hours would vary dependent on specific work applications; five production staff (6:00 a.m. – 3:00 p.m.), six administrative staff (8:00 a.m. – 5:00 p.m.), and eight hospitality staff (9:30 a.m. – 6:30 p.m.). The largest marketing event would involve 200 guests occurring on an annual basis. All new marketing events would only be held during off-peak hours.

Annual winery production would be estimated at 100,000 gallons. With regard to truck activity, the winery would generate approximately 4-5 deliveries on its busiest day (crush season).

Project Trip Generation/Distribution

The proposed project's weekday and weekend peak hour and daily traffic volumes have been calculated and are shown in Table 3. Overall trip generation calculations have been based on employee peaking factors and auto occupancy rates for event visitors based on recent winery research conducted by the

[11] *Yountville Hill Winery, Winery Traffic Information/Trip Generation Sheet, Preliminary project data for production, employment, visitors, and marketing, Mr. Lester Hardy, Attorney, Personal communication, August, 2013.*

Napa County Conservation, Development, and Planning Department and existing driveway volumes.[12] It is noted that for peak hour traffic generation, only full time employees traveling to/from the site were included in project trip generation calculations. For the weekday PM peak hour, this included six administrative staff (production staff would be gone, hospitality staff still on-site). For the weekend mid-day peak hour, this included the eight hospitality staff (production and administrative staff would be gone). Based on production, employment, and visitor activity, the project would be expected to generate 145 daily weekday trips with 39 PM peak hour trips (16 in, 23 out). During a typical weekend, the project would be expected to generate 228 daily trips with 59 mid-day peak hour trips (30 in, 29 out).

During the six-week harvest crush season, the proposed project is expected to generate an average of 250 daily trips. This daily trip total would represent 285 visitors, 9 full-time and 4 part-time employees on-site during weekend periods, 100,000 gallons of wine production, and approximately 35 daily tons (on-haul) of grapes.

Based on the largest marketing event attendance of 200 persons (twice per year), there would total generation of 191event trips.

To determine traffic conditions with the proposed project, the calculated project trips were added to existing volumes. Based on observed turning percentages, the project trips were distributed 25% to/from the north and 75% to/from the south on State Route 29.

Existing plus project and near-term plus project volumes have been shown in Figure 4 and 5.

Project Effects on Roadway/Intersection Operation

A. Existing Plus Project Conditions

The project would be expected to add approximately 109 daily trips south of the site and 36 daily trips north of the site on State Route 29. This would represent an addition of less than 1 percent (0.006) to the daily volumes on the highway. The combined existing plus project volume of 22,945 daily trips would remain at LOS F operating conditions for a two-lane rural arterial roadway based on established County thresholds.

During the peak winery activity periods, the project would generate 39 weekday PM peak hour and 59 Saturday mid-day peak hour trips. Weekday PM peak hour and weekend mid-day peak hour intersection levels of service were evaluated with proposed project traffic and are shown in Table 4.

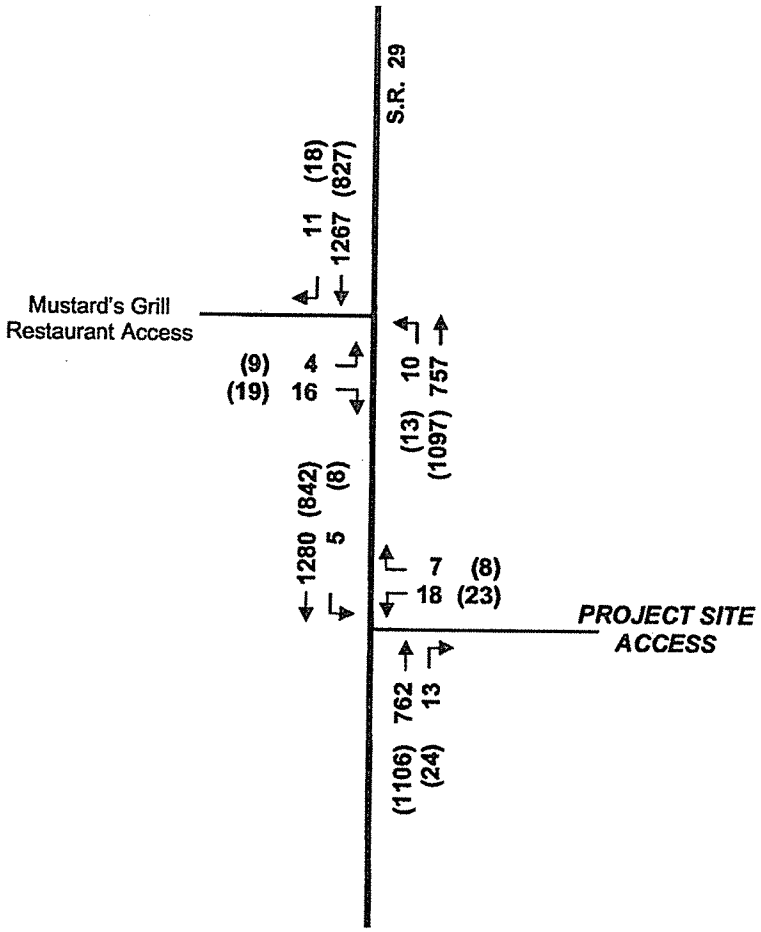
With existing plus project traffic volumes, the two project study intersections would continue to operate at acceptable levels (LOS C or better) during both the weekday PM peak hour and weekend mid-day peak hour periods. At shown in Table 4, intersection LOS would remain unchanged from existing conditions with proportional increases in overall vehicle delay.

[12] *County of Napa, Conservation, Development, and Planning Department, "Use Permit Application Package," Napa County Winery Traffic Generation Characteristics, 2012.*

TABLE 3
PEAK HOUR AND DAILY TRIP GENERATION:
PROPOSED YOUNTVILLE HILL WINERY PROJECT

Weekday Daily Traffic:		
110 visitors/2.6 persons per vehicle x 2 one-way trips	=	85 daily trips
19 full time employees x 3.05 one-way trips	=	58 daily trips
0 part-time employees x 1.90 one-way trips	=	0 daily trips
100,000 gallons/1,000 x .009 daily trucks x 2 o-w trips	=	2 daily trips
Total Weekday Daily Trips	=	**145 daily trips**
Weekday PM Peak Hour Traffic:		
(85 daily visitor trips + 2 daily truck trips) x 0.38 peak	=	33 peak hour trips
6 full time employees x 1 trip/employee	=	6 peak hour trips
0 part-time employees/2	=	0 peak hour trips
Total Weekday PM Peak Hour Trips	=	**39 trips (16 in, 23 out)**
Weekend (Saturday) Daily Traffic:		
285 visitors/2.8 persons per vehicle x 2 one-way trips	=	204 daily trips
8 full time employees x 3.05 one-way trips	=	24 daily trips
0 part-time employees x 1.90 one-way trips	=	0 daily trips
Total Weekend (Saturday) Daily Trips	=	**224 daily trips**
Weekend (Saturday) Peak Hour Traffic:		
204 daily visitor trips x 0.25 peak	=	51 peak hour trips
8 full time employees x 1 trip/employee	=	8 peak hour trips
0 part-time employees/2	=	0 peak hour trips
Total Weekend (Saturday) Peak Hour Trips	=	**59 trips (30 in, 29 out)**
Weekend (Saturday) Daily Harvest/Crush Traffic:		
285 visitors/2.8 persons per vehicle x 2 one-way trips	=	204 daily trips
9 full time employees x 3.05 one-way trips	=	27 daily trips
4 part-time employees x 1.90 one-way trips	=	4 daily trips
20,000 gallons/1,000 x .009 daily trucks x 2 o-w trips	=	1 daily trips
0 annual ton grapes (on-haul)/144 daily trucks x 2 o-w trips	=	0 daily trips
Total Weekend (Saturday) Daily Harvest/Crush Trips	=	**55 daily trips**
Largest Marketing Event – Additional Traffic		
6 event staff x 2 one-way trips per person	=	12 event trips
125 visitors / 2.8 visitors per vehicle x 2 o-w trips	=	89 event trips
4 trucks x 2 one-way trips	=	8 event trips
Total Largest Event Marketing Trips:	=	**109 event trips**

Source: Production, employee, and visitor data provided by Mr. Eric Sklar (project applicant) and Mr. Lester Hardy (Attorney).



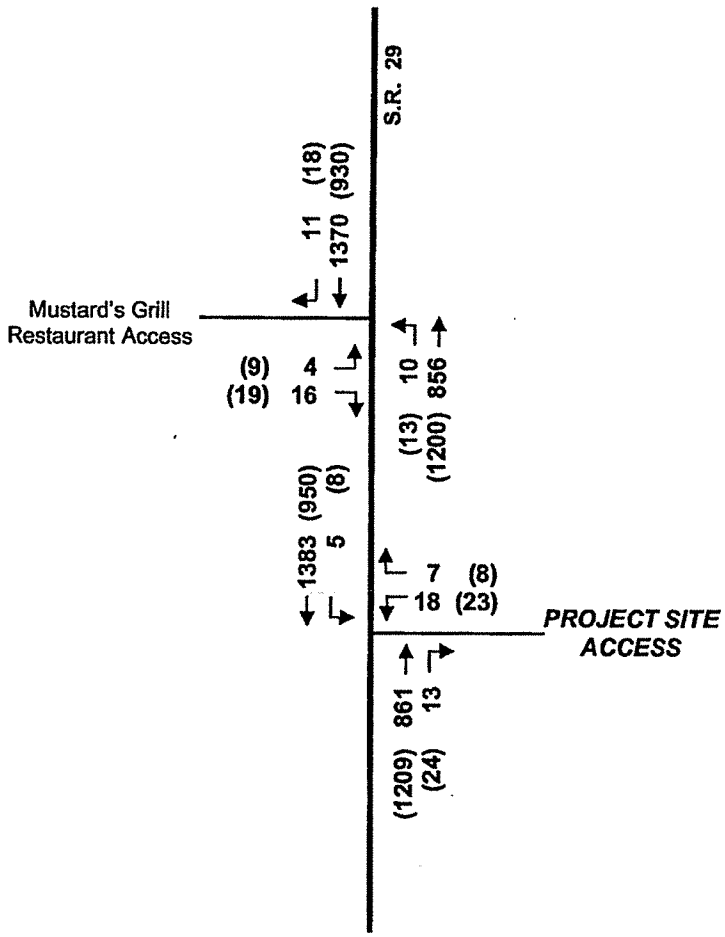
NOT TO SCALE

Existing + Project Weekday P.M. and (Weekend Mid-day) Peak Hour Volumes

North

omni-means

figure 4



NOT TO SCALE

Near Term + Project Weekday P.M. and (Weekend Mid-day) Peak Hour Volumes

North

omni-means

figure 5

B. Near-Term Plus Project Conditions

With near-term plus project conditions, daily traffic volumes on State Route 29 would increase to 23,873 ADT. Again, this would represent LOS F conditions for a two-lane, rural arterial roadway based on County thresholds. However, the existing continuous two-way-left-turn-lane on SR-29 improves overall vehicle delay and adds some additional capacity to the roadway.

Both driveway study intersections would operate at acceptable levels (LOS C or better) during both the weekday PM peak hour and weekend mid-day peak hour under near-term with project conditions.

TABLE 4
EXISTING PLUS PROJECT AND NEAR-TERM PLUS PROJECT CONDITIONS:
INTERSECTION LEVELS-OF-SERVICE
WEEKDAY PM PEAK AND WEEKEND MID-DAY PEAK HOUR

			Wkdy. PM LOS/Delay		Wknd. Mid-Day LOS/Delay	
#	Intersection	Control Type	Existing + Project	Near-Term + Project	Existing + Project	Near-Term + Project
1	Yountville Hill Driveway/SR-29	Stop	C 21.1 secs.	C 23.6 secs.	C 21.4 secs.	C 24.2 secs.

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (unsignalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

5. SITE ACCESS/DESIGN PARAMETERS

Sight Distance

As noted in the discussion of existing conditions, sight distances to the north and the south are well in excess of the minimum sight distances needed for the measured vehicle speeds. Based on radar surveys conducted in the vicinity of the proposed Yountville Hill Winery project, the "critical" vehicle speed (85% of all surveyed vehicles travel at or below the critical speed) along SR-29 at the winery were observed to be 49-54 miles per hour (mph).[13] Based on Caltrans design standards, these vehicle speeds require a stopping sight distance of 400-450 feet, measured along the travel lanes on SR-29.[14]

The Yountville Hill winery access intersection is located on a straight section of SR-29. Field observations indicate sight distances to the north and south are well in excess of the 450 feet needed for the measured vehicle speeds with the existing southerly and new northern driveway locations. However, a large shrub/tree (volunteer) would need to be removed on the north side of the driveway entrance to ensure unobstructed views to the north up SR-29.

Two-Way-Left-Turn-Lane-Operation

The proposed project's driveway intersects SR-29 at a point where a TWLTL exists. As shown on Figures 4 and 5, the driveway would have 5 inbound left-turns during a weekday PM peak hour and 8 inbound left turns during a Saturday afternoon peak hour. During these same periods, the inbound left turns counted at the Mustard's Grill driveway were 10 vehicles and 13 vehicles, respectively. Based on Caltrans guidelines for left turn queuing, the Mustard's Grill volumes would require a maximum of one vehicle storage during the

[13] *George W. Nickelson, P.E., Radar speed surveys on State Route 29 at Yountville Hill Winery driveway(s) October 30 and November 5, 2009*
[14] *Caltrans, Ibid....*

peak hours.[15] During the peak period counts, the actual observed left turn queues never exceeded one vehicle. The very low inbound left turn volumes at the project driveway would not be expected to significantly conflict with the left turns into Mustard's Grill.

Project Access and Circulation

Based on the Yountville Hill Winery site plan, a new driveway (improved) would extend to parking and winery facilities located on the hillside east of SR-29 (see Figure 6–Project Site Plan). The project driveway would have a minimum width of 20-feet to provide for two-way travel and comply with County standards. Approximately mid-way up the hillside, the driveway would provide access to a parking area and visitor entrance to the winery. The parking area would have a 25-foot drive aisle and multiple access points (three) from the driveway to allow for vehicle entry/exit and return to SR-29. Continuing up the hill, the driveway would terminate in a large cul-de-sac at the winery's visitor tasting room/office. There would be limited parking spaces at this building (two). This area would primarily be for project staff and/or ADA visitors not parking in the lower parking areas. The large cul-de-sac would allow vehicles to turn around and/or back out of parking spaces to exit the site.

The proposed project driveway has been evaluated for right-turn lane warrants. Caltrans guidelines suggest that the combination of northbound through volumes on SR-29 and the expected inbound right turn volumes would not warrant a separate right turn lane at the site driveway. However, the driveway would have inbound right turn volumes that would warrant a right turn taper (not a separate right turn lane). The right turn volume would just meet the minimum volume threshold during only the Saturday afternoon peak hour (with visitor activity at the maximum permitted levels).

The Napa County Transportation & Planning Agency (NCTPA) in cooperation with Napa County and local City agencies is developing bicycle routes as outlined in the Napa Countywide Bicycle Plan.[16] The plan encourages new developments to incorporate bicycle friendly design. State Route 29 has wide striped shoulder areas (unofficial Class II bike lanes) in both directions. Some visitors may utilize bicycles to access the proposed project. The project would provide bicycle racks for visitors to the proposed winery.

Marketing Events

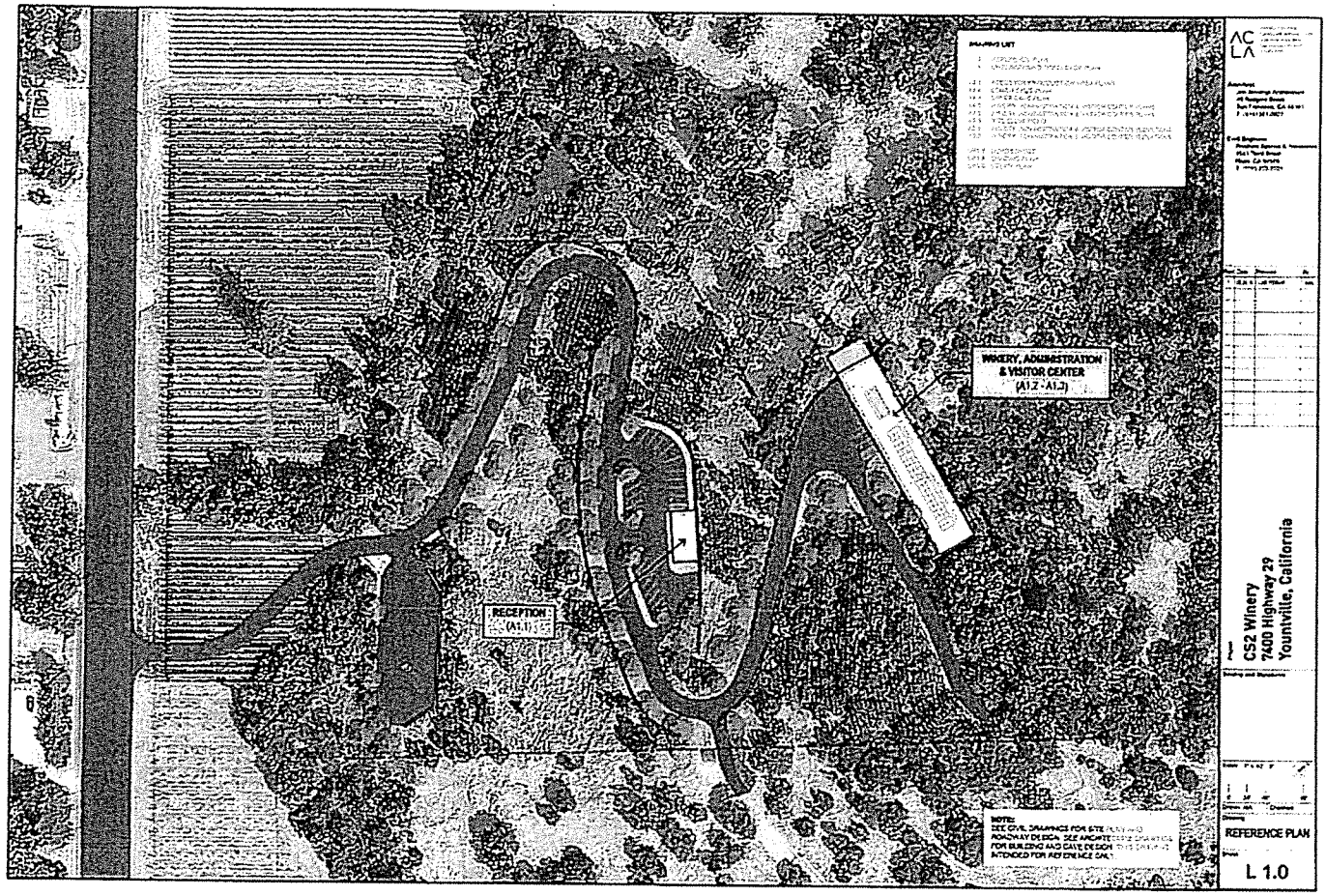
With regard to special event traffic, the largest (200 visitors) event would be an all day event on a weekend. This event would involve visitors arriving and departing throughout the entire day. The event would be scheduled to ensure that the majority of visitor arrivals and/or departures would not coincide with the Saturday afternoon peak hour background traffic flows on SR-29.

Based on standard auto occupancy rates, the largest special event (200 people) would generate up to 191 trips (96 in, 95 out). As noted, these events are typically of sufficient duration in length that the inbound and outbound trips occur in separate hours, thus the number of trips on the street network at one time are half of the total volume. These events are usually held outside of typical peak traffic periods (throughout the entire day or later than 6:00 p.m.) and therefore generally do not impact peak hour operations during the weekday/weekend peak periods.

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[15] *Caltrans, Guidelines for Reconstruction of Intersections, August 1985. The maximum peak hour northbound left-turn volume is 13 vehicles, requiring 1 vehicle storage calculated as follows: 13 hourly vehicles/60 x 2 minutes of storage = 0.43 or 1 vehicle.*

[16] *Napa County, Countywide Bicycle Plan (2012), Planning Area-North Valley, May 2012.*



Project Site Plan

North

omni-means

figure 6

Construction Impacts

With regard to construction impacts, the contractor responsible for cave construction has estimated an 18-month schedule during which time approximately 28,400 cubic yards of cave spoils would be hauled off-site. Based on an 18-month schedule, the spoils quantity would equate to approximately 75 cubic yards daily or 7-8 trucks each day. Truck volumes of this magnitude would not be measurably affect traffic flows on SR-29 during the weekday PM peak period.

6. CUMULATIVE CONDITIONS

Cumulative Year 2030 Projections

Model Forecast

Cumulative (Year 2030) volume projections on State Route 29 (SR-29) were derived from the Napa County Transportation & Planning Agency's traffic volume forecasts in the Napa County General Plan Update EIR. The forecast increase in volume-to-capacity (v/c) ratio from Year 2003 to Year 2030 on SR-29 in the project vicinity between Madison Street and Oakville Grade Road was applied to the provided Year 2003 peak hour two-way volume (2,017 trips) on SR-29, yielding a volume of 4,098 weekday PM peak hour trips on SR-29 in Year 2030.

The projected PM peak hour cumulative volume on SR-29 represents a large (200%) increase compared to the existing (Year 2013) peak hour counted volume of 2,042 trips on SR-29 at the project driveway. With projected cumulative forecasts, the existing daily volume on SR-29 would increase from 22,800 trips to 45,600 daily trips.

Historical Data

For comparison, average annual daily traffic volumes on SR-29 between Madison Street and Oakville Grade Road over the previous twenty years were reviewed. The average annual daily traffic (AADT) on SR-29 in 1992 was 15,500 trips. By comparison, the AADT on SR-29 2012 was 22,800 trips. Daily volumes were highest in the year 2007, reaching 26,500 AADT. Daily volumes on SR-29 have since declined and are lower today than they were in 2002. Increases in daily volumes between year 1992 and the highest year of 2007 equates to an annual increase of 4.5% per year on SR-29. Applying the same annual increase to the current ADT on SR-29 of 22,800 results in about 38,760 ADT in year 2030 (4.1% per year added for 17 years).

Cumulative volumes based on historical data are approximately 85% of the model forecast volumes on SR-29. The difference between the model numbers and historical growth trends indicates volumes are not increasing to the model's forecasted levels. However, in order to proactively address potential traffic volumes under cumulative conditions, the County has adopted several measures identified in the General Plan to improve the street network and also reduce vehicle trips.

In order to identify weekend cumulative conditions, the General Plan Update provides a ratio of weekday to weekend peak hour volumes on key streets within the valley. Several segments on SR-29 in the vicinity of the project were shown to have an average ratio of 0.76-0.80, indicating weekend peak hour volumes are expected to be about 80% of weekday volumes. Therefore the future weekend peak hour volumes would be expected to remain roughly in the same ratio as the existing volumes and lower than the weekday volume projections.



Cumulative Operating Conditions

The County's forecasted transportation model volumes on SR-29 under Year 2030 conditions are very tenuous given that the highway is essentially at or near capacity today. A more reasonable projection based on historical growth suggests that SR-29 would continue to operate near capacity levels with increased congestion during peak times of the day with longer peak periods during the day typically at unacceptable conditions (LOS E-F) for all minor street approaches and/or driveways at SR-29. Again, the presence of the existing two-way-left-turn-lane improves overall vehicle delays from minor street/driveways and as some additional capacity to the roadway.

Additional improvements to the street network are anticipated and have been included in the General Plan's Improved 2030 Network model. As noted, the County has also adopted several measures identified in the General Plan to reduce vehicle trips through public transit and Transportation Demand Management (TDM) strategies: "The project should support programs to reduce single occupant vehicle use and encourage alternative travel modes."

- In keeping with the policy, the winery project will provide bicycle racks for visitors who may arrive by bike. The project should also promote the use of public transportation and carpooling of employees (by adjusting work schedules, etc.) to facilitate the use of other transportation modes.

The County has identified other mitigation policies, including development of a traffic impact fee (TIF) to be developed in cooperation with the NCTPA (Mitigation Measure 4.4.1C). This would require new projects to pay their "fair share" of countywide traffic improvements they contribute the need for. Examples of such improvements could include transit/bicycle enhancements or possibly signalizing major cross street intersections along the SR-29 corridor. The concept is under development but presumably the fee would be applied on a "per trip" basis if/when implemented.

7. SUMMARY AND CONCLUSIONS

Daily and Peak Hour Operations

The proposed Yountville Hill Winery project would generate 145-224 net new daily trips during the weekday and weekend periods (respectively). The project traffic would represent an increase of less than 1% (0.006) over the existing SR-29 volume of 22,800 daily trips. All project study intersections would continue to operate at LOS C under existing plus project and near-term plus project conditions during both weekday and weekend peak hour conditions.

Daily volumes on SR-29 would continue to operate at or near capacity with 23,645 ADT (near-term no project) and 23,873 ADT with near-term plus project volumes but are aided with the presence of the continuous two-way-left-turn-lane.

Based on standard auto occupancy rates, the largest special event (200 people) would generate up to 191 trips (96 in, 95 out). As noted, these events are typically of sufficient duration in length that the inbound and outbound trips occur in separate hours, thus the number of trips on the street network at one time are half of the total volume. These events are usually held outside of typical peak traffic periods (throughout the entire day or later than 6:00 p.m.) and therefore generally do not impact peak hour operations during the weekday/weekend peak periods.



Vehicle Sight Distance

Vehicle sight distances to the north and the south on SR-29 are well in excess of the minimum sight distances needed for the measured vehicle speeds. Based on radar surveys conducted in the vicinity of the Yountville Hill Winery, the "critical" vehicle speed (85% of all surveyed vehicles travel at or below the critical speed) along SR-29 at the winery were observed to be 49-54 miles per hour (mph).[17] Based on Caltrans design standards, these vehicle speeds require a stopping sight distance of 400-450 feet, measured along the travel lanes on SR-29.[18]

The Yountville Hill winery access intersection is located on a straight section of SR-29. Field observations indicate sight distances to the north and south are well in excess of the 400-450 feet needed for the measured vehicle speeds at this driveway location. However, an existing shrub/tree just to the north side of the site's driveway should be removed to provide unobstructed views of vehicle traffic coming from the north on SR-29.

Vehicle Circulation/Site Access

Based on the Yountville Hill Winery site plan, a new driveway (improved) would extend in a winding fashion to parking and winery facilities located on the hillside east of SR-29 (see Figure 6--Project Site Plan). The project driveway would have a minimum width of 20-feet to provide for two-way travel and comply with County standards. Approximately mid-way up the hillside, the driveway would provide access to a large parking area and visitor entrance to the winery. The parking area would have a 25-foot drive aisle and multiple access points from the driveway (3) to allow for vehicle entry/exit and return to SR-29. Continuing up the hill, the driveway would terminate in a large cul-de-sac at the winery's visitor tasting room/office. Limited parking spaces would be provided in front of this building (two). This area would primarily be for project staff and/or visitors with ADA parking requirements. The large cul-de-sac would allow vehicles to turn around and/or back out of parking spaces to exit the site.

Based on design guidelines, the site's driveway would have inbound right turn volumes that would warrant a right turn taper (not a separate right turn lane), The right turn volume would just meet the minimum volume threshold for a taper during only the Saturday afternoon peak hour (with visitor activity at the maximum permitted levels).

The proposed project's driveway intersects SR-29 at a point where a TWLTL exists. As shown on Figures 4 and 5, the driveway would have 5 inbound left-turns during a weekday PM peak hour and 8 inbound left turns during a Saturday afternoon peak hour. During these same periods, the inbound left turns counted at the Mustard's Grill driveway were 10 vehicles and 13 vehicles, respectively. Based on Caltrans guidelines for left turn queuing, the Mustard's Grill volumes would require a maximum of one vehicle storage during the peak hours.[19] During the peak period counts, the actual observed left turn queues never exceeded one vehicle. The very low inbound left turn volumes at the project driveway would not be expected to significantly conflict with the left turns into Mustard's Grill.

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[17] *George W. Nickelson, P.E., Radar speed surveys on State Route 29 at Yountville Hill Winery driveway(s), October 30 and November 5, 2009*

[18] *Caltrans, Ibid....*

[19] *Caltrans, Guidelines for Reconstruction of Intersections, August 1985. The maximum peak hour northbound left-turn volume is 13 vehicles, requiring 1 vehicle storage calculated as follows: 13 hourly vehicles/60 x 2 minutes of storage = 0.43 or 1 vehicle.*



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With regard to construction impacts, the contractor responsible for cave construction has estimated an 18-month schedule during which time approximately 28,400 cubic yards of cave spoils would be hauled off-site. Based on an 18-month schedule, the spoils quantity would equate to approximately 75 cubic yards daily or 7-8 trucks each day. Truck volumes of this magnitude would not be measurably affect traffic flows on SR-29 during the weekday PM peak period.

Cumulative Year 2030 Conditions

As noted under cumulative model forecasts, the County's forecasted transportation model volumes on SR-29 under Year 2030 conditions are very tenuous given that the highway is essentially at or near capacity today. A more reasonable projection based on historical growth suggests that SR-29 would continue to operate near capacity levels with increased congestion during peak times of the day with longer peak periods during the day typically at unacceptable conditions (LOS E-F) for all minor street approaches and/or driveways at SR-29.

The County has identified other mitigation policies, including development of a traffic impact fee (TIF) to be developed in cooperation with the NCTPA (Mitigation Measure 4.4.1C). This would require new projects to pay their "fair share" of countywide traffic improvements they contribute the need for. Examples of such improvements could include transit/bicycle enhancements or signalizing major cross street intersections along the SR-29 corridor. The concept is under development but presumably the fee would be applied on a "per trip" basis if/when implemented.



APPENDIX

- Level of Service Definitions
- Level of Service Calculations
- Turn Lane Warrant Graphs
- Signal Warrant Sheets

LEVEL-OF-SERVICE CRITERIA FOR INTERSECTIONS

Level of Service	Type of Flow	Delay	Maneuverability	Control Delay (seconds/vehicle)		
				Signalized	Unsignalized	All-Way Stop
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10.0 secs.	≤ 10.0	≤ 10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	>10 and ≤ 20.0 secs.	>10 and ≤ 15.0	>10 and ≤ 15.0
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	>20 and ≤ 35.0 secs.	>15 and ≤ 25.0	>15 and ≤ 25.0
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles of stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	>35 and ≤ 55.0 secs.	>25 and ≤ 35.0	>25 and ≤ 35.0
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	>55 and ≤ 80.0 secs.	>35 and ≤ 50.0	>35 and ≤ 50.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	> 80.0 secs.	> 50.0	> 50.0

References: 1. Highway Capacity Manual, Fourth Edition, Transportation Research Board, 2000,

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	1	762	1	1	1280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	828	1	1	1391
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2222	829			829	
vC1, stage 1 conf vol	829					
vC2, stage 2 conf vol	1393					
vCu, unblocked vol	2222	829			829	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	227	371			802	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	2	829	1	1391
Volume Left	1	0	1	0
Volume Right	1	1	0	0
cSH	282	1700	802	1700
Volume to Capacity	0.01	0.49	0.00	0.82
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	17.9	0.0	9.5	0.0
Lane LOS	C		A	
Approach Delay (s)	17.9	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	1	1106	1	1	842
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	1202	1	1	915
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2120	1203			1203	
vC1, stage 1 conf vol	1203					
vC2, stage 2 conf vol	917					
vCu, unblocked vol	2120	1203			1203	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	272	225			580	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	2	1203	1	915
Volume Left	1	0	1	0
Volume Right	1	1	0	0
cSH	246	1700	580	1700
Volume to Capacity	0.01	0.71	0.00	0.54
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	19.8	0.0	11.2	0.0
Lane LOS	C		B	
Approach Delay (s)	19.8	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	1	861	1	1	1383
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	936	1	1	1503
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2442	936			937	
vC1, stage 1 conf vol	936					
vC2, stage 2 conf vol	1505					
vCu, unblocked vol	2442	936			937	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	200	321			73	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	2	937	1	1503
Volume Left	1	0	1	0
Volume Right	1	1	0	0
cSH	246	1700	731	1700
Volume to Capacity	0.01	0.55	0.00	0.88
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	19.7	0.0	9.9	0.0
Lane LOS	C		A	
Approach Delay (s)	19.7	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	1	1209	1	1	950
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	1314	1	1	1033
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLT					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2349	1315			1315	
vC1, stage 1 conf vol	1315					
vC2, stage 2 conf vol	1035					
vCu, unblocked vol	2349	1315			1315	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	239	193			526	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	2	1315	1	1033
Volume Left	1	0	1	0
Volume Right	1	1	0	0
cSH	214	1700	526	1700
Volume to Capacity	0.01	0.77	0.00	0.61
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	22.0	0.0	11.9	0.0
Lane LOS	C		B	
Approach Delay (s)	22.0	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	18	7	762	13	5	1280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	8	828	14	5	1391
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2238	835			842	
vC1, stage 1 conf vol	835					
vC2, stage 2 conf vol	1402					
vCu, unblocked vol	2238	835			842	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	98			99	
cM capacity (veh/h)	224	367			793	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	27	842	5	1391
Volume Left	20	0	5	0
Volume Right	8	14	0	0
cSH	251	1700	793	1700
Volume to Capacity	0.11	0.50	0.01	0.82
Queue Length 95th (ft)	9	0	1	0
Control Delay (s)	21.1	0.0	9.6	0.0
Lane LOS	C		A	
Approach Delay (s)	21.1	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	23	8	1106	24	8	842
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	9	1202	26	9	915
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2148	1215			1228	
vC1, stage 1 conf vol	1215					
vC2, stage 2 conf vol	933					
vCu, unblocked vol	2148	1215			1228	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	96			98	
cM capacity (veh/h)	287	221			567	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	34	1228	9	915
Volume Left	25	0	9	0
Volume Right	9	26	0	0
cSH	254	1700	567	1700
Volume to Capacity	0.13	0.72	0.02	0.54
Queue Length 95th (ft)	11	0	1	0
Control Delay (s)	21.4	0.0	11.4	0.0
Lane LOS	C		B	
Approach Delay (s)	21.4	0.0	0.1	
Approach LOS	C			

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	18	7	861	13	5	1383
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	8	936	14	5	1503
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2457	943			950	
vC1, stage 1 conf vol	943					
vC2, stage 2 conf vol	1514					
vCu, unblocked vol	2457	943			950	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	98			99	
cM capacity (veh/h)	197	318			723	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	27	950	5	1503
Volume Left	20	0	5	0
Volume Right	8	14	0	0
cSH	220	1700	723	1700
Volume to Capacity	0.12	0.56	0.01	0.88
Queue Length 95th (ft)	10	0	1	0
Control Delay (s)	23.6	0.0	10.0	0.0
Lane LOS	C		B	
Approach Delay (s)	23.6	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

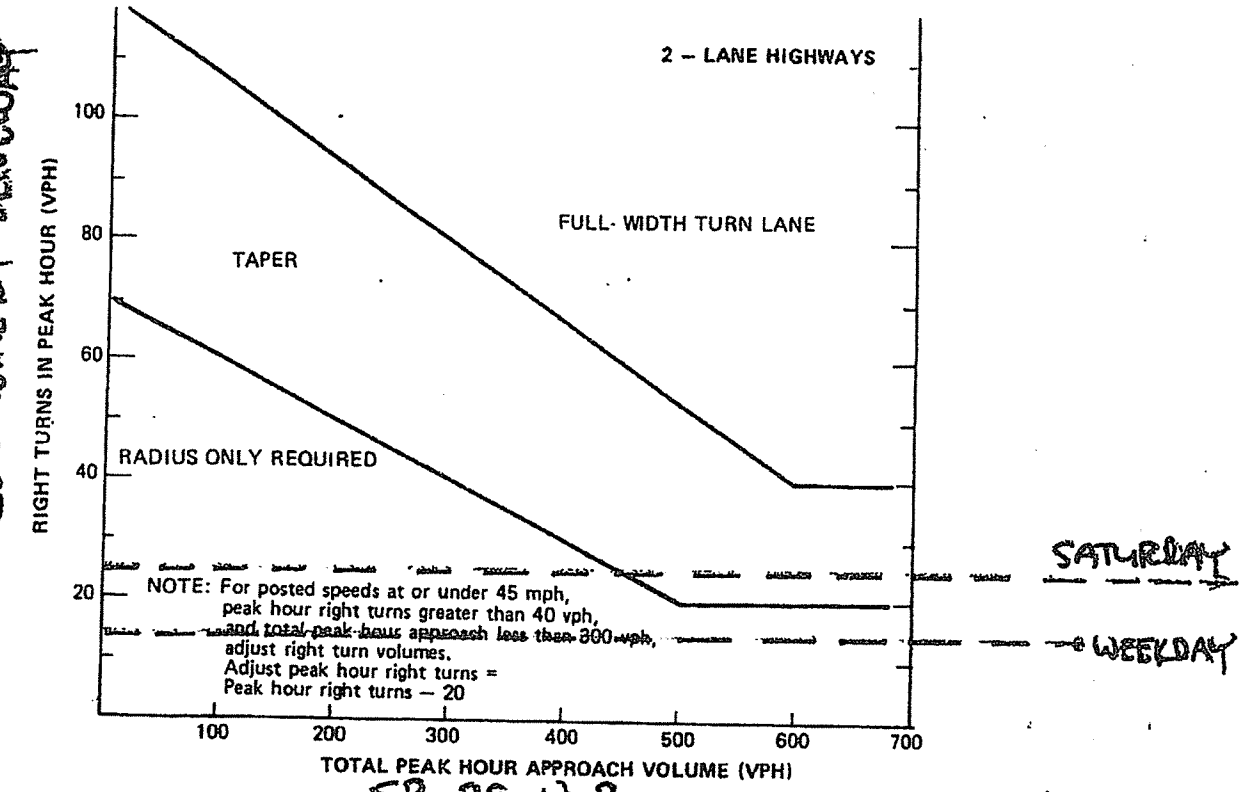


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	23	8	1209	24	8	950
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	9	1314	26	9	1033
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2377	1327			1340	
vC1, stage 1 conf vol	1327					
vC2, stage 2 conf vol	1050					
vCu, unblocked vol	2377	1327			1340	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	95			98	
cM capacity (veh/h)	235	190			514	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	34	1340	9	1033
Volume Left	25	0	9	0
Volume Right	9	26	0	0
cSH	221	1700	514	1700
Volume to Capacity	0.15	0.79	0.02	0.61
Queue Length 95th (ft)	13	0	1	0
Control Delay (s)	24.2	0.0	12.1	0.0
Lane LOS	C		B	
Approach Delay (s)	24.2	0.0	0.1	
Approach LOS	C			

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

CS2 WINERY DRIVEWAY



SR-29 N.B.

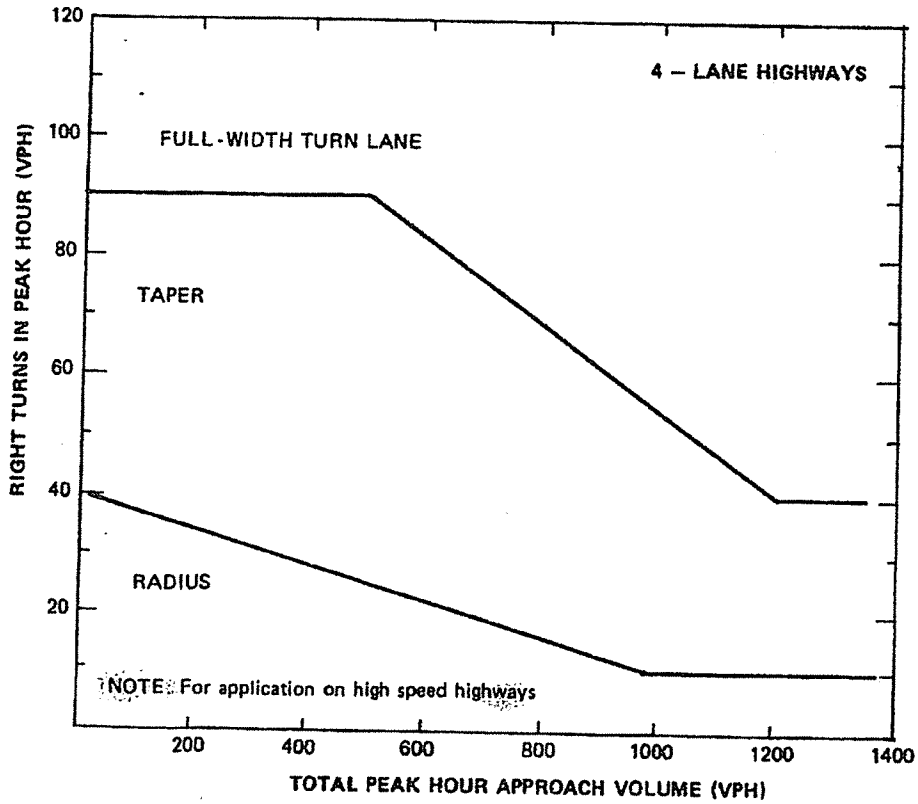
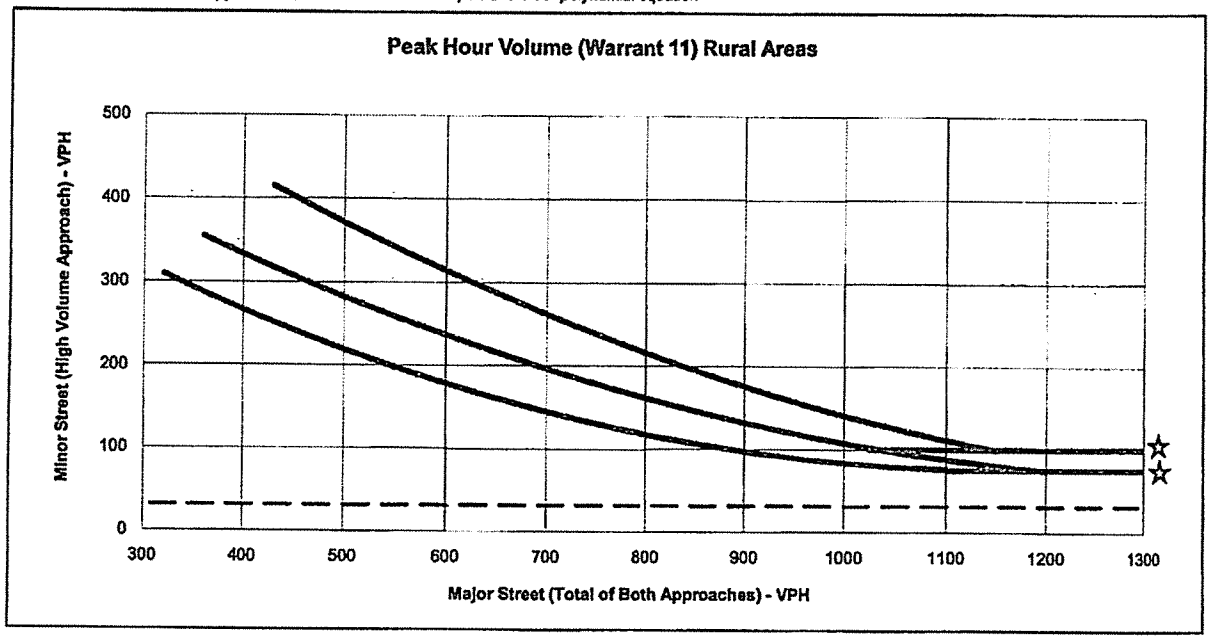


Figure 4-23. Traffic volume guidelines for design of right-turn lanes. (Source: Ref. *4-11*)

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
370	280				
400	270	460	297	430	410
500	215	500	290	500	380
600	185	600	230	600	310
700	140	700	198	700	265
800	115	800	170	800	210
900	99	900	125	900	180
1000	85	1000	105	1000	140
1100	75	1100	90	1100	110
1200	75	1200	75	1150	100
1300	75	1300	75	1300	100

** Note: Values in Table are approximate, actual curves based upon 2nd order polynomial equation*

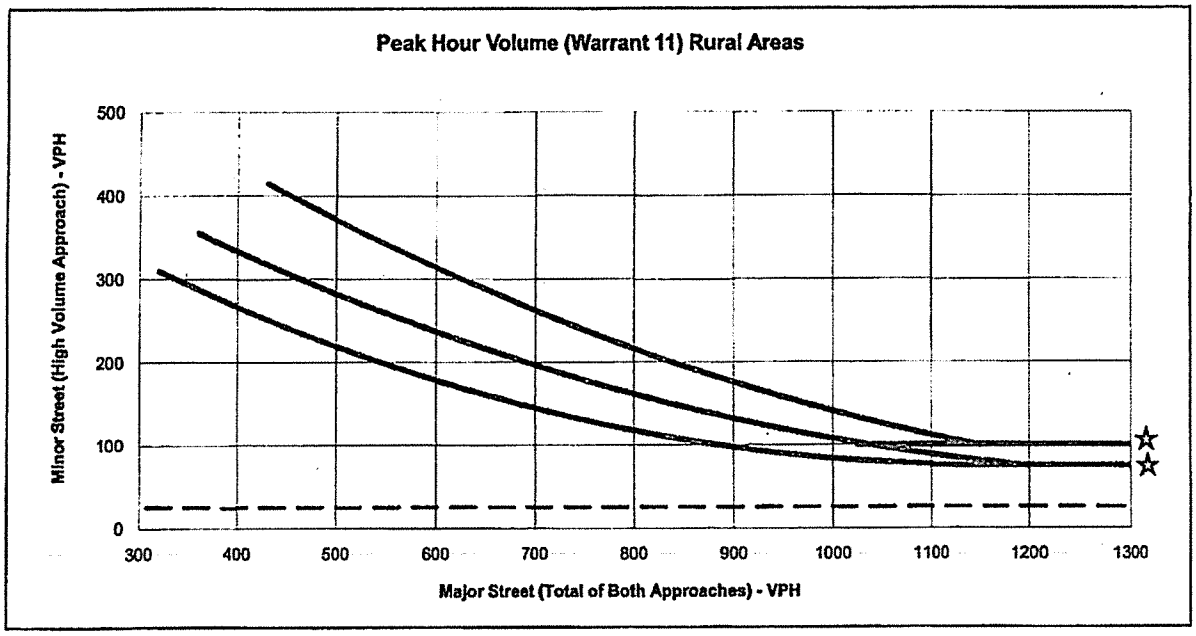


☆ NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Intersection:	Yountville Hill Winery / State Route 29
Scenario:	MD Weekend Near-Term plus Project
Minor St. Volume:	31
Major St. Volume:	2191
Warrant Met?:	NO

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
370	280				
400	270	460	297	430	410
500	215	500	290	500	380
600	185	600	230	600	310
700	140	700	198	700	265
800	115	800	170	800	210
900	99	900	125	900	180
1000	85	1000	105	1000	140
1100	75	1100	90	1100	110
1200	75	1200	75	1150	100
1300	75	1300	75	1300	100

** Note: Values in Table are approximate, actual curves based upon 2nd order polynomial equation*



☆ NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Intersection:	Yountville Hill Winery / State Route 29
Scenario:	PM Weekday Near-Term plus Project
Minor St. Volume:	25
Major St. Volume:	2262
Warrant Met?:	NO

omni·means
ENGINEERS PLANNERS

February 13, 2014

Mr. Eric Sklar
CS2 Wines, LLC
P.O. Box 47
Oakville, CA 94562

RE: Addendum Response Letter To Napa County Comments; Focused Traffic Analysis for the Proposed Yountville Hill Winery – Located at 7400 St. Helena Highway (SR-29) in Napa County (September 19, 2013)

Dear Mr. Sklar:

The following addendum letter is in response to Napa County staff comments on the focused traffic analysis performed for the proposed Yountville Hill Winery in Napa County. Specifically, Mr. Sean Trippi (Senior Planner with Napa County) has commented on our discussions relating to proposed project trip generation and actual project trip generation calculations found in Table 3 of the draft report.[i] Specifically, Mr. Trippi has noted our discussion of proposed project trip generation (page 12 of report) is not consistent with the actual trip generation shown in Table 3 (page 13 of the report). In response, we have the following clarifications/corrections for pages 12 and 13 of the draft report (attached):

- Page 12: 1st Paragraph—last sentence: "During a typical weekend, the project would be expected to generate 228 daily trips with 59 mid-day peak hour trips (30 in, 29 out)." This sentence is correct. However, Table 3 indicated a daily trip generation for a typical weekend Saturday of *224* trips. This has been corrected in Table 3 (attached);

- Page 12: 2nd Paragraph—first sentence: "During the six week harvest crush season, the proposed project is expected to generate and average of *250* daily trips. This sentence is incorrect. In addition, the weekend (Saturday) daily harvest/crush traffic calculation shown in Table 3 indicated *55* daily trips. This amount is also incorrect. The daily trip calculation for proposed project harvest/crush has been re-calculated and the text corrected. The proposed project would generate 241 daily trips during a Saturday harvest/crush season. Both text and Table 3 have been corrected (attached). As part of this new calculation, the correct amount of annual on-haul grapes (35 tons) has been included to correspond with text discussion.

We appreciate Mr. Trippi's review of our focused traffic analysis for the proposed Yountville Hill Winery project. We hope these corrections relating to overall trip generation will allow the environmental review to continue. It is noted that these corrections to daily project trip generation would not change our conclusions related to overall project impacts. Please call if you have any questions.

Sincerely,

OMNI-MEANS, Ltd.
Engineers & Planners

Peter J. Galloway
Project Manager/Transportation Planner

Cc: Mr. Sean Trippi, Senior Planner, Napa County
Mr. Lester Hardy, Attorney at Law, St. Helena
Mr. George Nickelson, P.E., Omni-Means

Enc. Page 12 & 13 (Corrected); Focused Traffic Analysis for the Proposed Yountville Hill Winery—Located at 7400 St. Helena Highway (SR-29) in Napa County (September 19, 2013).

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[1] *Mr. Sean Trippi, Senior Planner, Napa County, Planning, Building, and Environmental Services, Correspondence (email) to Mr. Lester Hardy, Attorney at Law, St. Helena, February 13, 2014.*

Napa County Conservation, Development, and Planning Department and existing driveway volumes.[12] It is noted that for peak hour traffic generation, only full time employees traveling to/from the site were included in project trip generation calculations. For the weekday PM peak hour, this included six administrative staff (production staff would be gone, hospitality staff still on-site). For the weekend mid-day peak hour, this included the eight hospitality staff (production and administrative staff would be gone). Based on production, employment, and visitor activity, the project would be expected to generate 145 daily weekday trips with 39 PM peak hour trips (16 in, 23 out). During a typical weekend, the project would be expected to generate 228 daily trips with 59 mid-day peak hour trips (30 in, 29 out).

During the six-week harvest crush season, the proposed project is expected to generate an average of 241 daily trips. This daily trip total would represent 285 visitors, 9 full-time and 4 part-time employees on-site during weekend periods, 100,000 gallons of wine production, and approximately 35 annual tons (on-haul) of grapes.

Based on the largest marketing event attendance of 200 persons (twice per year), there would total generation of 191event trips.

To determine traffic conditions with the proposed project, the calculated project trips were added to existing volumes. Based on observed turning percentages, the project trips were distributed 25% to/from the north and 75% to/from the south on State Route 29.

Existing plus project and near-term plus project volumes have been shown in Figure 4 and 5.

Project Effects on Roadway/Intersection Operation

A. Existing Plus Project Conditions

The project would be expected to add approximately 109 daily trips south of the site and 36 daily trips north of the site on State Route 29. This would represent an addition of less than 1 percent (0.006) to the daily volumes on the highway. The combined existing plus project volume of 22,945 daily trips would remain at LOS F operating conditions for a two-lane rural arterial roadway based on established County thresholds.

During the peak winery activity periods, the project would generate 39 weekday PM peak hour and 59 Saturday mid-day peak hour trips. Weekday PM peak hour and weekend mid-day peak hour intersection levels of service were evaluated with proposed project traffic and are shown in Table 4.

With existing plus project traffic volumes, the two project study intersections would continue to operate at acceptable levels (LOS C or better) during both the weekday PM peak hour and weekend mid-day peak hour periods. At shown in Table 4, intersection LOS would remain unchanged from existing conditions with proportional increases in overall vehicle delay.

[12] *County of Napa, Conservation, Development, and Planning Department, "Use Permit Application Package," Napa County Winery Traffic Generation Characteristics, 2012.*

TABLE 3
PEAK HOUR AND DAILY TRIP GENERATION:
PROPOSED YOUNTVILLE HILL WINERY PROJECT

Weekday Daily Traffic:		
110 visitors/2.6 persons per vehicle x 2 one-way trips	=	85 daily trips
19 full time employees x 3.05 one-way trips	=	58 daily trips
0 part-time employees x 1.90 one-way trips	=	0 daily trips
100,000 gallons/1,000 x .009 daily trucks x 2 o-w trips	=	2 daily trips
Total Weekday Daily Trips	=	**145 daily trips**
Weekday PM Peak Hour Traffic:		
(85 daily visitor trips + 2 daily truck trips) x 0.38 peak	=	33 peak hour trips
6 full time employees x 1 trip/employee	=	6 peak hour trips
0 part-time employees/2	=	0 peak hour trips
Total Weekday PM Peak Hour Trips	=	**39 trips (16 in, 23 out)**
Weekend (Saturday) Daily Traffic:		
285 visitors/2.8 persons per vehicle x 2 one-way trips	=	204 daily trips
8 full time employees x 3.05 one-way trips	=	24 daily trips
0 part-time employees x 1.90 one-way trips	=	0 daily trips
Total Weekend (Saturday) Daily Trips	=	**228 daily trips**
Weekend (Saturday) Peak Hour Traffic:		
204 daily visitor trips x 0.25 peak	=	51 peak hour trips
8 full time employees x 1 trip/employee	=	8 peak hour trips
0 part-time employees/2	=	0 peak hour trips
Total Weekend (Saturday) Peak Hour Trips	=	**59 trips (30 in, 29 out)**
Weekend (Saturday) Daily Harvest/Crush Traffic:		
285 visitors/2.8 persons per vehicle x 2 one-way trips	=	204 daily trips
9 full time employees x 3.05 one-way trips	=	27 daily trips
4 part-time employees x 1.90 one-way trips	=	8 daily trips
20,000 gallons/1,000 x .009 daily trucks x 2 o-w trips	=	1 daily trips
35 annual ton grapes (on-haul)/144 daily trucks x 2 o-w trips	=	1 daily trips
Total Weekend (Saturday) Daily Harvest/Crush Trips	=	**241 daily trips**
Largest Marketing Event – Additional Traffic		
6 event staff x 2 one-way trips per person	=	12 event trips
125 visitors / 2.8 visitors per vehicle x 2 o-w trips	=	89 event trips
4 trucks x 2 one-way trips	=	8 event trips
Total Largest Event Marketing Trips:	=	**109 event trips**

Source: Production, employee, and visitor data provided by Mr. Eric Sklar (project applicant) and Mr. Lester Hardy (Attorney), project representative, August, 2013. Daily and peak hour calculations based on County of Napa, Conservation, Development, and Planning Department, "Use Permit Application Package," Napa County Winery Traffic Generation Characteristics, 2012.

Exhibit 3



Exhibit 3

Napa Valley Winery Project Approvals

Name	(Orig) PC Meeting date	date approved	New/Mod	gallons	Added Production	acreage	(additional) visitation requested	(additional) vistation approved	Notes	variances regested
Kelly Fleming Winery	7/16/2014	NA	mod	12,000 to 20,000	8,000	83.14	8,940		continued date uncertain	
LMR Rutherford Estate Winery	6/18/2014	07/16/14	new	100,000	100,000	30	19,600	19,600		
Raymond Vineyards & Cellar	7/16/2014	NA	mod	750,000	0	60.72	42,400	-	continued date uncertain	
Castellucci Family Winery	5/21/2014	05/21/14	new	30,000	30,000	19.3	16,430	11,750		
Titus Vineyards Winery	5/7/2014	05/07/14	new	24,000	24,000	31.77	23,290	12,620		
Goosecross Cellars	5/7/2014	05/07/14	mod	?		11.31	50	50		
Sinegal Estate	3/19/2014	03/19/14	mod	13,200 to 60,000	46,800	30	7,020	7,020		
Diogenes Ridge Winery	2/19/2014	02/19/14	new	30,000	30,000	12.94	6,080	5,680		
Silverado Trail Winery	12/18/2013	02/05/14	new	60,000	60,000	17.7	11,940	11,940		
Martini Winery / G3	1/15/2014	01/15/14	mod	NA			11,099	11,088		
Domaine Carneros	1/15/2014	01/15/14	mod	NA	0	139	94,400	94,400		
Brand Napa Valley	1/15/2014	01/15/14	mod	NA		42.26	4,662	4,054		
Paradigm	1/15/2014	01/15/14	mod	NA		26.25	5,460	5,460		
J3 Wine Partners/ Farm Collective	12/18/2013	12/18/13	new	80,000	80,000	NA	12,220	12,220		
Theorem Winery	12/4/2013	12/04/13	mod	20,000	0	41.45	5,680	5,680		
L'Attitude Vineyards / Idealogy Cellears Winery	11/6/2013	11/06/13	new	30,000	30,000	10.09	5,700	5,700		
Napa Valley Holdings / Corona	11/6/2013	11/06/13	new	100,000	100,000	49.05	19,000	19,000		
Woolls Ranch Winery	11/6/2013	11/06/13	new	50,000	50,000	236.66	25,640	22,840		
Black Cat Winery (Industrial Park)	10/16/2013	10/16/13	mod	12,500	12,500	NA	7,400	7,400		
Peter Kitchak Winery	10/2/2013	10/02/13	mod	5,000 to 15,000	10,000	20.01	3,142	3,142		
Flynnville Wine Co	10/02/13		new	300,000	300,000	11.44	185,000	0	continued date uncertain	
Fantesca Winery / Suan and Duane Hoff	10/2/2013	10/02/13	mod	0	0	52.56	6,245	6,245		
Outpost Winery	10/2/2013	10/02/13	mod	30,000 to 50,000	20,000	42.3	5,092	5,092		
Robert Keenen Winery								-	acknowledgement	
Cliff Lede Vineyards	8/21/2013	08/21/13	mod	80,000 to 120,000	40,000	25.3	-	-		
Dunn Vineyards - Manzanita & Dogwood/Dunn	7/17/2013	07/17/13	mod	5,000 to 20,000	15,000	39	1,040	1,040		
Araujo Estate Winery	7/17/2013	07/17/13	mod	NA		162	5,825	5,825		
Davis Estates / Frostfire vineyards	7/3/2013	07/03/14	mod	20,000 to 30,000	10,000	114.32	10,184	10,184		
Hartwell Vineyards	6/5/2013	06/05/13	mod	12,000 to 36,000	24,000	29.81	18,964	18,964		
Honig Vineyard & Winery	6/5/2013	06/05/13	mod	150 - 300,000	150,000	67	22,200	22,200		
Coquerel Family Winery	6/5/2013	06/05/13	mod	75,000	0	19.73	4,900	4,900		
White Cottage Ranch Winery	5/1/2013	05/01/13	mod	20,000	0	62.35 & 4.65	10,625	9,377		
Stags Leap Winery	3/6/2013	04/03/13	mod	NA		118.2	10,920	10,920		
Tamber Bey Vineyards Winery	3/20/2013	03/20/13	new	60,000	60,000	22.41	8,740	8,640		
B Cellars	3/6/2013	03/06/13	mod	10,000 to 45,000	35,000	11.53	19,060	13,860		

Napa Valley Winery Project Approvals

Arkenstone Vineyards winery	1/16/2013	01/16/13	mod	48,000 to 60,000	12,000	42.53	7,688	7,688		
Trefethen family Vineyards	12/5/2012	12/05/12	new	30,000	30,000	41.15	7,680	7,680		
Odette Winery	10/17/2012	10/17/12	mod	NA		49.26	55,484	55,484		
15 Chateau Lane Winery	9/5/2012	09/05/12	new	20,000	20,000	12.33	2,332	2,332		
Cairdean Winery	6/6/2012	06/06/12	new	50,000	50,000	50.31	11,125	11,125		
Krupp, Jan Krupp / Bart & Patricia Krupp	6/6/2012	06/06/12	new	50,000	50,000	13	48,506	48,506		
Swanson Winery	5/16/2012	05/16/12	new	100,000	100,000	74	76,178	76,178		
Rombauer Vineyards	5/2/2012	05/02/12	mod	450,000	0	NA	-	-		
Reata Winery	3/21/2012	03/21/12	mod	200,000 to 800,000	600,000	78.33	-	-		
Envy Wines / Mark Carter	3/21/2012	03/21/12	mod	20,000 to 50,000	30,000	18.4	900	900		
Cliff Lede Vineyards	3/21/2012	03/21/12	mod	60,000 to 80,000	20,000	25.3	7,280	7,280		
Paraduxx Winery	3/7/2012	03/07/12	mod	156,000 to 200,000	40,000		14,177	14,177		
Lodestone Vineyards Winery	11/16/2011	11/16/11	new	20,000	20,000	42.1	13,130	13,130		
Silver Oak	10/19/2011	10/19/11	mod	132,500 to 210,000	75,000	22.5	-	-		
Faust House Winery	9/21/2011	09/21/11	ghost winery	10,000	10,000	6.35	5,900	5,950		Conservation Setback Exception Use Permit would allow limited earth disturbing activities necessary to convert the existing historic structures located within the required creek setback to winery-related purposes. The Exception to Established Napa County Road Standards would reduce the minimum 30 ft. turning radius onto the site from eastbound Coombsville Road to 13 ft. to preserve two historical entrance pylons located at the main driveway entrance.
Eagle Eye Winery	9/21/2011	09/21/11	new	30,000	30,000	13	7,376	7,276		NA
Chappellet	8/17/2011	08/17/11	mod	150,000	0		2,345	2,345		
					2,322,300		890,109	636,942		

Exhibit 4



Exhibit 4

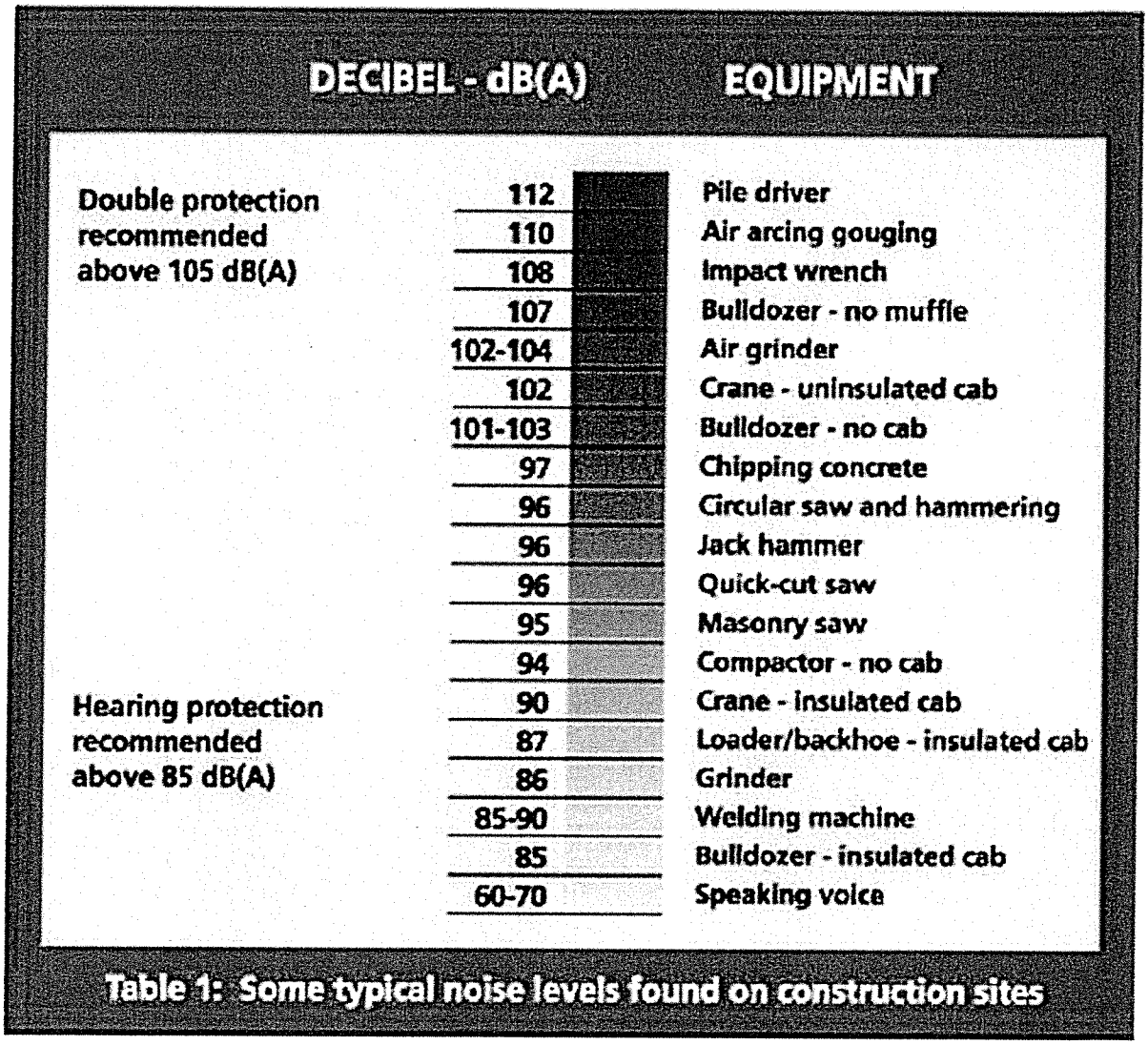


Table 1: Some typical noise levels found on construction sites

Frost, Melissa

Subject: FW: Girard Letter from Shute/Mihaly
Attachments: Letter to D Morrison (Part 1 of 4).pdf; Letter to D Morrison (Part 2 of 4).pdf; Letter to D Morrison (Part 3 of 4).pdf; Letter to D Morrison (Part 4 of 4).pdf

From: Juanito H. Maravilla [mailto:maravilla@smwlaw.com]
Sent: Tuesday, January 20, 2015 3:40 PM
To: Morrison, David
Cc: keepnvap@sonic.net; Ellison Folk; Laurel L. Impett
Subject: Proposed Girard Winery Project (Part 1 of 4)

Mr. Morrison:

On behalf of the Tofanelli family we submit this letter with four exhibits on the proposed Girard Winery Project. We would appreciate your distributing this letter to each member of the Planning Commission on or before the January 21, 2015 hearing on the Project.

Due to file size of the Letter, we are sending the Letter in 4 parts in separate emails. This email is **Part 1 of 4**.

When you have received all 4 emails, we would also appreciate confirmation of receipt of this letter and each of the four exhibits.

Thank you,

Juanito Maravilla
Shute, Mihaly & Weinberger LLP
396 Hayes Street
San Francisco, CA 94102-4421
v: 415/552-7272 x 225
f: 415/552-5816
www.smwlaw.com
Please consider the environment before printing this e-mail or attachments.

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Balcher, Wyntress

From: McDowell, John
Sent: Monday, August 10, 2015 8:07 AM
To: Balcher, Wyntress; Frost, Melissa
Cc: Gallina, Charlene
Subject: FW: Girard Winery Use Permit P14-00053

Comments on Girard Item for distribution to the Commission.

From: Joe Bob here [mailto:jbhitchcock44@gmail.com]
Sent: Sunday, August 09, 2015 1:16 AM
To: McDowell, John
Subject: Girard Winery Use Permit P14-00053

Dear Mr. McDowell:

Last week I was driving from St. Helena to my home in Calistoga around 4:30 pm on Highway 29. Traffic came to a stop south of Dunaweal Lane, backed up from the stop sign at Lincoln Avenue in Calistoga. After 10 minutes, I was about half way to the stop sign, so I made a u-turn, went back to Dunaweal, and turned left to go to the Silverado Trail. Dunaweal was busier than I have ever seen it. There were 6 or 7 cars waiting to turn left onto the Trail which took a few more minutes to clear. Turning left was difficult and dangerous, as traffic was heavy on the Trail in both directions.

The traffic added over 15 minutes to my drive time.

Those of us who live in Calistoga have to contend with noticeable added traffic due to the expansion of Indian Springs. Parking is nearly impossible at all times of day. Two new resorts, Calistoga Hills and Silver Rose will add nearly 3000 additional vehicle trips per day, further congesting Highway 29, Dunaweal Lane, and the Silverado Trail. Like it or not, that traffic is coming.

Now Girard wants to build a huge new facility on Dunaweal Lane. Sir, this is insanity. These roads cannot handle the current traffic load much less the already approved increases. Girard could result in a massive grid lock.

I have watched as the Calistoga City Council has approved project after project, denying that there will be any significant impact on traffic. They obviously have an unstated agenda, which is not the betterment of Calistoga for its residents. Of course the projects will cause severe traffic problems.

Now, you might ask yourself, "Who is this person writing to me, and what does he know about traffic problems?" I would like to state that I have a Master of Science degree in Transportation Management from the UCLA School of Business, with a specialty in Urban

Transportation. I know what I am talking about. But anybody who drives a car on Highway 29 will not need a degree to see the negative impact of the Girard project. When you are stopped for up to a half hour in gridlock just south of Calistoga, everybody is an expert.

We have reached and probably surpassed a breaking point. This new facility for Girard cannot be allowed to happen. You cannot inconvenience thousands of people per day, both residents and visitors, for the benefit of one business. You represent all the people in the Valley. It is time to protect us.

Respectfully,

Robert Hitchcock
1322 Berry Street
Calistoga, CA 94515
707-942-0619
jbhitchcock44@gmail.com
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George Caloyannidis
2202 Diamond Mountain Road
Calistoga, CA 94515
calti@comcast.net

Wyntress Balcher, Planner
1195 Third Street, Suite 210
Napa, CA 94559
wyntress.balcher@countyofnapa.org

August 10, 2015

GIRARD WINERY USE PERMIT APPLICATION UP P14-00053

TRAFFIC RELATED GUIDING COUNTY POLICIES:

These policies have been fully vetted at public hearings. The residents of Napa Valley rely on their elected officials to uphold them as they are important cornerstones to their quality of life and welfare.

A. General Plan Policy CIR 116:

***"The County will seek to maintain arterial Level of Service D or better on all County roadways*".**

B. ORDINANCE CHAPTER 18.04.010 - FINDINGS:

"F. ***Further, this board deems it necessary, for the purpose of promoting the health, safety and general welfare of the county, to revise the existing zoning ordinance...in accordance with the general plan and the following objectives:***

1. ***To lessen congestion on roads and highways;*** (emphasis added)
4. ***To promote health, safety and general welfare".***

CEQA - TRANSPORTATION/TRAFFIC FINDINGS:

"This analysis indicates that the added volume is so small as to result in no discernible change to the operation of State Hwy 29 from what would occur without the project".

"This project adds 2 peak hour trips south of Dunaweal to the State Hwy 29 volumes of 194 PM trips and 396 weekend trips, and 2:00PM and 1:00PM weekend trips, respectively, added to the 262 and 612 existing trips north of Dunaweal".

The Supplemental Report dated 4/9/15 states that: "The total volume of traffic on Dunaweal ranged from 1,484 vehicles on Thursday, to 1,691 on Saturday. With all approaches at LOS A or

B, the current operation of both intersections would be considered acceptable". Unclear language: Is the existing volume on Dunaweal Lane 262 to 612 or 1,484 to 1,691?

The traffic consultant concluded that: "Upon adding project-generated trips to existing volume, both the Dunaweal Lane/State Hwy 29 and Dunaweal Lane/Silverado Trail intersections are expected to continue operating at LOS A or B overall, as well as, on all approaches".

Were the impacts the approx. 3,000 Vehicle Daily Trips generated by the future entitled Silver Rose and Calistoga Hills resorts factored in?

The April 9, 2015 supplement to the W-Trans Traffic Impact Study analysis determined the project's potential impact on the operation of State Hwy 29 under the projected future 2030 PM peak hour volumes. It states that: "Both with maximum estimated project volumes added to anticipated 2030 volumes and without, operation would remain at **LOS E** both north and south of Dunaweal Lane. Based upon the projected 2030 volumes, the two intersections are expected to operate acceptably well, though the northbound Dunaweal lane approach to Silverado Trail is expected to operate at **LOS E** and the southbound Dunaweal Lane approach to State Hwy 29 is expected to operate at **LOS F** at peak hour".

These projections are contrary to stated County Policies and commitments to its residents. LOS E-F operations even at peak-hours. *especially at the time when 40,000 of them drive to and from work.*

Peak hour traffic inconvenience is not off limits to the residents' welfare nor is the projection to 2030 an excuse to delay appropriate action.

JUSTIFYING ARGUMENTS BY COUNTY OFFICIALS:

When approving traffic increasing projects, several County officials keep making the argument that: *"Traffic increases no matter what we do".*

This argument is not factual and is misleading the public:

A. According to the findings of the 2014 Fehr & Peers Travel behavior Study, only 9% of overall traffic is pass-through traffic accounting for 8,160 daily vehicle trips (9% of 181,330 entry-exits : 2 = 8,160). This is less that just the Copola / Beringer wineries generate.
One must also consider that a significant portion of the 9% pass-through traffic occurs in the Petrified Forest - Lake County corridor which does not affect either of the two main county traffic arteries.

Overall traffic in Napa county has grown at almost 5 times the rate of its population in the past 35 years.

B. It is the County's visitor expansion policies including but not limited to the facilitation of ever increasing numbers of attractions, number of wineries, their ever expanding uses, events, the funding of the Visitor's Bureau - in part towards this goal - which have resulted in the current unsustainable conditions.

The reality is that the Napa valley has the luxury of controlling its own traffic volumes as if it were an island. Practically all traffic volume - more that 91% of all entry point traffic - is the result of policies made by the County and its municipalities.

CEQA - TRANSPORTATION DEMAND PROGRAM

The County CEQA Transportation/Traffic analyses have been employing two disingenuous tools in assessing that individual traffic impacts of projects are "less than significant".

1. The theory that scheduling winery visitations during off-peak hour traffic has less than significant impacts is no longer valid. Southbound traffic at Hwy 29 and the Silverado Trail is already at unsustainable **LOS E-F** beginning at 2:00 PM and northbound traffic does not ease before 11:00 AM. Given current intolerable traffic conditions at the two main Napa valley arteries throughout most of the day, the Transportation Demand Program has lost all credibility as an effective tool to ease traffic.

2. The practice of assessing traffic impacts of any given project by looking at a limited radius of influence, ignores serious and quantifiable impacts to the general traffic patterns in the Napa valley and circumvents the real intent of CEQA Mandatory Findings of Cumulative Impacts.
Any one doubting how destructive this practice has been over the years, need only drive a car from Calistoga to Vallejo from 6:00 AM to 11:00 AM or from 2:00 PM to 6:00 PM in the reverse direction.

The prevailing culture of finding marginal ways to circumvent rather than adhere to the intent of CEQA in approving projects, results in dishonoring the County's commitment to its residents to uphold the General Plan and related Ordinance thus degrading their welfare and quality of life.

CEQA - GREENHOUSE GAS EMISSIONS:

The unsustainable rates of traffic increases and the increased bumper to bumper traffic is also resulting in traffic delays with the associated increase in greenhouse gas emissions, let alone waste of energy.
It should serve as a reminder that entire three weeks of January 2015 were Save the Air days in the Bay Area. While this is not solely attributable to County traffic growth policies, it is a reminder that we all bare responsibility in reducing rather than increasing carbon emissions.

CONCLUSIONS:

Through both its General Plan and Ordinances, the County has recognized that reducing traffic congestion is a growing problem and it has made a commitment to its citizens to adhere to policies which honor this commitment.
Yet for many years and continuing, its conscious policies are undermining the results. Both the Traffic Element of the Napa County EIR and the Fehr & Peers Traffic Study are available with solid facts which allow no cover whatsoever to justify them.

Unless projects which promote growth are shown to lessen congestion, such projects should either be denied or both the General Plan and its related Ordinances should be amended accordingly. The County alternative employed by its current culture is making a mockery of the process.

George Caloyannidis

Planning Commission Mtg.

FEB 18 2015

Agenda Item # 9B

Napa County Planning Commission
County Administration Building
1195 Third Street, Suite 201
Napa CA 94559

Re: Napa County Planning Commission Notice of Intent to Adopt Mitigated Negative Declaration
Girard Winery Use Permit P14-00053

Dear Planning Commission,

I am submitting this letter in opposition to the Girard Winery Use Permit Application and urge you to require full environmental review for the proposed winery and request you not adopt the Mitigated Negative Declaration. The project as proposed, violates the County of Napa Viewshed Ordinance 18.106.010 and is inconsistent with the goals and policies of the County of Napa General Plan particularly as specified in the land use, open space and conservation, and circulation elements.

As you are aware, the Silverado Trail is a County of Napa designated Scenic Highway and as such is included in the Viewshed ordinance. The project is in direct conflict with the Viewshed ordinance as it would destroy the existing views, landscape features and open space as seen from the Silverado Trail. The proposed project would, due to its location in an undeveloped valley plane and its proximity to the Silverado Trail violate the purpose and intent of the Viewshed Ordinance which states "protect the scenic quality of the county both for visitors to the county as well as for its residents by ensuring that future improvements are compatible with existing land forms." The geographic reality of the proposed project's location, specifically this location's contribution to the overall character of the Upper Valley and its relationship to the Silverado Trail prohibit approval of this project without at the very least seeking a variance from Viewshed ordinance.

I object to the adoption of the negative declaration and respectfully request the Planning Commission not adopt the Negative Declaration for the Girard Winery and instead have the applicant conduct an Environmental Impact Report and seek the required variances form the County of Napa Viewshed Policy.

Respectfully submitted,

Kellie Anderson
445 Lloyd Lane
Angwin CA 94508

Planning Commission Mtg.

JAN 21 2015

Agenda Item # 9A

Mr. John McDowell
Deputy Planning Director

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

Re: Girard Winery, Use Permit P14-00053

Mr. McDowell, Planning Commissioners;

Please place the following comments of California Fisheries & Water Unlimited into the administrative record of Use Permit P14-00053 for the proposed Girard Winery, Calistoga, CA.

California Fisheries &Water Unlimited opposes the approval of this Use Permit and project as proposed because of the potential for adverse impacts to the Northern Napa River and its tributaries. CF&WU is interested in all projects, whether of county or municipal origin, which have the potential to adversely impact the Napa River watershed, its aquatic resources, and those species protected under state and federal law. It is the opinion of CF&WU that the information provided does not support a Negative Declaration, that additional analysis is needed to better determine the cumulative impacts to Napa Valley resources, and that an Environment Impact Report is warranted.

The Girard project is of particular concern because of cumulative impacts to the Napa River watershed. It is a critical time for the Northern Napa River. This neglected stretch of the Napa River system appears at last to be receiving the attention it sorely deserves and which is legally due it under the premise of the Public Trust Doctrine, the guiding principle which obligates government to protect and preserve US waterways "in trust" for public uses. Efforts at Northern Napa River restoration are just beginning. These include:

~ Recent litigation which has resulted in the bypassing of water from Calistoga's municipally-owned Ghisolfo Dam to Kimball Creek, the headwaters of the Napa River, for the first time since the dam's construction in 1939. This bypass is intended for the sole purpose of sustaining fisheries pursuant to California Fish & Game Code section 5937.

~ Agreement between Calistoga city managers and representives from Friends of the Napa River, Living Rivers Council, Napa Chapter of the Sierra Club, Napa County Resource Conservation District, and CF&WU on September 30, 2014, to support the modification and/or removal of a second municipally-owned dam and reservoir on Cyrus Creek, a tributary of the Northern Napa River. Feige Dam has been a barrier to migratory fisheries since its construction in 1885;

~ Joint efforts by the Napa County Flood Control, Napa County Resource Conservation District, California Department of Fish & Game, and City of Calistoga for the removal of a concrete footbridge on the Napa River in downtown Calistoga. The footbridge has been a barrier to migratory fisheries for many decades;

~ Receipt of a state grant in 2014 by the California Land Stewardship Institute to assess the condition of the Napa River from Bale Lane (approximately 4.1 miles south of Calistoga) to Lincoln Avenue (in downtown Calistoga) in an effort to plan for stream restoration, similarly to what has been done in Rutherford and Oakville. The Napa County Resource Conservation District will be acting as the sub-

contractor responsible for the fisheries assessment component of the plan, and notes that "improving and expanding habitat for steelhead trout and chinook salmon is a top priority in the Napa River watershed".

~ Recent adoption by the San Francisco Bay Regional Water Quality Control Board on November 12, 2014, of Cease and Desist Orders for the City of Calistoga for violations at its Dunaweal Wastewater Treatment Plant. The CDO includes a laundry list of demands to correct past violations, prevent additional emergency discharges of tertiary-treated wastewater to the Napa River, resolve seepage from the plant's unlined riverside effluent storage ponds to groundwater and the river environment, provide data on its "constituents of concern" (including boron, arsenic, copper, lead, thallium, zinc, and antimony), plan for future pollution prevention, and protect agricultural interests and authorized water users downstream. The close proximity of the Girard project to this problematic plant is especially concerning to CF&WU.

~ Continuing protest by the San Francisco Bay Regional Water Quality Control Board of plans for aggressive logging targeted on Calistoga's steep west side. Timber Harvest Plan 1-13-126 NAP, which requires the approval of multiple agencies to proceed, will decide the fate of the controversial Calistoga Hills Resort, located approximately 1.5 miles from the proposed Girard Winery project. The Regional Water Board is citing serious concerns with erosion, sedimentation, and adverse impacts to anadromous Salmonids (steelhead and salmon) in all freshwater life stages.

In light of these and other restoration efforts currently planned for the Northern Napa River, the extended drought conditions and climate changes associated with it, and four very ambitious projects approved and/or under construction in the City of Calistoga (the Indian Springs Resort, Silver Rose Resort, Calistoga Hills Resort, and the Calistoga Family Apartments low-income housing project), it is the opinion of CF&WU that now is not the time to be adding more stresses to the unique hydrogeology of the area, the greater Napa Valley groundwater basin, and the Napa River system, which is impaired and 303D-listed for sediments, nutrients, and pathogens, pursuant to the federal Clean Water Act. It is shortsighted to ignore consideration of city projects combined with those under county jurisdiction. All current and future projects that extract groundwater need to be assessed in order to fully assess undetermined cumulative effects created by this and future projects in order to assure that water resources are protected for future generations of Californians. As an example, the County must consider the fact that groundwater extraction from the Napa Valley groundwater basin is occuring within the municipalities of Calistoga, St. Helena, Napa, and American Canyon and are not regulated by the County. Like the human circulatory system, all water is interconnected, and water quantity and water quality go hand in hand: this is part of the larger California Basin Plan. Long-range, cumulative impacts to the Napa Valley groundwater basin, or to surface waters such as the Napa River and its tributaries must be considered in order to sustain a healthy, viable watershed. Much of this is law; some is simply common sense.

CF&WU has the following concerns with regard to Use Permit P14-00053 and the Girard Winery project as proposed, and urges further hydrogeologic analysis in order to better determine appropriate mitigations, if any.

Should further, detailed hydrogeologic analysis demonstrate that groundwater levels in the area are in decline, the Use Permit should not be approved, since the project has the potential to further deplete critical groundwater resources;

If further hydrogeologic analysis demonstrates the water table is in fact dropping as local sources report,

whether it is due to climatic conditions, the cumulative effects from the pumping of neighboring wells, or otherwise, the Use Permit should not be approved. Additional groundwater extraction from the Napa Valley groundwater basin has the potential to contribute to diminished stream flows and/or to dewater portions of the Napa River and/or its tributaries;

If further hydrogeologic analysis demonstrates that the additional extraction of groundwater has the potential to cause problematic pollutants of the Dunaweal Wastewater Treatment Plant to move towards the Napa River and/or its tributaries, the Use Permit should not be approved. The interaction between the Napa River, its underflow, and the groundwater system must be taken into consideration when determining whether groundwater pumping has the potential to cause or create adverse environmental impacts;

If further hydrogeologic analysis demonstrates the possibility that additional groundwater extraction in the area will drawdown the water table, especially in dry years, and has the potential to change the flow gradient for discharge to the Napa River and/or its tributaries, then the Use Permit should not be approved;

And should there be any evidence after further study(s) that threatened or protected Salmonid species in all freshwater life stages of the Napa River system will be adversely impacted or will result in juvenile mortality, and budding efforts at restoring what was once a viable fishery are undermined in the process, then the Permit should be unequivocally denied. It is the County's responsibility to ensure that no adverse impacts to protected species of the Napa River occur due to conditions such as dewatering, groundwater extraction, or otherwise, in order to protect the beneficial uses of the Napa River and to prevent future degradation.

... As late as 1963, the Napa River was reported by the California Department of Fish & Game as the "most important steelhead stream bordering San Francisco Bay". In fact, the Napa River and many streams in the county historically supported large numbers of steelhead trout, chinook salmon, and coho salmon. Unfortunately, their populations have declined sharply in the past several decades. Steelhead were listed as threatened in Napa County in 1997 under the federal Endangered Species Act and are under the authority of the US NOAA Fisheries agency; they are also protected by the State of California Endangered Species Act under the authority and management of the California Department of Fish and Game. A small chinook salmon run still exists in the Napa River, but is remains unclear whether they are wild fish or hatchery strays originating from the Sacramento or San Joaquin river systems. Coho salmon became extinct in the Napa River in the 1960's.

I am unaware of any grape varieties in the valley nearing extinction.

CF&WU urges denial of Use Permit P14-00053 and strongly recommends preparation of an EIR for the Girard Winery project.

Respectfully submitted,

Christina Baiocchi Aranguren
California Fisheries & Water Unlimited

Dated: January 16, 2015
bcc: Interested parties

Planning Commission Mtg.

JAN 21 2015

Agenda Item # 9A

John McDowell
Deputy Planning Director
Napa County

January 19, 2015

Regarding: Girard Winery Application

Dear John and Planning Commissioners,

My wife and I live at 4704 Silverado Trail, where Dunaweal intersects the Trail. I have concerns, and critical, relevant information about the Girard Winery application, regarding water supply in the area. The applicants have not adequately proved that sufficient water is available on the property, nor that there are no significant negative effects of pumping the projected volume of groundwater. I respectfully request the opportunity to speak longer than the normal 3 minutes at this Wednesday's hearing, to express this to the Commission; thank you.

My wife and I own 33 acres, with three wineries bordering our parcel. Our well is on the valley floor, and provided plenty of water. When a neighbor's 12.5 acres of valley floor vineyard and home needed more water than their existing 3 wells could provide, they drilled another well 50 ft from ours. Our available water then decreased.

Later, new owners converted some of that vineyard into Venge Winery, and constructed a large metal water storage tank to increase their capacity. However, during the growing season, despite pumping as much as they can from groundwater, their system does not supply enough. They've had to truck water in regularly for years, perhaps more than once a week. They probably would have had to show sufficient supply was available to get their winery permit, but that "proof" clearly turned out to be wrong.

Properties around us have multiple wells (some abandoned) in order to try to meet their water needs. After the neighboring vineyards reduced our well's output, we drilled 3 or 4 "dry" wells before we found more water. Only the variety of terrain on our property allowed that; we could have drilled on the valley floor forever without success, and simply drilling deeper to reach more water was not an option because drillers want to avoid hitting boron and geothermal, common to the Calistoga area.

Girard Winery water:

The Clos Pegas #2 well is designated to provide the water for Girard Winery, as well as continuing to provide for Clos Pegas Winery. It is currently providing for Clos Pegas winery production, reported to be 25,000 cases, or 60,000 gallons, with plans to increase that production and a permit for 200,000 cases (*Wine Spectator 8/21/13*). The Girard application is also for 200,000 gallons. The total production of the two wineries would be 400,000 gallons, or 6.7 times the current 60,000 gallons of Clos Pegas wine. This also means 6.7 times as much water would be used. That's a major change.

Well #2 may have produced enough water historically for Girard's past, lower production, but there has been no proof that 6.7 times the water can be pumped regularly over a prolonged period from this well, or as a whole from the property. Girard's Water System Feasibility report claims that the well logs show that well #2 produces 23 gallons per minute (gpm), and with its pump produces 18gpm, calculating that pumping for 13.8 hours daily will provide the required volume of 14,978 gallons. That's a theoretical conclusion, assuming the water level in the well doesn't drop; a lower level makes a pump work harder, producing less water; and if the water level falls too low from pumping… there is no water left to pump.

The Water Well Driller's Report #384909 reports the static water level in the well was 25ft, and that after a well test removed 30gpm for 3 hours, the water level had lowered to 200ft; the test may have stopped because the 220ft deep well was almost empty. This would equate to 5,400 gallons produced in this single test, which emptied the well. Well recovery time and prolonged water production have not been evaluated. The Peak Daily Water Demand (*Water System Feasibility study, pg 4*) is calculated to be 14,978 gallons, almost 3 times the test volume, per day. Because we don't know how long it takes this well to recover and be able to produce again, we don't know if the well can pump that test volume 3 times per day, or what the long term effects of such pumping will be on the well. Given that 14,978 gallons would be needed to produce 6.7 times the current Clos Pegas wine volume, then the calculated daily volume of production water this well currently produces for Clos Pegas could be estimated to be:

14,978 / 6.7 = 2235 gallons

Apparently the well can produce that much, but that's all that might reasonably be "proved" at this time; long-term capacity beyond that volume hasn't been proved. If this well can't produce sufficient water, the application mentions 1 (or 2?) other existing wells, which currently may be disconnected and/or not a potable source. The production of these wells has not been referenced, and the same concerns over proving actual production exist. Drilling additional wells is possible, but as my neighbor and I have experienced on our properties, it is no guarantee of water.

Trucking:

If sufficient water isn't available from the property, Girard and Clos Pegas would end up trucking water, probably lots of water. Does Napa County really believe in approving such a scenario? What if this becomes a County wide occurrence? That is not a sustainable policy. With the water information before you now, the Girard project should not be allowed to proceed and become a precedent for poor planning and trucking water. If wine can't be made on a site, there should not be a winery there. It's that simple.

This is exactly what has happened to Venge's 20,000 gallon winery, even after drawing as much water as possible from multiple wells on a 12.5 acre valley floor site. The Girard/Clos Pegas wineries will produce 20 times more wine, and need 20 times more water, but they will be drawing water from a valley floor site only 2 times the size.

That's 10 times the water per acre that my neighbor could find… will Girard be that lucky? Will the County bet on that?

Consider that, from the Phase 1 study, page 5:

> "…all vineyard irrigation is supplied by the irrigation reservoir on the Girard parcel. This pond is filled solely with rainwater, vineyard subdrain water, and treated winery process wastewater. This pond is the sole source of irrigation for all vineyards and landscape on the Girard and Clos Pegase parcels.
>
> *Clos Pegase Winery Process Use*
> Process water demand is estimated using the factors in the Napa County Phase One form.
>
> 200,000 gallons wine/yr x 2.15 ac-ft/100,000 gallons wine = 4.30 ac-ft/yr
>
> Additionally, water use data for the existing Clos Pegase and Girard process operations was reviewed for the wastewater feasibility study preparation. In that analysis, it was estimated that approximately 920,000 gallons (2.82 ac-ft/yr) of process water will be required. This number is used as an estimate of treated process wastewater available for irrigation of onsite vineyards and landscape. That volume is subtracted from the parcel demand, as it is not a demand on groundwater resources."

The winery process water comes from well #2, and a significant volume of process wastewater, 920,000 gallons, is earmarked for vineyard irrigation. If that well doesn't produce enough for the winery, the calculated wastewater would not be available for irrigation either; and all the project calculations fall apart.

So, if there is a need to truck water for winery production, that same trucked water would end up as process wastewater for irrigation. I understand the trucked water comes from municipalities… is irrigation with that water legal in this county?

The GRAC report:

The Napa Valley GRAC report is often referenced to claim that there is no known water shortage on the Valley floor. It can also be used to claim there is no known water abundance on the Valley floor, because the report actually says neither. It's an intelligent, highly professional, comprehensive report, but recognizes the need to state repeatedly throughout the text that available monitoring and data are often insufficient, especially in the Calistoga area, the site of the Girard proposal:

> **"2.3 Napa Valley Floor Geologic Subareas**
> The Napa Valley Floor is informally divided into four areas for this Report. The upper valley extends from the northern end of the valley just north of the town of

St. Helena. This area is about nine miles long and about one mile or less in width. Except for near St. Helena, the upper valley was not examined for this study." *(GRAC, pg. 25)*

"The upper Napa Valley and the MST area were largely excluded from the present study because of the small size of the upper valley and the previous detailed studies of the MST." *(GRAC, pg. 25)*

"As with the calculated depth to groundwater values along the Napa river thalweg, the groundwater elevation contours in Spring 2010 were interpreted with limited well control (wells in the groundwater level monitoring program with known well construction information) and, therefore, calculated values in many area of the valley have great uncertainty." *(GRAC, pg. 69)*

"Figure 8-7 illustrates annual root-zone water balance model results for the Napa river near Calistoga watershed. This watershed is located at the north end of the Napa Valley and includes developed and undeveloped lands. The streamflow gage near Calistoga was only in operation for eight years..." *(GRAC, pg. 89)*

"10.3 Aquifer Testing

As explained in this Report, the distribution of the hydraulic conductivities in the Napa Valley as presented by Faye (1973) was based on data recorded on historical drillers' reports. During the current study, it became evident, based on the approximately 1,300 reports reviewed, that most of the "test" data are insufficient to adequately determine or estimate aquifer characteristics, since most of these data were recorded during airlift operations rather than a pumping test. Currently, test methods accepted in the County's Well and Groundwater Ordinance allow bailing, airlifting, pumping, or any manner of testing generally acceptable within the well drilling industry to determine well yield. Recommendations for modifying the Napa County's Well and Groundwater Ordinance (Title 13, Chapter 13.04) have been proposed to improve the quality of data received by Environmental Management concerning reporting of well yield (LSCE, 2011c). These recommendations included removal of bailing and airlifting as acceptable methods; pumping is recommended to gather the appropriate data to reliably determine well yield, particularly in areas where such information along with aquifer characteristics is determined to be important to accomplish other County groundwater objectives. In 2013, County staff and the GRAC plan to review this recommendation and provide guidance for updating the County's Well and Groundwater Ordinance. *(GRAC, pg.126)*

10.5 Groundwater Monitoring Network

This Report illustrates the distribution of current groundwater level monitoring locations, which is primarily located in the Napa Valley Floor-Napa and MST Subareas. Very little groundwater level monitoring is currently conducted elsewhere in Napa County outside these two subareas. *(GRAC, pg. 127)*

Luhdorff & Scalmanini's Figure 5-2 (page 152) map stops before Calistoga, and shows far fewer wells in the Girard project area than in St. Helena and south; their Figure 5-11 map goes no further north than St. Helena.

Some of the calculations and models do not reflect real world conditions, and so further calculations based on them for water analysis of projects such as the Girard proposal, will be increasingly inaccurate:

> **"8.10.1 Considerations Related to Overall Water Balance**
> The root-zone water balance has resulted in recharge estimates for the Napa River Basin Watershed and sub-watersheds. As noted in the discussion of the root-zone water balance components, this model does not include groundwater pumping or subsurface groundwater outflow from the underlying aquifer system." *(GRAC, pg.108)*

Conclusion:

In the absence of factual or accurate data from the GRAC report for the Girard region, the known facts from other sources concerning existing wells in the area become much more important. The water situation at Venge winery is one of the few comparisons available, and does not bode well for the much larger Girard project. At the very least, the project needs further data and studies. Tripling production at Clos Pegas to the permitted 200,000 gallons may itself create water problems; granting the Girard Winery permit will double that effect.

Even if the subject properties can produce the water, there have been no studies of the effects to neighbors or to the region in general. As in the case of Venge Winery, repercussions to neighbors do exist. The effects from the Girard/Clos Pegas project will be 20 times as great. No permit should be issued to Girard unless more extensive studies demonstrate a favorable outcome.

Sincerely,

David Clark
4704 Silverado Trail
Calistoga

Frost, Melissa

Subject: FW: Girard Winery hearing
Attachments: Girard.1.19.15.doc

-----Original Message-----

From: McDowell, John

Sent: Tuesday, January 20, 2015 10:11 AM

To: Balcher, Wyntress; Frost, Melissa

Cc: Gallina, Charlene; Anderson, Laura

Subject: FW: Girard Winery hearing

Correspondence on Girard item for tomorrow.

-----Original Message-----

From: David Clark [mailto:david@davidsjewelers.com]

Sent: Tuesday, January 20, 2015 10:07 AM

To: McDowell, John

Cc: heather@vinehillranch.com; terry scott; napacommissioner@yahoo.com; fidd@comcast.net; mattpope384@gmail.com

Subject: Girard Winery hearing

Hi John,

Would you please read my attached letter, enter it into the Girard file, and ensure that the Planning Commissioners get a copy? Thanks very much.

Best regards,

David Clark

4704 Silverado Trail

Calistoga

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Frost, Melissa

Subject: Girard Winery, Use Permit P14-00035
Attachments: Girard Winery Use Permit.odt

From: McDowell, John
Sent: Tuesday, January 20, 2015 10:09 AM
To: Frost, Melissa; Balcher, Wyntress
Cc: Gallina, Charlene; Anderson, Laura
Subject: FW: Girard Winery, Use Permit P14-00035

Correspondence on Girard item for tomorrow's hearing.

From: California Fisheries & Water Unlimited [mailto:calfisheriesandwaterunlimited@gmail.com]
Sent: Monday, January 19, 2015 8:56 PM
To: McDowell, John
Subject: Girard Winery, Use Permit P14-00035

Mr. McDowell;

If you could please reply that you/Planning Commissioners have received the comments of CF&WU (attached), it would be much appreciated.

Thank you, Christina Aranguren

On Jan 16, 2015, at 11:18 AM, California Fisheries & Water Unlimited <calfisheriesandwaterunlimited@gmail.com> wrote:

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Planning Commission Mtg.
JAN 21 2015
Agenda Item # 9A

Frost, Melissa

Subject: FW: Girard Winery

From: Bill Hocker [mailto:bill@wmhocker.org]
Sent: Tuesday, January 20, 2015 11:14 AM
To: Heather Phillips; napacommissioner@yahoo.com; tkscottco@aol.com; mattpope384@gmail.com; Wagenknecht, Brad; Luce, Mark; Dillon, Diane; Pedroza, Alfredo; Caldwell, Keith; Morrison, David; McDowell, John; Balcher, Wyntress; anne.cottrell@lucene.com
Subject: Girard Winery

Supervisors, Commissioners and Planners,

I know this will seem like I'm just wasting everyone's time, and I agree with Supervisor Dillon that the big picture issues aren't going to be resolved through individual projects, and I know that I have no standing in the Girard project. But since I learned last March of a project proposed in my backyard I lie awake at night, every night, thinking about these things. Writing these letters helps.

"Napa County is one of the smallest counties in California and within the County areas suitable for quality vineyards are limited and irreplaceable. Any project that directly or indirectly results in the removal of existing or potential vineyard land from use depletes the inventory of such land forever."
- From the 1990 WDO

I ask your indulgence for a moment to please take a look at the Girard vineyard on Google Maps by clicking here: https://maps.google.com/maps?q=1077+Dunaweal+Ln,+Calistoga,+CA&hnear=1077+Dunaweal+Ln,+Calistoga,+California+94515&t=h&z=16

GIven the propitious placement of the ponds, the vineyard is a perfect rectangle. It is almost an archetypal piece of agricultural land. But now imagine the Girard Winery, about the size of the Clos Pegase winery development area, located right in the middle of it.

Now zoom out a bit on the map and imagine a similar winery in the middle of every vineyard plot in the vicinity, including perhaps those nice rectangles on Larkmead Lane, another area of concern this week. Continue to mouse down through the entire length of the valley and imagine a winery on every empty vineyard you see. And then roam around the splotches of deforestation throughout the hills and imagine a similar winery on every splotch.

Is this the best way to protect agriculture? Is this what you want the Napa Valley to become?

The owner of the Girard vineyard has other properties already occupied by winery buildings, including the one across the street. Other developers are also coming before you seeking their 2nd or 3rd winery. Let them expand their existing wineries to increase capacity. I mean, what reason is there to build a winery other than to provide winemaking capacity? It would be a much more efficient use of the limited and irreplaceable land than the development of new facilities on undeveloped land. Please, begin here and let this plot, and all other plots in the county that have yet to be compromised by development, remain devoted purely to agriculture (in its pre-

WDO definition) . If the intentions that led to the creation of the ag preserve cannot protect this virgin field from development then the ag preserve is meaningless.

Bill Hocker

sodacanyonroad.org

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Planning Commission Mtg.
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January 19, 2015

TO: Ben Monroe, PE, Always Engineering, Inc.

FROM: Jeremy Kobor, MS
O'Connor Environmental, Inc.

SUBJECT: Review of Girard Winery Phase I Water Availability Analysis, Public Water System Feasibility Study, and Water Supply Permit Amendment

Introduction

This memorandum summarizes the findings from the review of three documents related to the pending Girard Winery Use Permit application process. The documents reviewed include the following: a Phase I Water Availability Analysis completed by Always Engineering dated November 26, 2014, a Water System Feasibility Study for the Girard Winery completed by Always Engineering dated February 21, 2014, and an Amended Water System Technical Report for Clos Pegase Winery completed by Acme Engineering dated May 2009. In addition to commenting on the existing documentation, some additional perspective regarding the proposed water use relative to water availability and potential impacts to neighboring properties is also provided.

Summary of Findings

The different documents make different assumptions regarding the source of irrigation water and the Winery Water Use values. Despite these varied assumptions, even when the most conservative (highest water use) assumptions/values are used, the total proposed use for the Girard Winery is still below the 26.53 ac-ft/yr Allowable Water Allotment. Similarly, even using the most conservative water use values, the stated well capacity is sufficient to meet both peak and total annual demands under the proposed combined use by the Clos Pegase and Girard wineries.

It is my understanding that concerns have been raised that the proposed increase in production from the existing well could interfere with water availability on neighboring dry-farmed vineyards. Review of the driller's log for the project well reveals that the upper 90-ft contain primarily clay and that the well produces water over a screened interval of 80 to 220-ft below ground surface. The static water level at the time of well completion was 25-ft below ground surface. Given the presence of a thick clay layer(s) between the land surface and the zone of well production, and the separation between the water table and the land surface it is highly unlikely that groundwater production from this well would impact soil moisture conditions in the surrounding area.

Frost, Melissa

Subject: FW: Girard-Review of well information
Attachments: GirardWaterAvailability-Revised1-19-3.pdf

From: Heather McCollister [mailto:bhmccolli@sbcglobal.net]
Sent: Monday, January 19, 2015 5:42 PM
To: Balcher, Wyntress; McDowell, John; Gallina, Charlene
Cc: Pat Roney; Ben Monroe
Subject: Girard-Review of well information

Hi there,
Attached is a brief summary for independent review of our water availability/well data for Girard.

Thank you

Heather McCollister

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Frost, Melissa

Subject: FW: Please forward to Planning Commissioners

Planning Commission Mtg.
JAN 21 2015
Agenda Item # 9A

From: Norma Tofanelli [mailto:keepnvap@sonic.net]
Sent: Tuesday, January 20, 2015 7:35 AM
To: McDowell, John
Cc: Morrison, David; Balcher, Wyntress; Pat Roney; Vince Tofanelli
Subject: Please forward to Planning Commissioners

Hi, John

Please forward the following apology to the Planning Commissioners - not all have contact info on the county planning web page.

The Tofanelli family apologizes for the late submission of data for the Girard hearing tomorrow.
Unfortunately, we are submitting most of our data later today. This does not allow you much time to read and absorb.
This unfortunate timing was mandated by the short continuance that you granted - over major holiday weeks.

Not only was the proposed Neg Dec issued just before Thanksgiving, the period of continuance from the original 12/17 hearing included several major holidays.
Christmas and New Year's fell in the middle of the week so that many offices were closed both weeks. and many professionals were on holiday.
In addition, yesterday was also a national holiday.
This timing allowed only about 2 weeks (from January 5 until today) to seek out and hire experts; proof and assemble final data and submit to you.
This was very difficult - most hydrologists require a minimum 45 days to prepare data. We were fortunate to find one who was familiar with Napa County and previous studies in the area. We just received his final proof.

We were able to meet with the project proponents and have agreement on conditions of approval for mutually agreeable fencing to prevent winery visitors from trespassing on neighbors' lands as well as dust control measures.

We hope that you understand and are able to study our submissions before the hearing tomorrow.

Thank you for understanding,
Norma Tofanelli

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21 January 2015

Planning Commission Mtg.

JAN 21 2015

Agenda Item # 9A

Napa County Planning Commission

Chair Heather Phillips
Commissioners

re: Girard Winery Use Permit #P-14-00053

I apologize to the Commission, staff and the applicant for the amount of information submitted just before this hearing. The timing of the continuance granted on December 17 included 2 major holiday weeks (Christmas and New Years), limiting the time available to find experts, complete research, compile data.

Please note for the record, that although we are adjacent neighbors to both the proposed Girard parcel and Clos Pegase, and we spoke at the December hearing, the Tofanelli family did not receive any legal notice of this hearing today.

Many of our concerns are detailed in the letter to you from Ellison Folk, Shute, Mihaly and Weinberger; others remain.

As immediate neighbors, we will be forever impacted by the massive change in operations on these parcels. The Girard winery building with faux stone front and tall cupolas will block the most beautiful down valley view on Dunaweal Lane as well as the incredible view of the western hills that I have enjoyed all my life. These views will be gone for our lifetime.

Our farming operations will be irrevocably altered - fences and gates will have to be installed to keep winery visitors from wandering into our home lands, adding to the increasing burden from tourist trespass and theft.

Mr. Roney has agreed to install fence(s) and gate(s) at mutually agreeable locations as conditions of approval. These must be installed before the winery is allowed to open for business.

Mr. Roney has also agreed to conditions of approval to control construction dust to protect our organic vineyards. As many signs around the valley point out - dust IS harmful to grapes, most particularly to those that are farmed organically. It is

critical that the dust be controlled and not creep over to our vines.

While Mr. Roney has been very gracious and accommodating, we are very concerned about the operations of Girard and Clos Pegase and the changes they bring to a once quiet rural area.

Clos Pegase is a pre-WDO winery with a permit for 200,000 gallons although it produces only 25,000 cases or about 60,000 gallons of wine. Warnings from neighbors so many years ago that the clay soils of the parcel would not perc proved true and we watched as truck after truck hauled out winery waste. Then we watched the mound system fail as toxic winery waste water inched toward the Napa River. We protested when they sought to pipe the waste under Dunaweal to be treated in ponds on the second, now Girard, parcel. County code at the time mandated the merger of contiguous parcels under same ownership when the use on one parcel required services that existed on the other parcel. The county disregarded its own code and the neighbors didn't sue. Too bad.

We warned, too, that the Clos Pegase parcel could not provide water as claimed. We laughed at the well drilling rig atop a huge pile of cave tailings at the base of the hill, watched as well drilling and the original well failed and water had to be piped in from the second parcel.

As long as a winery exists on the Clos Pegase parcel, the two parcels are inextricably linked. It can't produce its own water nor get rid of its own waste. To grant another winery on this parcel is contrary to the intent of the WDO. The parcel has been used - another winery should not be allowed. Where once there were approximately 50 acres of prime producing farm land with a modest farmer's house and barn there will now be two industrial processing plants with retail and commercial uses in their place. This appears to be a policy issue for the Board of Supervisors. When has a parcel been "used"?

Once again, neighbors are concerned about water. According to staff "The County has no record of problems or complaints of diminished groundwater supplies at the project site or in the general vicinity." Astonishing. We have been submitting data to support our water concerns for over 30 years. I have presented to this very Commission the attached area well log and history so many times - most recently: Pavitt, Venge, Fisher. These should be quite familiar to most of you.

Familiar also should be the attached pages from the 1989 WDO FEIR in which Jill Pahl, Senior Environmental Health Specialist, noted that the Dunaweal Lane area

warranted study as it appears to be an "existing problem yield area" where "water is in short supply." What happens to these documents that we labor to produce as evidence? Are they "disappeared" down Orwell's memory hole?

While much of the county, and Napa city, is grappling with the problem of water being trucked to increasingly unsustainable projects, staff appears unaware of water trucking in the Dunaweal area and again assures there is plenty of water. One acre foot of water for each acre of land can supposedly be continuously extracted with no harm. GRAC and Ludorff Scalmanini do not provide data to support that assumption. Indeed, they state there is insufficient data to assume anything and, instead, identify the Calistoga area as "High Priority" for study because it is particularly data deficient.

A small winery, Venge Vineyards (8,000 cases), less than a mile away, was approved in 2009, also with assurances of ample water - from 4 wells. The 12-acre parcel had a small vineyard and private residence but needed 4 wells to survive. Neighbors were told their water concerns were baseless. One acre foot of water for every acre of land? Venge was built in 2010 and now trucks water in regularly. At least one Venge neighbor now also has to truck in water periodically.

The problem in our area is that the alluvium capable of storing water is very thin, geothermal waters with vineyard-killing boron are very close to the surface and the hills are so fissured from volcanic activity it is unclear how much water received in the eastern hills actually recharges here.

Apparently unknown to the county, and perhaps unknown also to the applicant, is that Clos Pegase has also recently trucked in water. I watched in 2012-13 as water trucks regularly chugged up the hill to the storage tank near the residence.

The new owners plan to boost production at Clos Pegase to 200,000 gallons as permitted. An increase of over 300%. If water has had to be trucked in to produce 60,000 gallons, how many more water trucks will be needed when production grows threefold? How many will be needed when Girard is in production?

What is most concerning is the change that the new owners have brought to Clos Pegase. It is well known that weddings are illegal at Napa County wineries. One of the principles, Leslie Rudd, has owned a winery here since the late 1980's and surely is aware of this unwavering WDO policy. Yet, the major marketing plan to "grow" Clos Pegase appears to be via weddings. Almost immediate to the change in ownership, Clos Pegase began an intense wedding marketing program.

Included is a packet of printed wedding promo material downloaded from the internet. Google "Clos Pegase" - "weddings" is the first item that comes up. Click on Clos Pegase "weddings" and up pops the wedding home page. Click through and you will see they have pulled out vineyard to make way for a portable altar and chairs. They aren't kidding - they are promoting the actual wedding ceremony as well as the receptions and dinners. Lovely, expensive photography with brides and grooms all over the vineyard, winery and caves.

Wedding-spot.com provides more detail: maximum outdoor ceremony = 250 guests, maximum indoor reception = 250 guests. Average wedding cost is between $17,000 and $27,000 for 100 guests, or about $70,000 for the maximum 250 guests. And make no mistake, this is all about weddings and not at all about wine marketing. Only beer and wine are allowed and the alcohol is noted to be "BYO" - Bring Your Own. They aren't even required to drink Clos Pegase wines at these weddings.

We have recently observed events for wedding planners as well as the weddings. Napa County Sheriff's complaint logs contain the details. Code enforcement should check with them. One deputy, responding to a recent wedding complaint, told me that he could not do anything other than request the music be turned down, because he said "weddings are legal in Napa County, they happen up and down the valley all the time." When I cited the facts, that weddings are illegal here, he responded - "if that's true, and you can put a stop to them, you have no idea how many calls you will save this department."

I repeat - Napa County Sheriff's deputies appear to be responding regularly to complaints generated by weddings occurring all over the valley, but do not shut them down because they are considered "legal activities". Perhaps the Board of Supervisors should chat with the Sheriff? And Code Enforcement should open some files?

The new owners have at least one more trick up their marketing sleeve - see Calistoga Winegrowers promo piece. "The winery now hosts weddings, among other events, and a remodel of the house on the property will create a new event space." Not only is this a wedding mill, the private residence is intended to be a new event space for yet more illegal special events. Clos Pegase does not hold permits to allow these activities.

We are reminded that these same winery owners also own Cosentino, which uses

State Highway 29 as a personal loading and unloading zone because the parcel is too small for the winery activities it contains. The neighbors suffer. It is astounding that the county, CHP and CalTrans allow this to continue. We are not looking forward to policing our new, scofflaw, neighbors.

Weddings and illegal events were apparently conducted at the site by the former owner as well. Included in the packet is this letter, anonymously put into my mailbox by an irate neighbor who expected me to stop the shenanigans. I'm presenting it at this time, so they know their efforts were not in vain.

Every day we learn that Napa County has very serious problems that are not being addressed. Thousands of winery waste water trucks are apparently a surprise to planners. At one Raymond hearing, staff revealed that "dozens" of left-turn lanes throughout the county, mandated as CEQA mitigations, have never been installed. Yet traffic is one of our biggest issues. This Commission has been asking for at least a year for a nexus between marketing and production, for definitions of marketing events vs food and wine pairings. (*Attached request from Chair Phillips, July 16, 2014*). The much heralded NCTPA traffic study has not been completed - how can you assess cumulative traffic impacts? No one knows yet how many water trucks are delivering how much water to which unsustainable projects all over the county. And yet, Wine Business Journal recently reported that there are 80 winery projects "in the pipeline". How can this continue? How can you keep compounding the problem by approving more projects without current and complete data?

And, how can you issue a new use permit to owners who are openly and flagrantly violating the WDO and Napa County code?

Norma J. Tofanelli

Norma J. Tofanelli
for the Tofanelli Family
1001 & 1076 Dunaweal Lane

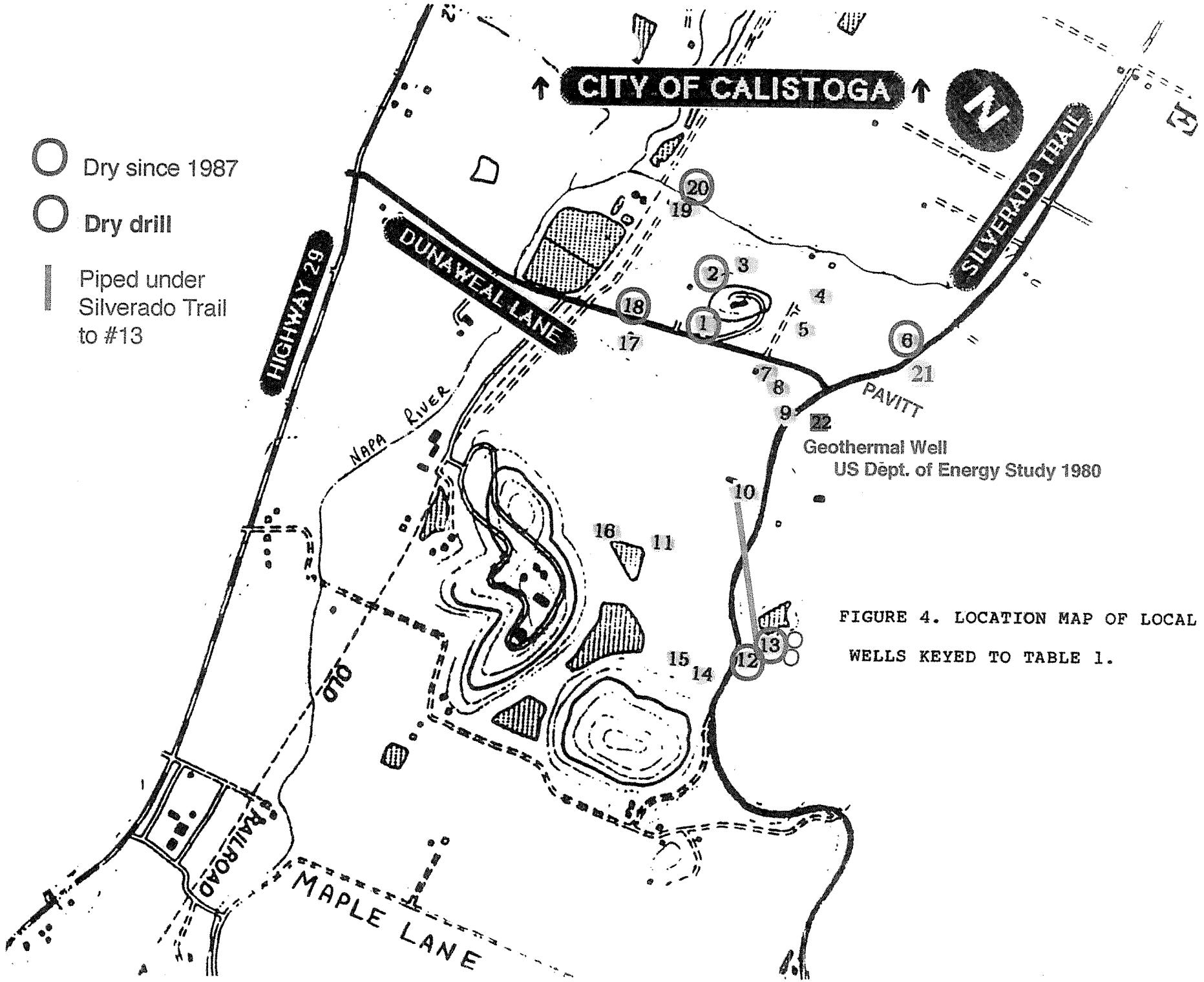


FIGURE 4. LOCATION MAP OF LOCAL WELLS KEYED TO TABLE 1.

1987 Data

Dunaweal Area Well Records

The following information was drawn from a series of interviews with property owners, winery employees, well drillers, Napa County Department of Environmental Health employees, and from personal information gathered over the 60 years that my family has been farming this area.

1. **Clos Pegase: 75', 30 gpm**

This well was drilled in July, 1985 after an unsuccessful attempt to drill (well #18) on the same parcel, southeast of this well. The well drilling rig was mounted atop the pile of debris from cave excavations and grading at the top of the hill and drilled down through the rubble. The previous vineyard manager/caretaker stated that the area drilled in had traditionally been an area of seepage from the hill.

2. **Clos Pegase: no records - depth unknown, 7 gpm?**

This is the property's historic well and hasn't been a good source according to previous owners and caretakers. It had to serve two single-family residences. *(Projected as 7 gpm because use permit claims 37 gpm total for winery site and well #1 is 30 gpm.)*

3. **Czapleski: depth unknown, 1-2 gpm.**

This was drilled about 15-20 years ago by the former owner. According to the former owner and tenants this well historically has dried up in late September. According to the former tenants they had to use bottled water for drinking in late summer and fall.

4. **Czapleski: depth unknown, hand-dug, 1-2 gpm**

This is the property's historic well dating back at least 60 years. According to conversations with former owners, (dating back to as early as 1929), this well was sufficient for domestic usage but in the last 20 years has had to be supplemented by other sources.

5. **Czapleski: 370', 1-2 gpm**

This well was drilled in May 1987. Water from wells #3, #4, and #5 is being pumped into a recently constructed concrete water storage tank in an effort to provide water for domestic as well as vineyard usage. Water was trucked in to fill the tank after construction presumably because the flow from the wells was insufficient to fill the tank within the time necessary to insure the proper curing of the concrete.

6. **Czapleski: dry, depth unknown**

This was drilled by the former owner and was abandoned before completion.

7. **Tofanelli (DiGiulio): 17', gpm unknown.**

This was the property's historic well already in existence when the property was purchased in 1929. It has served as the only source for domestic use until 1977 when it went dry. In approximately 1960, the water level began dropping seriously during summer and fall months. In 1977 the well dried up and water had to be tanked in. The

8. Tofanelli (DiGiulio): 195', 10gpm

This well was drilled in the fall of 1977 after well #7 went dry; the water is noticeably warmer than the water in well #7. This well is one of the 206 test wells being tracked in the study of the Calistoga area's geothermal resource being conducted by the US Department of Energy in conjunction with the California Division of Mines and Geology (CDMG).

This well was tested at 20°C in the most recent test and the report notes that "For the purpose of preparing Geothermal Resources Map of California, CDMG has chosen 20°C as the starting temperature for warm water." However, as it is common practice in Calistoga to store water in metal pressure tanks which can affect the temperature, so "...25°C has arbitrarily been chosen as the cutoff point for a geothermal well for the purpose of this investigation only." As no metal pressure tank is used at this well, it can be seen that this well qualifies as geothermal under the standard CDMG definition. This indicates just how close to the surface the geothermal is in this area, particularly since another well (well #22) just across the Silverado Trail from this one is also being monitored and has been tested at 41°C at 275'.

9. Tofanelli (DiGiulio): 19-20', hand dug - livestock only.

Since about 1960 this well dries up in late sumer-fall. It has been noted throughout the years that when neighbors across the Silverado Trail from this well are watering their lawns and runoff is seen, the well subsequently dries up and takes several days to recover.

10. Corry (Perry): 45', gpm unknown

This is the property's historic well. When the property was purchased by the current owners it was 15' hand-dug, but in 1959 it no longer provided sufficient water for domestic use and had to be drilled to 45'. It has been a sufficient domestic source since that time.

11. Tofanelli (DiGiulio): 18', gpm unknown - livestock only

This is one of the property's historic wells, already in existence in 1929. It has traditionally been used for livestock and was the source for the animals (horses and cows) that were pastured in this area when the vineyards were still being worked by horse (as recently as 30 years ago). It is currently used for livestock (horse) watering. In the last 20 years this source normally goes dry in late summer - fall.

As this well is currently used for livestock, and is located approximately 20-25' from the property line adjacent to the proposed wastewater ponds there is concern that it could be contaminated. Stored near the property line in this area is an old, abandoned out-house that has not been in use for about 25 years and is in unuseable condition. It has been filled with soda and beer cans and various garbage items by field workers over the years.

12. Angell: 325', dry - drilled in December 1985

This was an attempt to replace well #13, which was dry. The property owner was buying water from an adjacent property owner as there was no other source of water on this property.

13. Angell: 125', 9 gpm

This is the property's historic well and was 35' deep. For last 20 years it has been dry in summer-fall. In about 1982 it dried up totally. When the attempt to find water at well #12 failed, the driller tried to clean out this well, and somehow the bottom dropped down another 90' where water was found. It tested in January 1986 at 9 gpm.

14. Rosenberger: 135', 1.5 gpm

This well was drilled about 30 years ago. The owner indicated that it has been an increasingly poor summer-fall source.

15. Rosenberger: 250', 1.5 gpm

This was drilled about 8-9 years ago as #14 was not sufficient for domestic use even though the property owners are in residence normally only about three days per week.

16. Clos Pegase: not a well, but a sump hole

This was excavated by Blakeley construction company in about 1975.

17. D'Anneo: no information

Historically has not been a good well. The former owner was required, as a condition to serving as a foster parent family, to bring in bottled water for drinking.

18. Clos Pegase: depth unknown, dry

This was drilled in May or June 1985, during the winery permit appeal period. It was noted during the appeal hearings that the actual attempt to drill was made prior to obtaining a well permit to allow such drilling.

19. Tofanelli: 80', 1-2 gpm

This well was drilled in 1953 and has been sufficient for domestic use only; however, its recovery rate is very slow and water conservation measures have always been used by the owners. Over the last 15 years recovery rate has been increasingly slower.

20. Fisher: 600', dry; drilled approximately 1984.

The approximate depth of this well was learned in conversation with the drillers as work progressed. Its drilling was of particular concern to the Tofanelli family as its location is only a short distance from well #19. The drillers said that after drilling all of that depth only "a trickle of water" was found and the well was abandoned.

21. Curtiss: 235', 20 gpm

22. See #8 for data

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Clos Pegase

clospegase.com/

WELCOME TO **CLOS PEGASE**, the classic Napa Valley destination for award-winning, estate wines and luxury hospitality. Located just down the road from the ...

4.4 ★★★★★ 9 Google reviews · Write a review

1060 Dunaweal Lane, Calistoga, CA 94515
(707) 942-4981

Weddings
CLOS PEGASE is an idyllic setting for any wedding, from a small ...

Architecture
WHEN THE FOUNDERS OF CLOS PEGASE, Mr. and Mrs. Jan ...

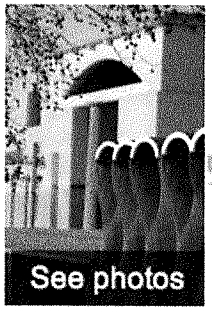
Visit
VISIT. WE WELCOME YOU TO VISIT CLOS PEGASE WINERY ...

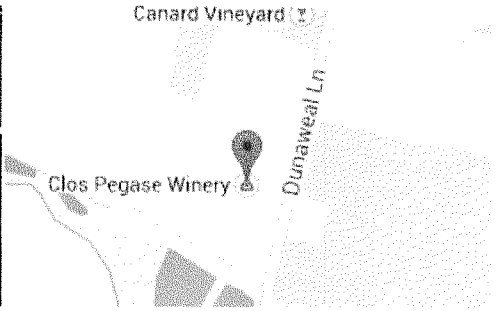
Tastings
WE WELCOME GUESTS TO VISIT CLOS PEGASE WINERY and ...

Wines
2009 Clos Pegase Pinot Noir, Mitsuko's Vineyard, Carneros ...

Event
a private event on the Cypress Lawn ... and the perfect location ...

More results from clospegase.com »





Clos Pegase Winery

Directions

4.4 ★★★★★ 9 Google reviews

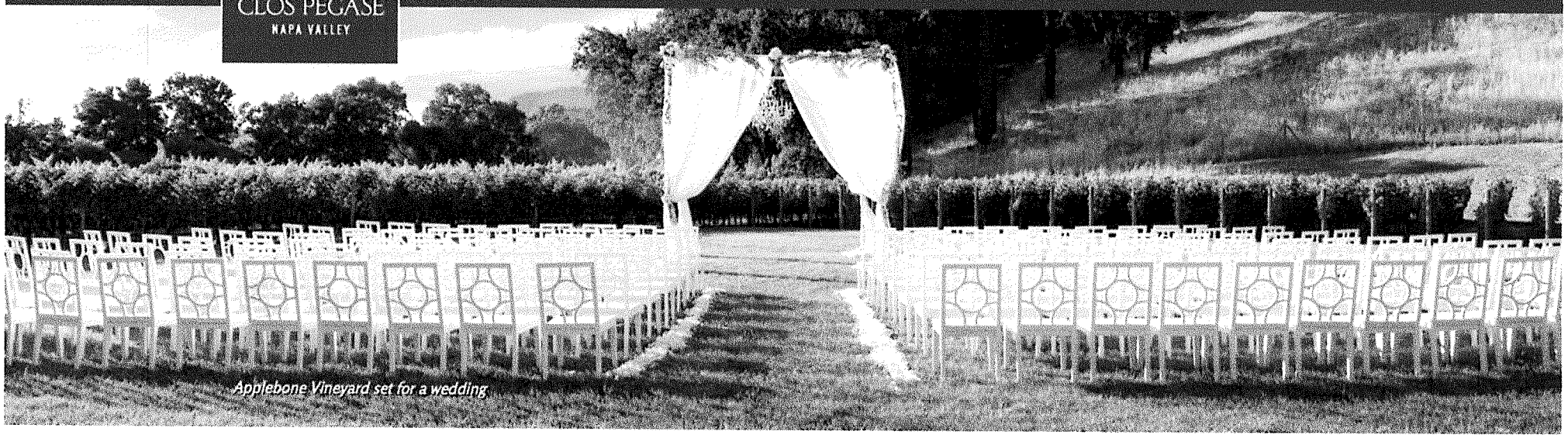
Wine Store

Address: 1060 Dunaweal Lane, Calistoga, CA 94515

Phone: (707) 942-4981

Hours: Open today · 11:00 am – 5:00 pm

Menu: locu.com



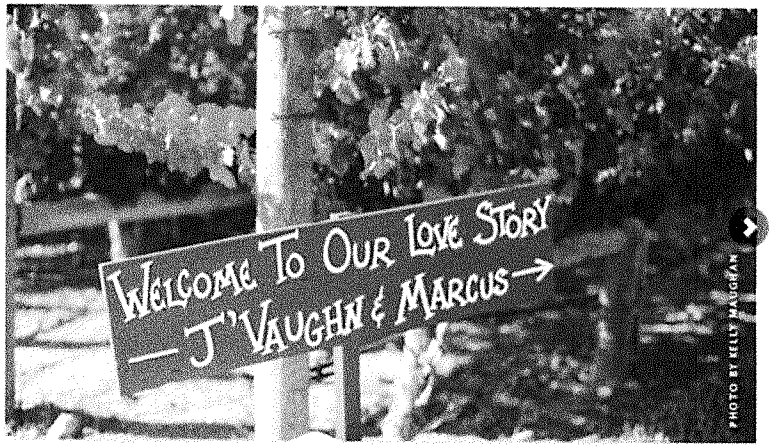
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SHOP WINE »

All Wines
Hommage
White & Rosé Wines
Red Wine
Dessert Wine
Favorites

WEDDINGS



A wedding in the vineyard

1 / 15

Plan an Event:

To speak with our Event Team:

707.921.2631

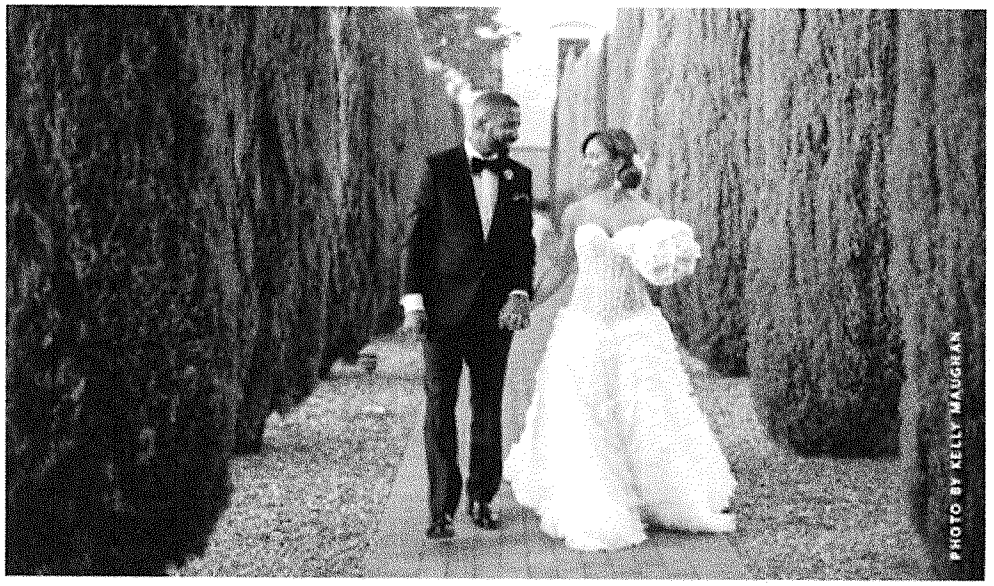
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WEDDINGS

Weddings
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SHOP WINE ›

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Red Wine
Dessert Wine
Favorites





Plan an Event:

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CLOS PEGASE is an idyllic setting for any wedding, from a small intimate affair to a grand gathering of family and friends. An architectural masterpiece surrounded by vineyards, the property has a feel of modern luxury that is like no other winery in the Napa Valley. As you enter our breathtaking portico it provides a unique window to nature that embraces the winery, the expansive lawn lined with Cypress trees; that invites you to our spacious brick

CLOS PEGASE is an idyllic setting for any wedding, from a small intimate affair to a grand gathering of family and friends. An architectural masterpiece surrounded by vineyards, the property has a feel of modern luxury that is like no other winery in the Napa Valley. As you enter our breathtaking portico it provides a unique window to nature that embraces the winery, the expansive lawn lined with Cypress trees; that invites you to our spacious brick courtyard. **Applebone Vineyard**, is our unique wedding site that is nestled amongst the vines, with Mount St. Helena as a backdrop, and the rolling hills of the valley will provide you with a stunning setting for your most special day. All this conspires to create an atmosphere that is at once intimate and grand.

Clos Pegase offers exquisite caves to entertain your guests, with a dining capacity of up to 250 guests. The main tunnel will lead you to a trail of glowing candlelight into our enchanting Cave Theater, where your guests can dance the night away. Your wedding day here will be nothing short of magical!

We would be honored to be part of your day...

Location Names:

- Portico Entrance
- Courtyard
- Cypress Lawn
- Applebone Vineyard
- Cask Room
- Caves
- Cave Theater



AT CLOS PEGASE WINERY WE HELP YOU CREATE the most unique and memorable experiences. From anniversaries, rehearsal dinners, birthdays, holiday parties, private parties and more, we will transform our winery into your unique vision for the event. Along with the stunning setting, dramatic architecture, and world-class wines, we will provide you with best in class hospitality and get all of the details just right, including food, décor, and live entertainment. No matter the occasion, events at Clos Pegase reflect a welcoming blend of elegance and magic for you to create memories you will never forget.

Clos Pegase provides several distinct spaces for your event, each delivering a unique experience depending on your needs. Whether you are looking for an indoor or outdoor location, a large area for hundreds of guests or an intimate space, Clos Pegase has several different options from which to choose.

A few locations for our events:

- Portico entrance
- Courtyard
- Cave Theater
- Visitor Center
- Cask Room
- Harvest Dining Room
- Vineyard Picnic Area

Contact our Event Team at 707.921.2631 to work with you on all of the details to have the perfect event at Clos Pegase Winery.

Clos Pegase Winery

Napa/Sonoma

Share Pin it Tweet



Photo by: Kelly Maughan Photography

See all photos



Venue Details

1060 Dunaweal Lane
Calistoga, CA 94515

Email Favorite

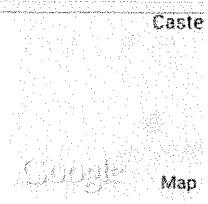
Style:	Winery/Vineyard, Historic/Landmark Building, Park/Garden, Outdoor
Max Capacity:	250 guests
Outdoor Ceremony:	Yes
Indoor Ceremony:	No
Outdoor Reception:	No
Indoor Reception:	Yes
Catering Options:	Choose from List
Alcohol Options:	BYO
Time Restrictions:	08:00AM to 10:00PM

Price This Venue

Book a Tour

Clos Pegase Winery Details

Overview Amenities



Description

Nothing says luxury like an elegant wedding celebration in one of Napa's exquisite wineries. Clos Pegase Winery, set in idyllic Napa Valley just minutes from Calistoga, is the epitome of modern luxury. This beautiful venue will make you feel as though you have been transported to Tuscany. As you enter the portico, the unparalleled view of the lush lawn lined with Cypress trees will take your breath away as you make your way into the brick courtyard. Imagine walking down the aisle with Mount St. Helena providing a grand backdrop for your special day, surrounded by your friends and family amongst the verdant vines of Applebone Vineyard. After your stunning vows, your guests can make their way through an elegant tunnel to enjoy gourmet food and exquisite wines in the soft, glowing candlelight of the Cave Theater. Full of vintage luxury, the Cask Room offers fantastic photo opportunities for your wedding album, and the unique caves will have your guests impressed the whole night through. Time to raise a glass and cheers to your new life together!

Wedding Style

Winery/Vineyard, Historic/Landmark Building, Park/Garden, Outdoor

Services

Outdoor Ceremony, Indoor Reception

Capacity

Max Outdoor Ceremony: 250 guests
Max Indoor Reception: 250 guests

Time Restrictions

Set up can start 3 hours prior to event. Events must end by 10:00PM.

Rental Fees

The rental fee ranges from $12,000 to $15,000 for ceremony and reception and includes 5 hours of event time excluding set up and clean up. Additional hours can be arranged.

Wedding Cost

The average wedding cost at Clos Pegase Winery is estimated at between $17,115 and $27,625 for a ceremony & reception for 100 guests.

Catering

Choose from List

Alcohol

BYO

Book a Tour Price This Venue

Calistoga Food and Wine Festival, continued...

The winery dinner will be the third portion of the festival and the cost will be based on a price set by the participating winery. Ultimately, it is **our goal to have multiple wineries hosting a Saturday night wine dinner, giving the attendees several options and a variety of unique experiences.** This may still be possible for this year depending on the responses we receive from the members of the CWG.

Sign ups are now open. Please respond to Adam Fox to ensure your participation and to help make the Calistoga Food and Wine Festival a success!

SEEKING MAGNUMS FOR AUCTION NAPA VALLEY E-AUCTION LOT

Calistoga Winegrowers is again participating in Auction Napa Valley with an E-Auction lot. **We are seeking two things to fufill this lot: Magnums of wine.** These do not need to be a Calistoga AVA wine, per se, but winery must be a member of Napa Valley Vintners and Calistoga Winegrowers. **Experiences:** This is a "Calistoga Experience" lot. So if you have any contacts that might be able to provide lodging, meals, museum tickets, spa treatments, etc., please forward their information to us.

Contact Carolyn Czapleski to donate to this lot.

MEMBER PROFILE: CLOS PEGASE

Founder: Jan Shrem Current owner: Vintage Wine Estates

General manager: Samantha Rudd

Winemaker: Richard Sowalsky, with Marco Di Giulio as consulting winemaker



When Vintage Wine Estates, owned by Leslie Rudd and Pat Roney, purchased Clos Pegase from founder Jan Shrem in August 2013, it was a bit like coming full circle for Leslie. "Clos Pegase was one of the first wineries my father visited when he came to Napa Valley, and always thought Calistoga was a special place," says Clos Pegase general manager Samantha Rudd. "We're honored to be the new stewards of this brand and winery."

Samantha joined Clos Pegase after a lunch with Jan and Leslie, where the talk turned to family. Leslie thought it would be valuable for Samantha—who at that time was managing hospitality at Rudd Estate—to spend some time earning her own success outside the family estate. Jan thought Clos Pegase could be a good fit for her. A month later, Samantha started as general manager of Clos Pegase.

Jan established the winery in 1984 with the help of Andre Tchelistcheff, who made the first vintage of wines, and legendary architect/designer Michael Graves, who designed the winery and its grounds. So Samantha's vision is to maintain the integrity of property and the brand while making both more accessible to wine lovers.

The winery now hosts weddings, among other events, and a remodel of the house on the property will create a new event space. "The house is a beautiful jewel, so we look forward to making that available," says Samantha. Wine production, which is currently at 25,000 cases, will be increased to make use of the winery's extensive vineyard acreage while still remaining focused on producing estate wines.

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I feel strongly that it would benefit Napa County's planning process to clarify where we stand in relation to key metrics associated with Napa County's General Plan in order to better support the Commission's evaluation of winery project applications. The Commission has been assured that we are operating within the parameters of the County's General Plan, but we need to evaluate and review the analysis in light of changes that we have seen within permit applications in response to the increasingly competitive wine marketing environment. Without sufficient analysis, possibly confirming that we are operating within the parameter of the County's General Plan, we could be placing the County in a vulnerable position. This is not just about the winery permits we have in front of us, but ensuring that the Commission is performing the necessary diligence to make sure we have the resources to ensure that wineries can continue to be approved well into the future.

In light of this, I respectfully request that Director Morrison present a work plan that would include a timeline and deliverables relating to the delivery of the analysis requested at the Joint Meeting on May 20, 2014. I suggest that this plan be presented at the next scheduled Planning Commission meeting on August 6, 2014.

The requested analysis should include:

1. Permitted production capacity (in gallons) in relation to current wine grape production capacity, as reflected in the 2013 CDFA Grape Crush Report
2. Permitted and planned winery hospitality versus General Plan by permitted capacity and in total.
   - Future hospitality projections with a conservative assumption scaffolding up from 10 acres, with 100,000 gallons and up to 50,000 visitors
3. Cumulative Traffic and status of traffic study
4. Water and Wastewater in the context of the GRAC

I would also like to suggest, on a date certain, a discussion by Staff and the Planning Commission to advance a range of topics to include:

- Discussion of Planning Staff's interpretation of winery applications' hospitality to production ratio, specifically as it relates to the inclusion of unenclosed spaces, in order to inform a more consistent administrative standard.
- Definition of the appropriate metric by which to measure production versus hospitality as an ancillary use within the Winery Definition Ordinance (% Footprint v % Activity)
- Discussion with regard to the appropriateness of permitting the use of winery rooftops for hospitality purposes
- Definition of recommended policy with regard to the installation and display of public art in the Agricultural Preserve
- Assessment of the validity of Napa County's Stage 1 water analysis
- Consideration of the conditioning the inability of projects to truck water in after approval and subsequent failure

This is in no way meant to question the efforts to date of Planning Administration and the Commission. I have requested discussion as a Commission of many of these topics before, however it is very difficult to discuss policy as a Commission outside of the context of a permit application.

While the Planning Commission is not necessarily charged with creating policy, it is our responsibility to ensure that we have the necessary perspective and context to apply the requisite discretion to ensure the integrity of Napa County's planning processes. Because if all we are going to do is "implement existing regulations" than we just might as well go home as I think our very competent staff is more than capable of doing that on their own.

Commissioner Phillips
7.16.14

Friends of Dunaweal Lane

Re: Clos Pegase

Clos Pegase is now scheduling weddings at the

Owner Jan Shrem's residence. This is agains the ordinance.

Also- there is no commercial kitchen, handicap bathroom or permit for the construction they are currently doing.

Please call the planning department and health department to voice your disproval-

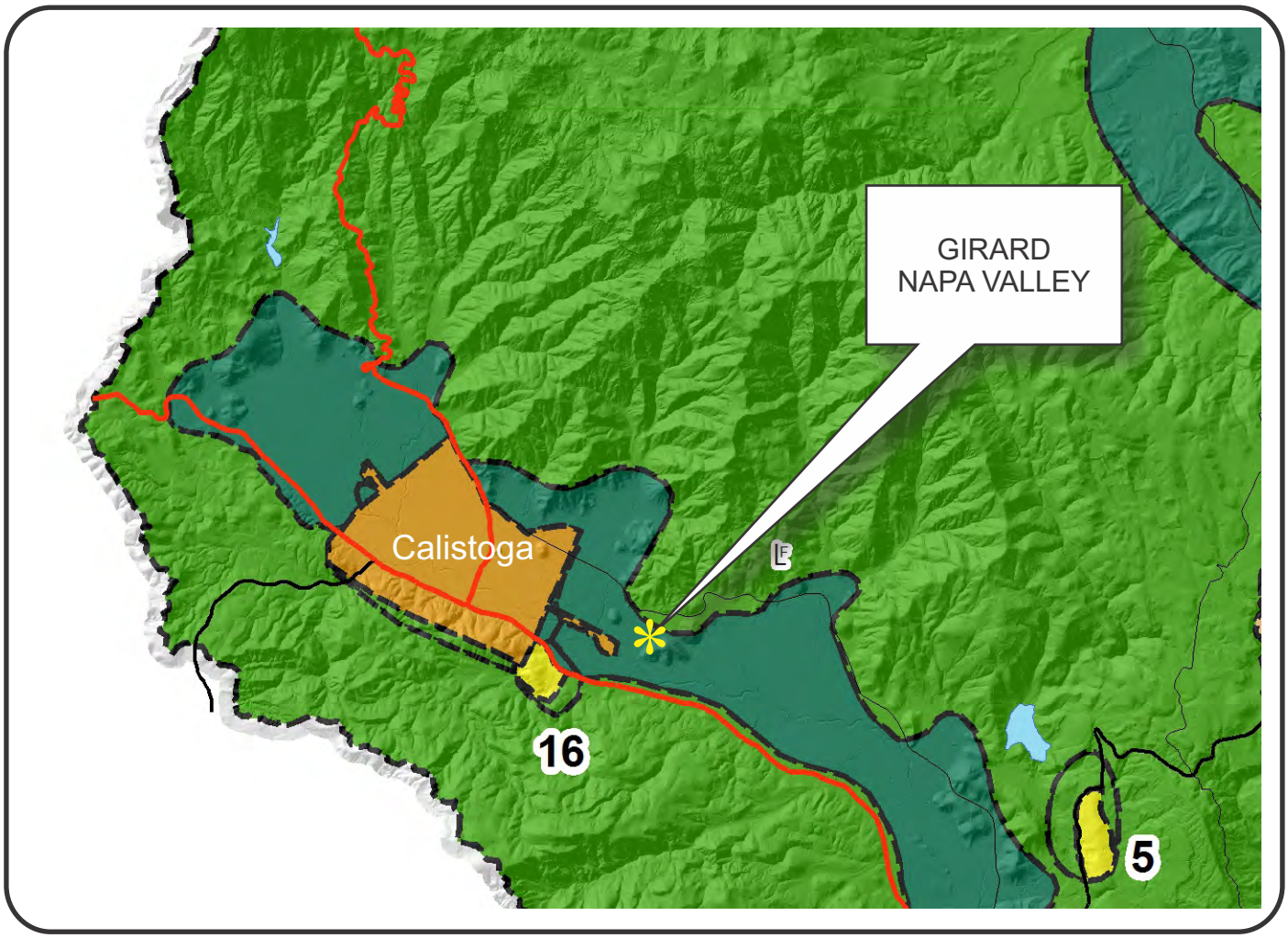
707 253 4417

Again- Clos Pegase needsto be reminded of what they can do!!

Comparison Chart
150,000 to 250,000 Gallon Wineries

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	ID	Name	Status	BldSz Curr	Cave Size	Prod Curr	Tour Tastg	Visit Day	Visit Week	Visit_Yr	Visit_NmE	Emplyee Num	WDO	acres	Location
2	90	GRGICH HILLS CELLARS	PROD	46,083	0	250,000	APPT	572	4,004	208,208	385	44	x	13.24	Valley Floor
3	103	NIEBAUM COPPOLA ESTATE HWY 29	PROD	74,879	18,400	250,000	PUB	0	3,391	176,332	0	78	x	81.81	Valley Floor
4	259	VILLA AMOROSA	PROD	119,460	30,000	250,000	PUB	200	600	31,200	0	6	x	40.00	West hillside
5	1	ACACIA WINERY	PROD	34,436	0	250,000	APPT	75	525	27,375	63	22	x	49.67	Carneros
6	247	TURNBULL WINE CELLARS	PROD	40,543	0	250,000	APPT	350	400	20,800	22	8	x	21.64	Valley Floor
7	388	ALTAMURA VINEYARDS	PROD	30,232	0	250,000	APPT	10	150	7,800	8	6		42.72	Wooden Valley
8	84	FROGS LEAP WINERY	PROD	38,568	0	240,000	APPT	50	350	18,200	36	19		38.92	Valley Floor
9	28	MICHAEL MONDAVI FAMILY WINERY	PROD	28,965	0	240,000	PUB	28	51	2,652	0	10	x	9.92	Valley Floor
10	21	BOUCHAINE VINEYARDS	PROD	39,588	0	225,000	PUB	30	150	1,800	25	12	x	102.28	Carneros
11	202	SILVER OAK WINE CELLARS	PROD	75,000	0	210,000	PUB	500	3,000	156,000	312	50	x	22.54	Valley Floor
12		**Averages**		52,775					**1,262**	**65,037**	**85**				
13	239	SUTTER HOME WINERY	PROD	41,000	0	200,000	PUB	0	3,500	182,000	0	101		1.00	Valley Floor
14	317	PARADUXX VINEYARDS	PROD	32,909	0	200,000	APPT	0	840	43,680	160	38		45.56	Valley Floor
15	45	CLOS PEGASE INC	PROD	24,100	19,000	200,000	PUB	0	725	37,700	0	10	x	20.39	Valley Floor
16	269	WHITEHALL LANE WINERY	PROD	34,227	0	200,000	PUB	250	600	31,200	60	7	x	25.28	Valley Floor
17	203	SILVERADO HILL VINEYARD LLC	PROD	27,454	0	200,000	APPT	70	490	25,480	126	24	x	35.68	Valley Floor
18	151	GROTH WINERY AND OAKCROSS VINEYARDSS	PROD	49,480	0	200,000	APPT	0	180	9,360	77	24	x	63.09	Valley Floor
19	199	SHAFER VINEYARDS	PROD	33,630	8,900	200,000	APPT	0	105	3,750	29	2	x	8.50	Valley Floor
20		**Averages**		**34,686**					**920**	**47,596**	**65**				
21	191	SCHRAMSBERG VINEYARDS WINERY	PROD	40,645	54,071	180,000	APPT	96	672	34,944	42	39	x	39.30	West hillside
22	415	QUINTESSA WINERY	PROD	30,430	17,000	180,000	APPT	100	500	26,000	13	12		17.66	Valley Floor
23	136	PROVENANCE VINEYARDS	PROD	39,925	0	180,000	PUB	25	65	3,380	36	12	x	60.65	Valley Floor
24	74	FAR NIENTE WINERY	PROD	18,000	39,000	175,000	PUB	0	500	26,000	832	30	x	13.00	Valley Floor
25	67	DUCKHORN VINEYARDS	PROD	32,933	0	160,000	PUB	82	626	32,552	167	42	x	10.67	Valley Floor
26	51	CUVAISON	PROD	20,002	25,000	155,048	PUB	300	600	31,200	730	15	x	14.59	Valley Floor
27	357	CUVAISON CARNEROS	PROD	35,000	25,000	155,048	APPT	75	525	27,300	0	10		206.00	Carneros
28	196	SEQUOIA GROVE VINEYARDS	PROD	27,810	0	150,000	PUB	45	600	31,200	22	28	x	24.26	Valley Floor
29	124	LUNA VINEYARDS	PROD	16,480	0	150,000	APPT	60	420	21,840	77	15	x	28.11	Valley Floor
30	32	CHAPPELLET WINERY	PROD	53,136	0	150,000	PUB	40	280	14,560	9	24	x	15.01	East hillside
31	274	LADERA WINERY	PROD	20,247	19,000	150,000	APPT	70	60	3,120	30	13	x	13.99	East hillside
32	457	SOMERSTON WINERY	APVD	34,477	18,045	150,000	APPT	8	56	2,912	8	12		261.00	Chiles Valley
33	169	ETUDE WINERY	PROD	40,520	0	150,000	PUB	200	740	38,480	1,127	22	x	29.81	Carneros
34		**Averages**		31,508					434	22,576	238				
35		**Median for All**		34,457					513	26,650	33				
36															
37	524	GIRARD NAPA VALLEY	PEND	39,604	0	200,000	APPT	42	294	15,288	9	25		26.53	Valley Floor
38															
39	236	MERRYVALE VINEYARDS	PROD	20,000	0	190,000	PUB	0	570	29,640	0	24			City St. Helena

NAPA COUNTY LAND USE PLAN 2008 - 2030



SCALE IN MILES
0 2

LEGEND

N

URBANIZED OR NON-AGRICULTURAL

- Study Area
- Cities
- Urban Residential*
- Rural Residential*
- Industrial
- Public-Institutional
- Napa Pipe Mixed Use

OPEN SPACE

- Agriculture, Watershed & Open Space
- Agricultural Resource

TRANSPORTATION

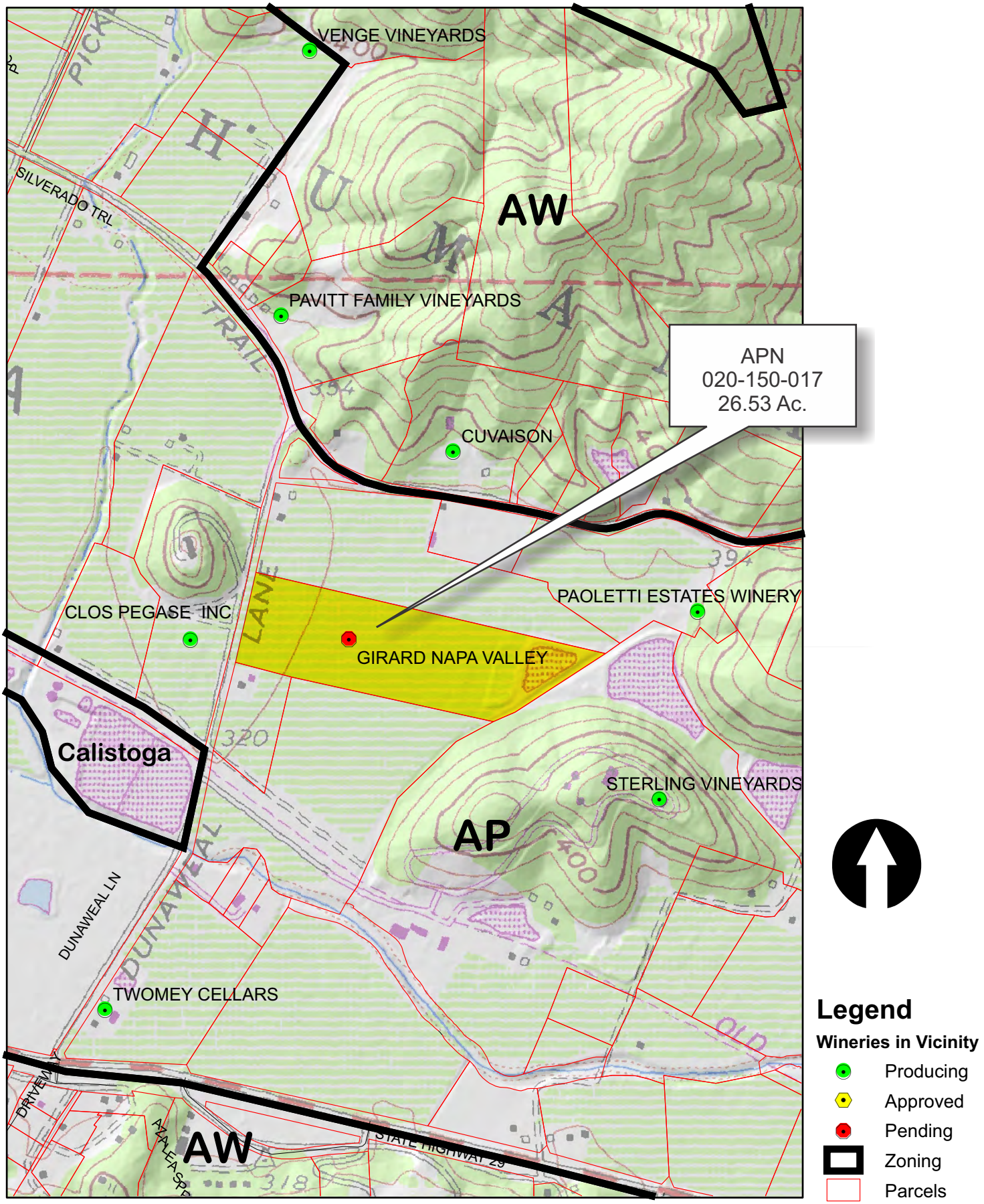
- Mineral Resource
- Limited Access Highway
- Major Road
- American Canyon ULL
- City of Napa RUL
- Landfill - General Plan
- Secondary Road
- Airport
- Railroad
- Airport Clear Zone

* See Action Item AG/LU-114.1 regarding agriculturally zoned areas within these land use designations

APN
020-150-017
11-17-2014
UP
01

GirardWinery-up1.cdr

GIRARD NAPA VALLEY



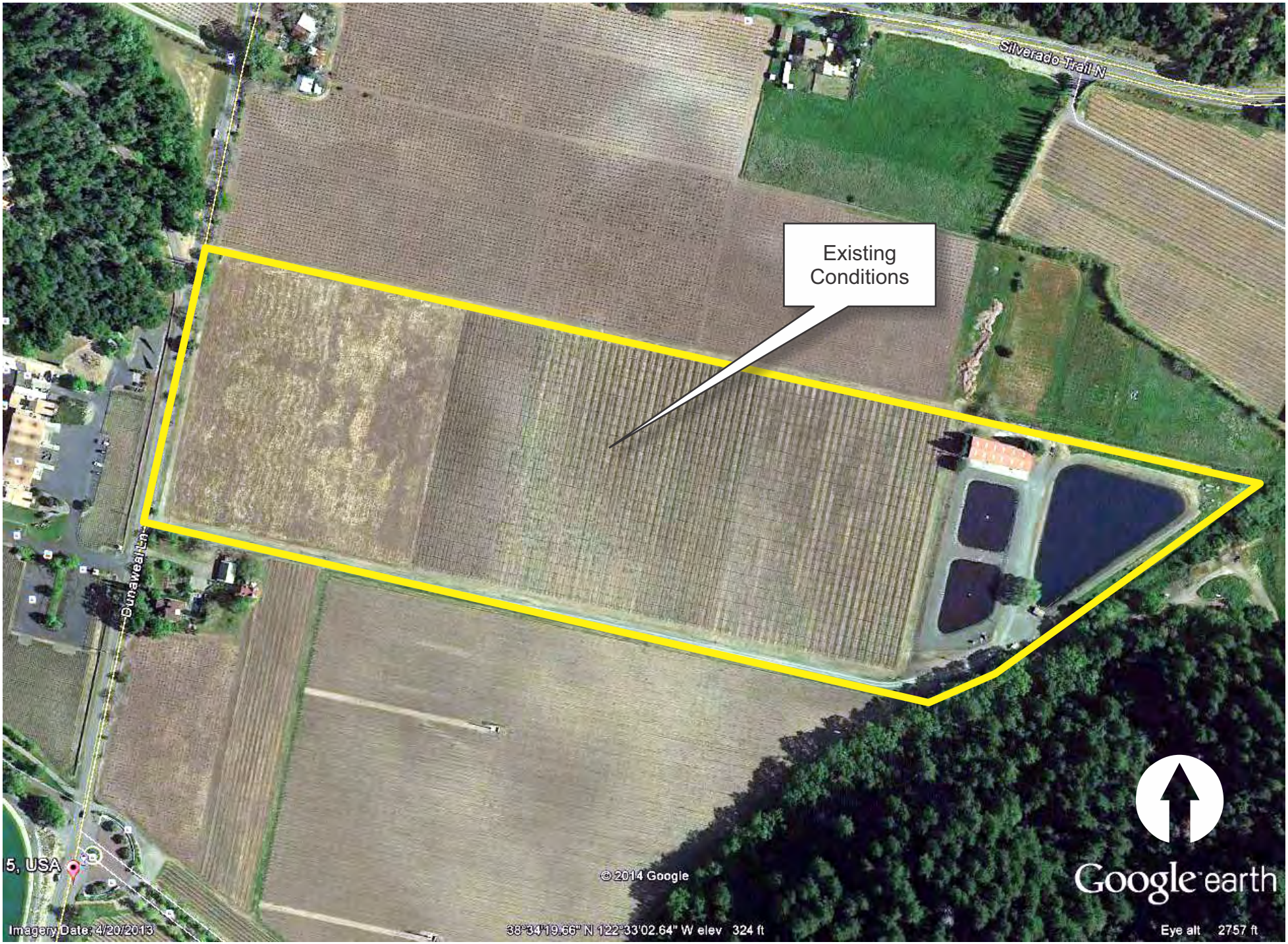
Legend

Wineries in Vicinity

- Producing
- Approved
- Pending
- Zoning
- Parcels

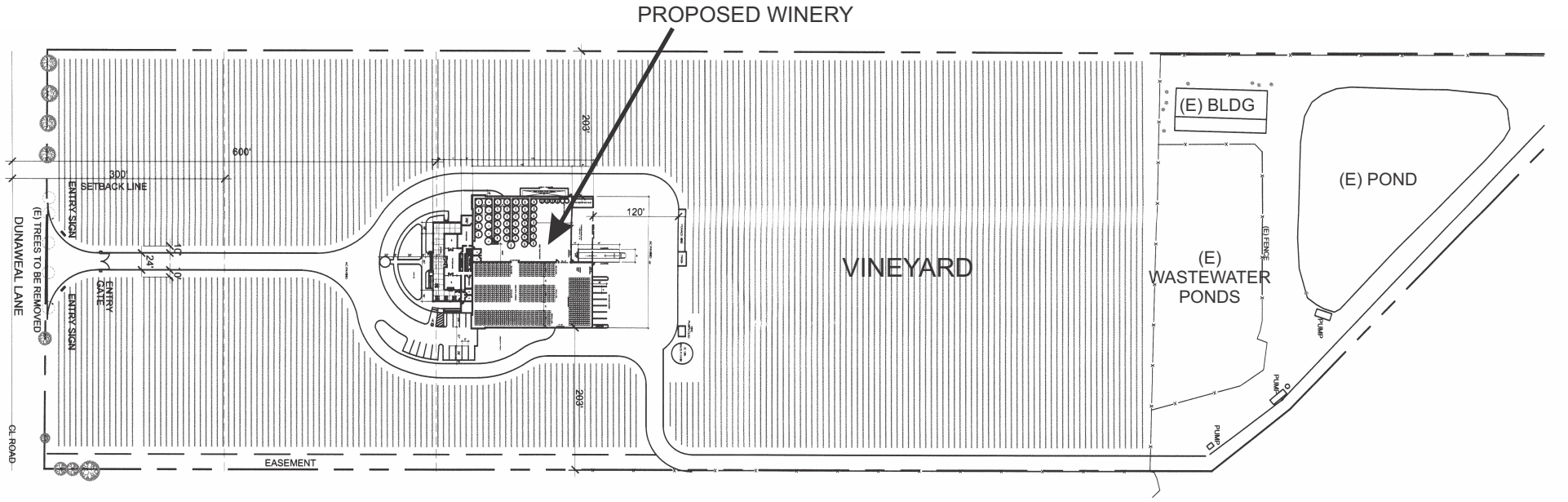
11-17-2014	UP	02	Napa County Conservation Development and Planning Department	GirardWinery-up1.cdr

GIRARD NAPA VALLEY



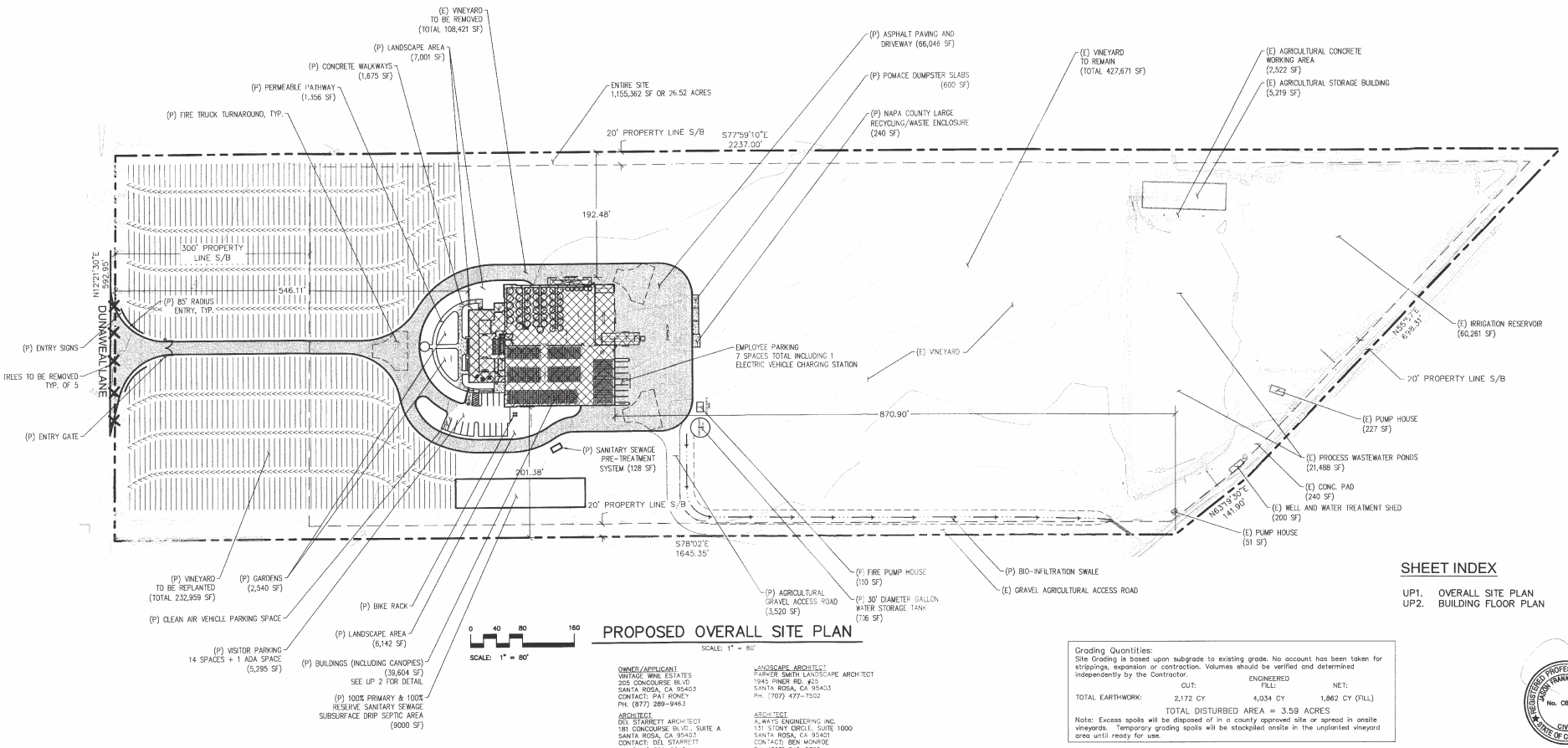
11-17-2014	UP	03	Napa County Conservation Development and Planning Department	GirardWinery-up1.cdr

GIRARD NAPA VALLEY



Proposed Site Plan

GIRARD NAPA VALLEY



PROPOSED OVERALL SITE PLAN

SCALE: 1" = 80'

OWNER/APPLICANT
VINTAGE WINE ESTATES
205 CONCOURSE BLVD
SANTA ROSA, CA 95403
CONTACT: PAT RONEY
PH. (877) 289-9463

ARCHITECT
DEL STARRETT ARCHITECT
181 CONCOURSE BLVD., SUITE A
SANTA ROSA, CA 95403
CONTACT: DEL STARRETT
PH. (707) 526-9645

LANDSCAPE ARCHITECT
PARKER SMITH LANDSCAPE ARCHITECT
1945 PINER RD. #25
SANTA ROSA, CA 95403
PH. (707) 477-7502

ARCHITECT
ALWAYS ENGINEERING INC.
131 STONY CIRCLE, SUITE 1000
SANTA ROSA, CA 95401
CONTACT: BEN MONROE
PH. (707) 542-8795

Grading Quantities:
Site Grading is based upon subgrade to existing grade. No account has been taken for strippings, expansion or contraction. Volumes should be verified and determined independently by the Contractor.

	CUT:	ENGINEERED FILL:	NET:
TOTAL EARTHWORK:	2,172 CY	4,034 CY	1,862 CY (FILL)

TOTAL DISTURBED AREA = 3.59 ACRES

Note: Excess spoils will be disposed of in a county approved site or spread in onsite vineyards. Temporary grading spoils will be stockpiled onsite in the unplanted vineyard area until ready for use.

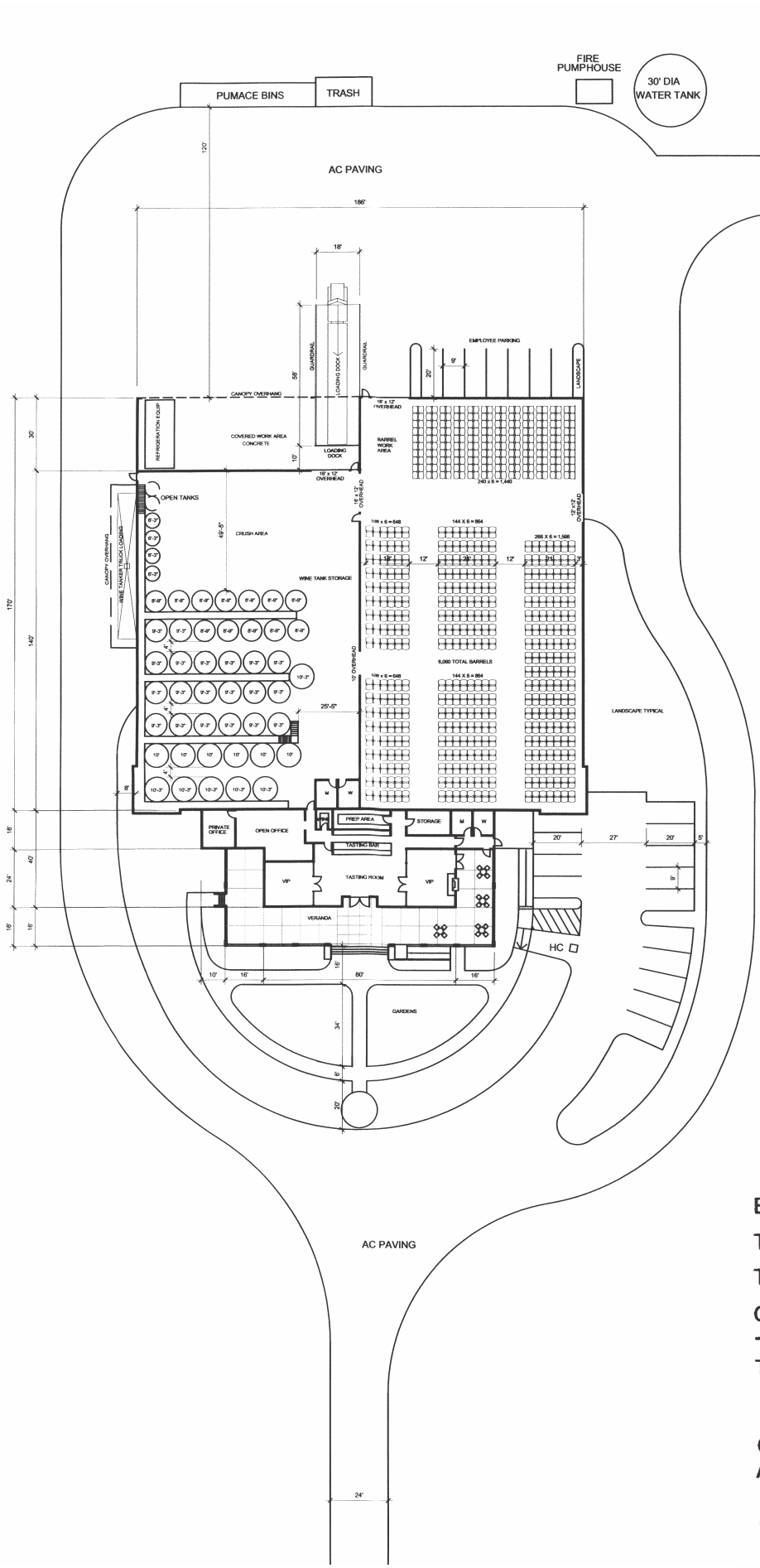
SHEET INDEX

UP1. OVERALL SITE PLAN
UP2. BUILDING FLOOR PLAN

REGISTERED PROFESSIONAL ENGINEER JOHN FRANK HOECKER No. C66429 CIVIL STATE OF CALIFORNIA

Engineering Site Plan

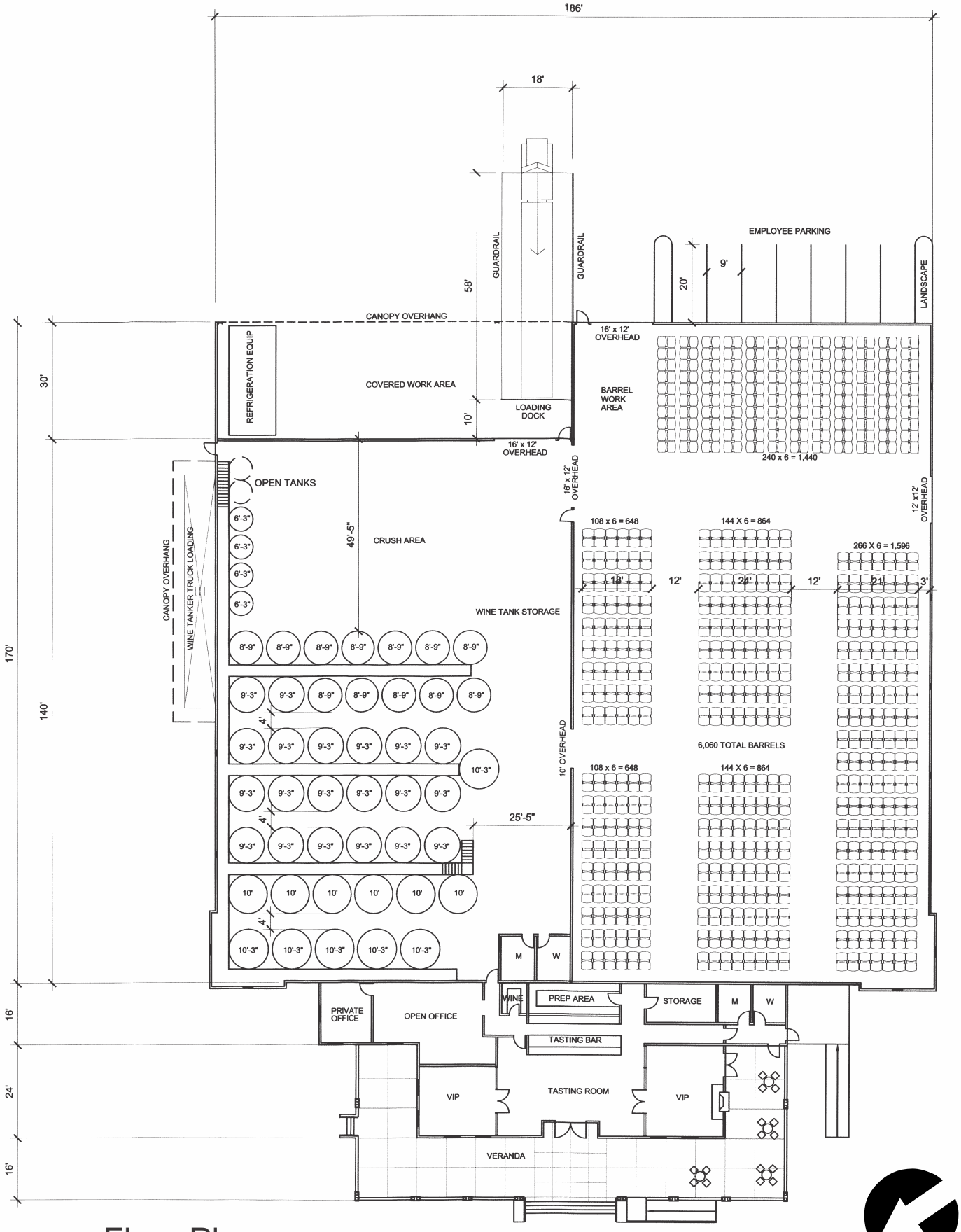
GIRARD NAPA VALLEY



Site Plan Detail

BARRELS	15,875 SF
TANKS	13,080 SF
TASTING	3,010 SF
OFFICE	806 SF
TOTAL BUILDING	32,771 SF
COVERED WORK AREA	2,781 SF
COVERED VERANDA	2,628 SF

GIRARD NAPA VALLEY



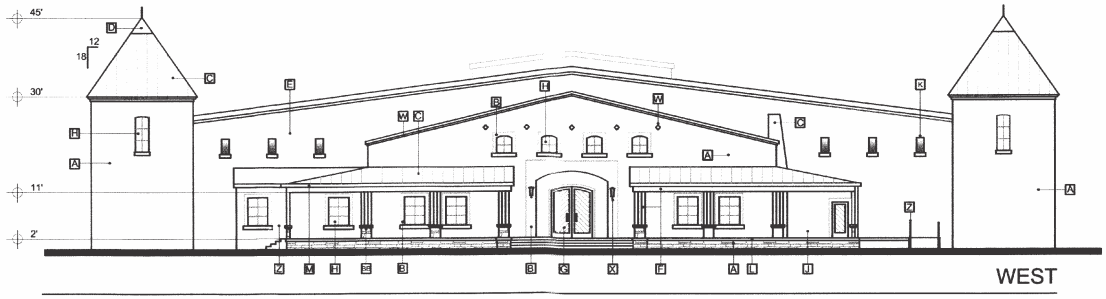
Floor Plan

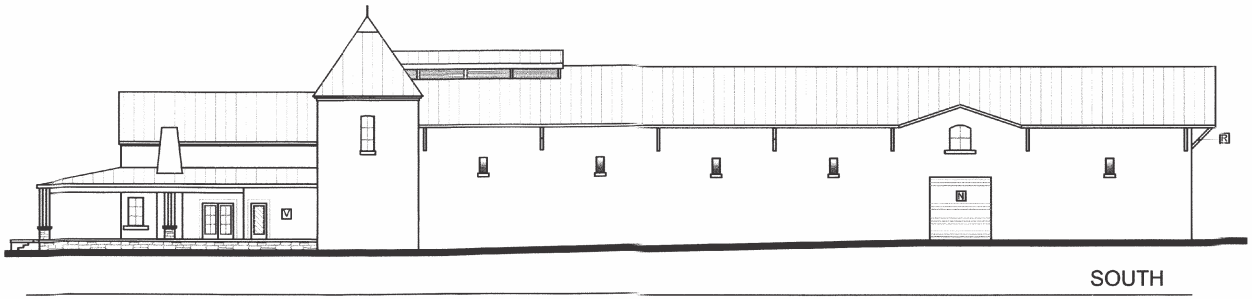
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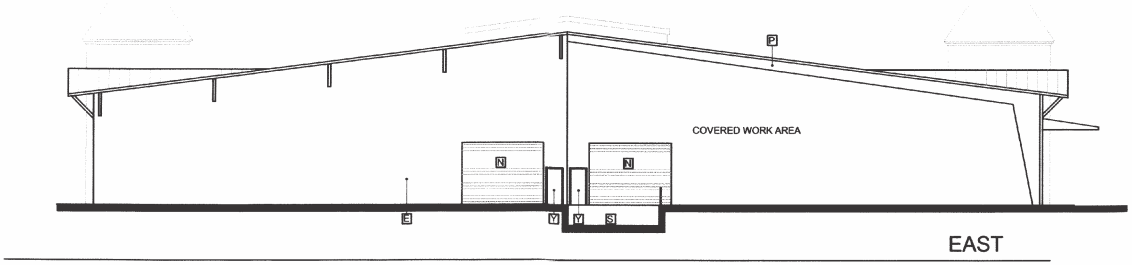
GIRARD NAPA VALLEY

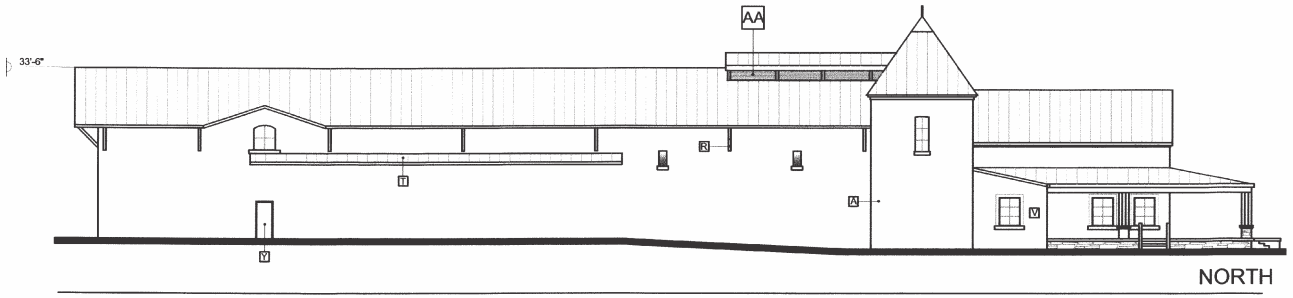
MATERIAL LEGEND

- A CONCRETE WITH STONE VENEER
- B PLASTER TRIM
- C METAL ROOFING
- D METAL CAPPING
- E CONCRETE
- F WOOD BEAM AND POSTS
- G WOOD DOORS
- H DIVIDED LITE WINDOWS WITH LOW E GLASS AND STONE LEDGE
- J EXTERIOR PLASTER
- K RECESSED WINDOW WITH STONE LEDGE
- L CONCRETE VERANDA
- M PAINTED METAL GUTTER
- N ROLL-UP DOOR
- P EXPOSED METAL FRAMING
- Q STONE CHIMNEY
- R METAL KICKERS
- S LOADING DOCK
- T TRUCK LOADING CANOPY
- V PLASTER
- W DECORATIVE BOLTED IRON PLATES
- X ENTRANCE LIGHTS
- Y PAINTED METAL MANDOORS
- Z PAINTED METAL HANDRAILS
- AA VENTED LOUVERS
- BB STONE BASE WITH CAP



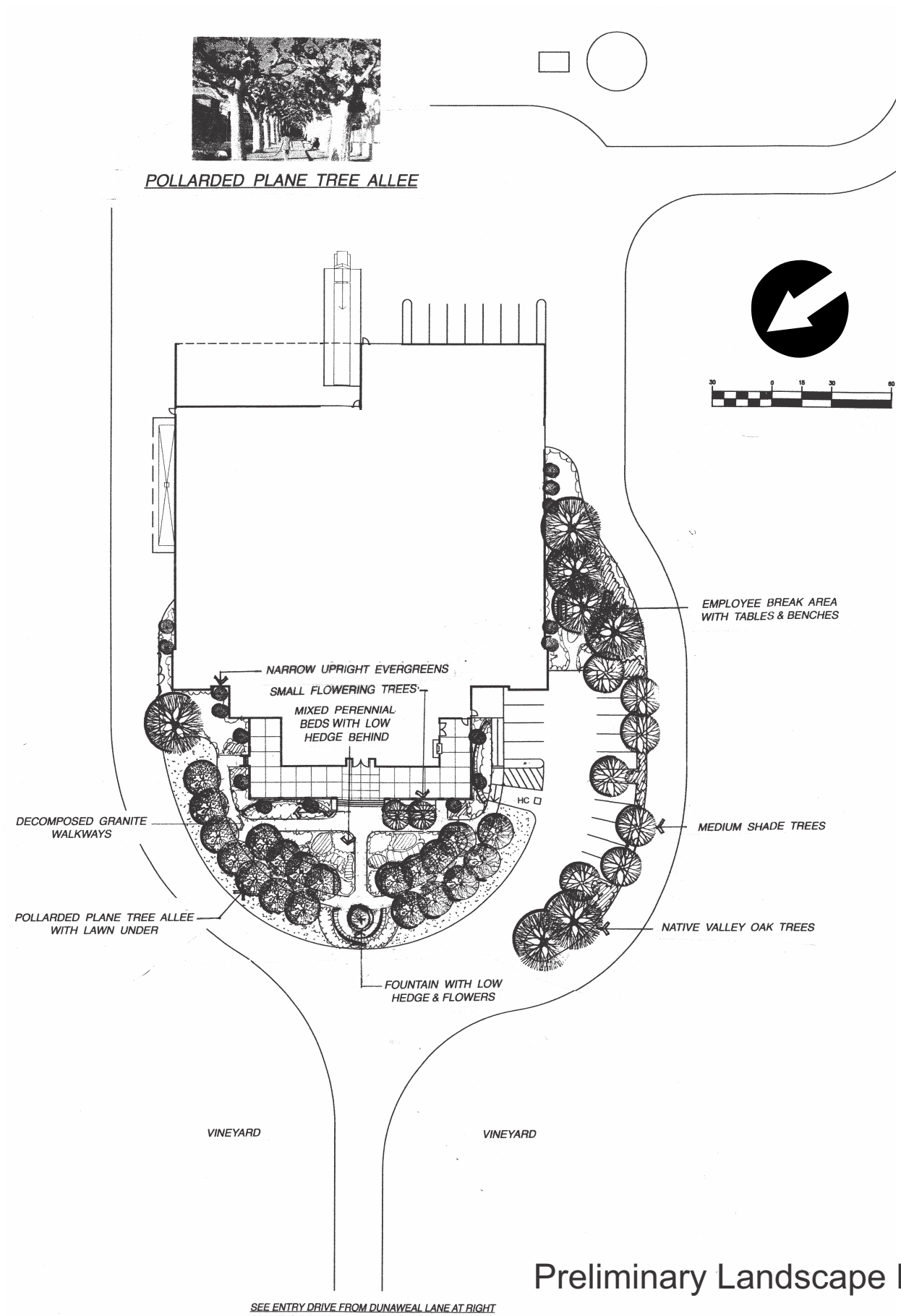






GIRARD NAPA VALLEY

POLLARDED PLANE TREE ALLEE



Preliminary Landscape Plan

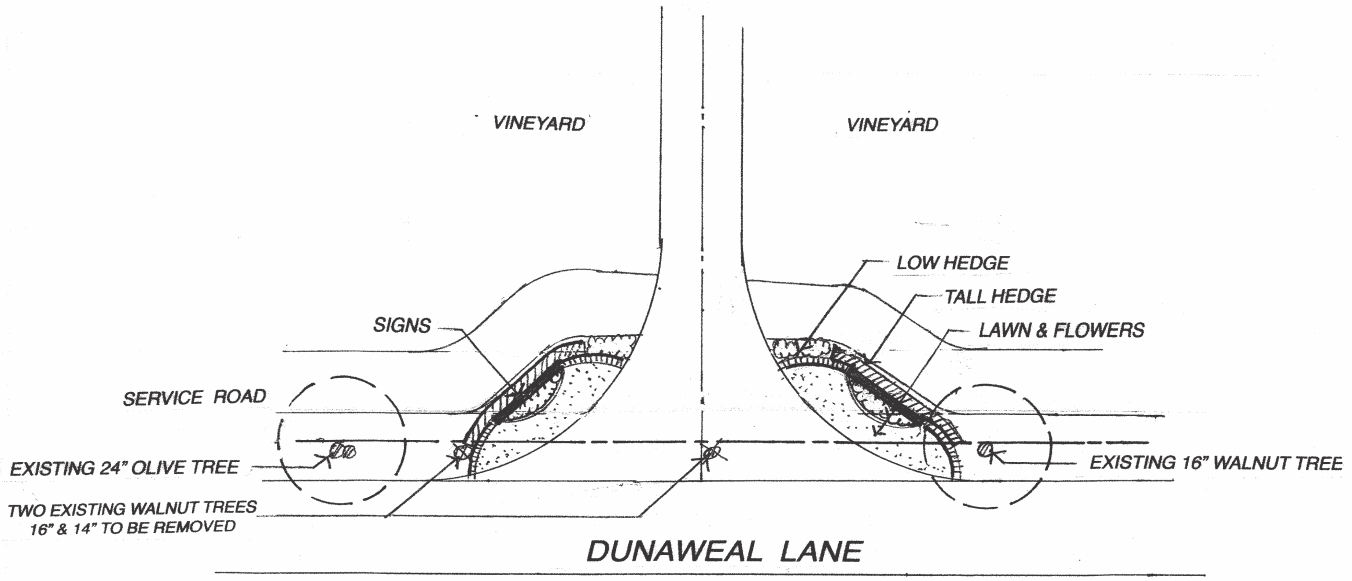
PLANT LEGEND

SYMBOL	PLANT DESCRIPTION & SPECIES	PLANTING SIZE	WATER USE
	EXISTING TREES TO REMAIN		
	Olea europea / Olive		
	Juglans hybrid / Walnut		
	EXISTING TREES TO BE REMOVED		
	Juglans hybrid / Walnut		
	LARGE NATIVE SHADE TREES		
	Quercus lobata./ CA Valley Oak	*24" Box*	*Low*
	MEDIUM SHADE TREES WITH FALL COLOR		
	Pistacia chinensis 'Keith Davey'/ Chinese Pistache	*24" Box*	*Low*
	ALLEE OF POLLARDED TREES		
	Platanus acerifolia 'Columbia' / London Plane Tree	*24" Box*	*Moderate*
	SMALL FLOWERING TREES		
	Lagerstoemia hybrid 'Tuscarorra' / Coral Crape Myrtle	*24" Box*	*Low*
	NARROW, UPRIGHT EVERGREEN SHRUB/TREES		
	Juniperus chinensis 'Skyrocket' / Skyrocket Juniper	*15 Gal.*	*Low*
	LOW & TALL HEDGES	*5 Gal.*	*Low/Mod.*
	Buxus microphylla 'Var.' / Boxwood (Low)		
	Prunus lyoni / Catalina Island Cherry (Tall)		
	LOW TO MEDIUM SHRUBS & GRASSES	*5 Gal.*	*Low*
	Arctostaphylos densiflora 'Howard McMinn' / McMinn Manzanita		
	Ceanothus 'Skylark' / CA Lilac		
	Mahonia pinnata 'Ken Hartman' / CA False Holly		
	Loropetalum chinensis var. / Purpleleaf Loropetalum		
	Arctostaphylos 'Emerald Carpet' / G.C. Manzanita		
	Erigeron karvinskianus / Santa Barbara Daisy		
	Calamagrostis arundinacea 'Karl Foerster' / Feather Reed Grass		
	Myoporum parviflora 'Putah Creek' / Ground Cover Myoporum		
	PERENNIALS & ACCENT GROUND COVERS	*1/2 Gal.*	*Low/Mod.*
	Lavendula Varieties / Lavender		
	Rosa floribunda varieties / Floribunda Roses		
	Salvia gregii, spathacea, leucantha / Sage		
	Gaura lindheimeri 'Siskiyou Pink' / Pink Gaura		
	Hemerocallis 'Evergreen Pink or Yellow' / Evergreen Daylilies		
	Pennisetum orientale / Oriental Fountain Grass		
	ACCENT GROUND COVERS & FLOWERS	*4"/1 Gal.*	*Low/Mod.*
	Annuals / Seasonal Flowers		
	Festuca californica 'Serpentine Blue' / Blue CA Fescue		
	Tulbaghia violacaea 'Silver Lace' / Variegated Society Garlic		
	Rosa 'Flower Carpet' var. / Ground Cover Roses		
	LAWN	*Sod*	*Mod./High*

LANDSCAPE NOTES

1. ALL PLANTINGS TO BE IRRIGATED WITH AUTOMATIC DRIP IRRIGATION SYSTEM (SUBSURFACE DRIP EMITTERS FOR LAWN AREAS). CONTROLLER TO HAVE MULTIPLE PROGRAMS & RAIN SHUTOFF DEVICE. PLANTINGS AND IRRIGATION SYSTEM WILL MEET THE LATEST REQUIREMENTS OF NAPA COUNTY'S 'WATER EFFICIENCY ORDINANCE'.

2. A TREE PROTECTION PLAN WILL BE INCLUDED ON THE CIVIL ENGINEERING PLANS THAT WILL REQUIRE PROTECTIVE FENCING; RESTRICTIONS ON GRADING OR TRENCHING WITHIN THE DRIPLINES OF PROTECTED TREES, NO STORAGE OF MATERIALS WITHIN FENCED AREAS, ETC.



GIRARD NAPA VALLEY



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Urban Planner
impett@smwlaw.com

August 18, 2015

Via E-Mail

Wyntress Balcher, Planner
Napa County Planning
Building & Environmental Services Department
1195 Third Street, Suite 210
Napa, CA 94559
Wyntress.Balcher@countyofnapa.org

Re: Girard Winery Use Permit P14-00053 Initial Study/Proposed Negative Declaration

Dear Ms. Balcher:

On behalf of the Tofanelli family, we submit these comments on the Initial Study/ proposed revised Negative Declaration ("Revised IS/ND") for the proposed Girard Winery Use Permit ("Project"). Substantial evidence shows that the Project could have a number of potentially significant impacts on the environment. Accordingly, and as a matter of law, the County would be in violation of 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").

On January 20, 2015, this firm submitted a letter on the prior IS/ND for the proposed Project. That letter is incorporated by reference into this letter. The issues raised in the January 20, 2015 letter remain valid. This letter focuses on the new issues raised in the Revised IS/ND. One of the most significant revisions to the prior IS/ND relates to the treatment of the Project's impacts on water supply, and specifically the potential for the Project to impact neighboring wells and the Napa River. Accordingly, we include a second technical memorandum prepared by Tom Myers Ph.D. Our two letters, the two reports prepared by Dr. Myers (January 20, 2015 and August 15, 2015, the latter is attached as Exhibit 1) constitute the Tofanelli family's comments on the Revised IS/ND.

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. The Revised IS/ND's Analysis of Groundwater Impacts Is Inadequate and There is a Fair Argument That These Impacts Would Be Significant.

The Revised IS/ND incorrectly concludes the Project would have a less than significant impact on groundwater supplies and groundwater quality. Revised IS/ND at 12. Contrary to this conclusion, and as the reports prepared by Dr. Myers clearly demonstrate, the Project has the potential to result in a significant impact on groundwater supplies and groundwater quality with corresponding impacts on neighboring residential and agricultural wells and the Napa River.

A letter from Steve Lederer, the County's Director of Public Works, included in the Revised IS/ND states that there is substantial evidence in the record that: (1) the groundwater table in the area shows a long term stable trend; (2) impacts on neighboring wells or the Napa River are not anticipated; and (3) the Project is unlikely to cause directional flow changes which would draw chemicals from Calistoga into the area. *See* April 3, 2015 Letter from S. Lederer.

We disagree with Mr. Lederer's statements; the record does not provide this evidence. Moreover, even if it did, this is not the standard for preparation of an EIR. Under CEQA, an EIR is required whenever substantial evidence in the administrative record supports a "fair argument" that significant impacts may occur, *even if other substantial evidence supports the opposite conclusion*. Guidelines §§15064(a)(1), (f)(1 (emphasis added). CEQA further 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. *The Pocket Protectors v. City of Sacramento*, 124 Cal.App.4th 903, 928 (2005). An impact need not be momentous or of a long enduring nature; the word "significant" "covers a spectrum ranging from 'not trivial' through 'appreciable' to 'important' and even 'momentous.'" *No Oil, Inc. v. City of Los Angeles*, 13 Cal.3d 68, 83 n. 16 (1974). The fair argument test thus reflects a "low threshold requirement for initial preparation of an EIR" and expresses "a preference for resolving doubts in favor of environmental review." *Stanislaus Audubon Society, Inc. v. County of Stanislaus,* 33 Cal.App.4th 144, 151 (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* (1988), 202 Cal.App.3d 296, 311. 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.

1. The Groundwater Table Does Not Show A Long Term Stable Trend.

Dr. Myers' January 20, 2015 memorandum ("Myers' January report") explained that the prior IS/ND erred in its assertion that the groundwater levels in the Napa Valley floor exhibit stable long-term trends with shallow depth to water. The County now looks to a new groundwater monitoring report to suggest that groundwater levels in the Project vicinity are stable. Lederer letter at 2. Yet, the 2014 Groundwater Monitoring Report does not show stable groundwater levels. The hydrographs in the Calistoga area (shown on Figure 5-7 of the 2014 Annual Groundwater Monitoring Report) still show the effects of pumping and drought. *See* Myers August 15, 2015 report at 2. Well NapaCounty-129 is a good example. The maximum level declined significantly from 2007 to 2009 and has been declining again since 2012 (with little recovery shown). Well NapaCounty-127 also shows extreme drawdowns in 2004 and 2012 with only marginal recovery, and Well 08N06W10Q001M shows much more drawdown occurring during dry years. *Id*.

Other evidence exists demonstrating deficient groundwater supplies in the area. Residents near the proposed Project site have informed the County that their wells are drying up and that some area residents are trucking water to their properties. Under CEQA, an agency should heed personal observations of environmental conditions near a project site. *See Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 34 (residents' observations can constitute substantial evidence of traffic impacts). David Clark, for example (4704 Silverado Trail – about one mile north of the proposed Project), explains a situation where his neighbor's valley floor winery vineyard and home needed more water than their existing three wells could provide. *See* letter from D. Clark to J. McDowell, January 19, 2015, included in August 19, 2015 Planning Commission Hearing Supporting Documents (Exhibit P: Public Comments Received). Mr. Clark states that the neighbor

drilled another well fifty feet from Mr. Clark's well at which point Mr. Clark's available water decreased. He explains:

> Later, new owners converted some of that vineyard into Venge Winery, and constructed a large metal water storage tank to increase their capacity. However, during the growing season, despite pumping as much as they can from groundwater, their system does not supply enough. They've had to truck water in regularly for years, perhaps more than once a week. They probably would have had to show sufficient supply was available to get their winery permit, but that "proof" clearly turned out to be wrong.
>
> Properties around us have multiple wells (some abandoned) in order to try to meet their water needs. After the neighboring vineyards reduced our well's output, we drilled 3 or 4 "dry" wells before we found more water. Only the variety of terrain on our property allowed that; we could have drilled on the valley floor forever without success, and simply drilling deeper to reach more water was not an option because drillers want to avoid hitting boron and geothermal, common to the Calistoga area. *Id*.

There is ample documentation, from the County's own groundwater reports to personal observations, that this area of the County already experiences groundwater deficiencies. Pumping from the Project will exacerbate these deficiencies which, in turn, will adversely affect neighboring wells and the Napa River.

2. The Project, Together With Other Projects, Has the Potential to Result in Significant Impacts on Neighboring Wells and the Napa River.

A fundamental flaw in the Revised IS/ND's analysis is its failure to take into account the effects of cumulative pumping on neighboring wells and the Napa River. Instead, the County's analysis only identifies the demand from the proposed Project alone, ignoring entirely other uses and projects that will extract groundwater. This approach is a clear violation of CEQA.

CEQA requires the lead agency to analyze and mitigate a Project's potentially significant cumulative impacts. CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which

compound or increase other environmental impacts." Guidelines § 15355; *see also Communities for a Better Env't v. Cal. Res. Agency*, 103 Cal.App.4th at 120. An effect is "cumulatively considerable" when the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Guidelines § 15065(a)(3). A proper cumulative impact analysis is "absolutely critical," *Bakersfield Citizens for Local Control v. City of Bakersfield,* 124 Cal.App.4th 1184, 1217 (2004) , as it is a mechanism for controlling "the piecemeal approval of several projects that, taken together, could overwhelm the natural environment," *Las Virgenes Homeowners Fed'n, Inc. v. County of Los Angeles,* 177 Cal.App.3d 300, 306 (1986). The revised IS/ND provides no analysis of cumulative impacts on water supply. Specifically, as the Myers' reports explain, cumulative pumping from all of the wells in the Napa alluvium and connected aquifers has the potential to impact the Napa River and neighboring wells.

Pumping from multiple wells can cause a drawdown in the aquifers near the Napa River. Drawdown is replenished with water diverted from the river. This means the water never discharges into the river or it is being diverted from the river due to the water level being drawn down below the level of the river. Most of the recovery is due to water being diverted from the river. Increasing the total cumulative pumpage from aquifers near the river will increase the deficit in those aquifers and decrease flow in the river by either drawing from the river or preventing groundwater flow from reaching the river. The Revised IS/ND and the Lederer letter ignore this fact entirely.

In addition, and in direct contrast to Mr. Lederer's assertion that drawdown will not change the flow gradient for discharge to the river, Dr. Myers' explains that any pumping from wells near the river will affect the river's flow gradient; that is simply well hydraulics (Fetter 2001). Myers August 15, 2015 report at 7. A well changes the gradient to draw water to the well. All discharge from a near-surface aquifer originated as recharge to that aquifer. Natural discharge is to rivers, springs, or groundwater-dependent vegetation. Groundwater pumping takes some of that natural discharge, as conservation of mass requires. Initially pumping will draw from storage and cause drawdown and change gradients for discharge to the river (or other natural discharge points). Pumping water from the valley near the river will take water from the river, either by diverting groundwater discharge to the river or actually pulling water from river. All pumping, past, current and future, takes or will take water from those discharges. Groundwater extraction from the Project and other cumulative development certainly has the potential to result in significant effects on the River.

Groundwater extraction from the Project and other cumulative development also has the potential to impact neighboring wells. The Lederer letter asserts that "there does not appear to be factually supported evidence that there would be a significant effect on wells in the vicinity of the project." Lederer letter at 3. This is incorrect. Dr. Myers performed calculations to determine groundwater drawdown in the Project vicinity. He concludes that, "even when using the applicant's assumptions, pumping the Girard well will cause some drawdown to occur at distances that correspond to neighbors' wells." *See* Myers August 2015 Report at 9. Drawdown at the Girard well exceeds 60 feet and at a distance of 1,000 feet (the estimated distance of certain neighboring wells) is about 8 feet after 11 days of pumping at 5.8 gpm. "There will clearly be drawdown at neighboring wells within 1,000 feet." *Id*.

We can find no credible explanation for the County's failure to take into account cumulative development. This is especially disconcerting because, in our January 20, 2015 letter on the prior IS/ND, we identified at least 19 new or modified wineries that were proposed to be developed in the County. In addition, Sterling Winery, within one-half mile of the proposed Project site, drilled a new well in May 2015. Water demand from these projects will further tax already constrained groundwater supplies. In addition to these other projects, the Clos Pegase Winery is expected to substantially increase its winery production. Clos Pegase is currently producing about 25,000 cases or 60,000 gallons. It plans to increase that production to 200,000 gallons. *See* January 19, 2015 letter from D. Clark, citing *Wine Spectator* 8/21/13. Together with the Girard application, the total production of the two wineries would be 400,000 gallons or 6.7 times the current 60,000 gallons of Clos Pegase. *Id*.

Nor does the Revised IS/ND provide any evidentiary support that the applicant will be restricted to using the amount of water specified in the revised IS/ND.[1] The County's draft Conditions of Approval ("COA") purport to limit the Project to a "not to exceed" volume of 10-acre feet ("ac/ft") per year. *See* August 19, 2015 COA at 9.

[1] The Project's (and the Clos Pegase winery) projected water demand has declined substantially compared to the amount identified in the prior IS/ND, yet the revised IS/ND does not provide a satisfactory explanation for this reduction. The revised IS/ND states that the overall water use for the proposed Girard Winery and the existing Clos Pegase winery would be 8.22 af/yr. whereas the prior IS/ND identified the total demand for both wineries as 12.49 af/yr. Revised IS/ND at 15; prior IS/ND at 14. We can find no logical explanation for this discrepancy since both versions of the IS/ND state that all vineyard irrigation (both parcels) and all winery landscaping is and will be provided for using the existing process wastewater irrigation pond located on the Girard winery property. *Id*.

Yet, rather than require the winery operations to be discontinued if its water use exceeds 10 ac/ft. per year, the COA call for the applicant to provide "the plan the winery has for reducing water use." COA at 9. A plan for reducing water use provides no assurance that water use will, in fact, be reduced. More importantly, a plan does not ensure the protection of neighboring wells or the Napa River. Indeed, if this "condition" is indicative of the conditions being placed on each of the pending winery projects proposed by the County, existing groundwater deficiencies in the County are likely to be greatly exacerbated.

In addition to causing diminished groundwater supplies, the Project also has the potential to cause groundwater contamination. The Revised IS/ND concludes that it is "highly unlikely" that the proposed pumping would affect boron and arsenic levels. Revised IS/ND at 13. The document arrives at this conclusion based on the assertion that the proposed pumping is significantly less than the mean annual recharge and that long-term reduction in groundwater elevations are unlikely to occur as a result of the project pumping. *Id*. As discussed previously, there is ample evidence that contradicts these findings. As Dr. Myers explains. additional pumping downgradient of the high concentrations of arsenic and boron could certainly draw these contaminants toward the Project area. *See* Myers' August 15, 2015 report at 12. Moreover as the Clark letter explains, arsenic and boron could also contaminate adjacent groundwater if neighbors are forced to drill deeper wells as a result of diminishing groundwater.

Given the uncertainty about the effects of groundwater pumping, especially pumping on a cumulative basis, the Revised IS/ND cannot simply assert that the Project would not result in boron and /or arsenic contaminating area wells. To conclude that an impact is less than significant, the IS/ND must be supported by 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). Because the Revised IS/ND's conclusion of insignificance is premised on unsupported assumptions, it fails far short of this threshold.

Faced with overwhelming evidence of deficient groundwater conditions in the area, and the potential for the Project, together with cumulative development, to impact neighboring wells and the Napa River, the County must prepare an EIR prior to taking action on the proposed Project.

B. The Revised IS/ND's Analysis of Impacts Relating to Wastewater Treatment is Inadequate, and There is a Fair Argument that the Project May Have Significant Groundwater Impacts.

The revised IS/ND raises more questions than it answers with regard to the Project's processing of wastewater. The IS/ND states that the Project includes a new sanitary sewage system. Revised IS/ND at 10. Yet the IS/ND does not describe this system or provide any analysis of the potential impacts that could accompany the installation of a septic system on the Project site.

Septic systems are a significant source of groundwater contamination that can lead to waterborne disease outbreaks and other adverse health effects. *See* Source Water Protection Practices Bulletin: Managing Septic Systems to Prevent Contamination of Drinking Water, U.S. EPA, July 2001, attached as Exhibit 2. A septic system's potential to contaminate surface and groundwater is dependent upon soil types and groundwater depths. It is critical to avoid areas with high water tables and shallow impermeable layers because there is insufficient unsaturated soil thickness to ensure sufficient treatment septic system effluent. *Id*.

It is clear that the applicant has no idea whether the site can even support a septic system. According to the IS/ND, the applicant attempted to evaluate the site in November 2013 but there was not sufficient rainfall to perform groundwater monitoring. Revised IS/ND at 10. Nevertheless, the applicant simply assumed that the site's soils would be adequate for a septic system. *Id*. Later, however, the revised IS/ND states that in the event groundwater monitoring cannot occur prior to the application for construction permits, an irrigation reuse alternative system would be implemented. The document does not describe this alternative system nor does it explain how or whether such a system would avoid groundwater impacts. Instead it simply asserts that any alternative system would require approval from the Regional Water Quality Control Board ("RWQCB"). Revised IS/ND at 10.

Details relating to the processing of the Project's wastewater are critical details; they cannot be deferred until after Project approval. *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296, 306-07 (1988). Nor can the County evade its obligation to conduct this necessary impact analysis by suggesting that the Project would require approval from the RWQCB. The fact that a wastewater system would need regulatory approval does not release an agency from its obligation to fully describe the system and analyze all impacts that would arise from the system.

The County must provide a comprehensive analysis of the potential impacts from the Project's proposed wastewater treatment system in an EIR as evidence indicates that these impacts could be significant.

C. The Revised IS/ND's Noise Analysis is Inadequate, and There is a Fair Argument that the Project May Have Significant Noise Impacts.

Notwithstanding our request that the County study the effects of the increase in noise associated with construction and operation of the proposed Project, the Revised IS/ND fails to conduct this necessary evaluation. This omission is especially egregious since the IS/ND acknowledges that the County General Plan EIR confirms that concerns relating to a project's noise impacts should be addressed and considered in the planning and environmental review process. Revised IS/ND at 18.

The Revised ND concedes that the proposed marketing activities could create additional noise impacts. Revised IS/ND at 18. Yet the IS/ND stops short of actually analyzing the effect these marketing events would have on surrounding properties. Instead it states that the potential for the creation of significant noise from visitation would be significantly reduced since large gatherings for events will occur indoors within the barrel areas of the winery. *Id*. The County's conditions of approval do not include a prohibition on outdoor events. Moreover, the Revised IS/ND indicates that lawn areas will be used for tasting and picnic areas. Revised IS/ND at 2. As discussed below, as the current owners of Clos Pegase, the applicant conducts events in violation of its current conditional use permit. Napa County has not effectively monitored Clos Pegase for these violations and there is no indication that the Girard Winery will be monitored for event violations. Consequently, the Revised IS/ND lacks the evidentiary basis that the Project's noise impacts would be less than significant.

D. The Revised IS/ND's Transportation Analysis is Inadequate, and There is a Fair Argument that the Project May Have Significant Transportation Impacts.

As we discussed in our prior letter, SR 29 immediately adjacent to Dunaweal Lane is projected to operate at LOS F in 2030. Traffic generated by the Project will contribute to this deficient service level resulting in a significant impact. This fact is confirmed by Napa County's Deputy Director of Public Works. He explains that the increase in vehicular trips caused by the Project will result in a significant impact because nearby roads and intersections will operate at an unacceptable level. *See* Letter from Rick Marshall, June 3, 2015.

Rather than identify this impact as significant, the applicant now asserts that the Project's PM peak hour vehicular trips can be *eliminated* altogether. Revised IS/ND at 21 (emphasis added). While it may be possible to manage employee's schedules, unless the County places a condition on the Project to close the winery during peak hours, the Revised IS/ND does not provide the necessary assurance that visitors will not travel to the winery during these hours.

Nor as we discussed in our prior letter does the Revised IS/ND take into account traffic from the Project, together with planned development projects in the area. In addition to the numerous new wineries or winery expansions in the area, two massive development projects are proposed within the City of Calistoga. The Calistoga Hills resort includes the development of a 110-room luxury hotel with 20 villas and 13 estate homes. The Silver Rose Project includes the development of 57,630 square feet of resort facilities, 85 guest rooms, a 110-seat restaurant and 21 single family dwellings. *See* City of Calistoga Planning and Building Department Proposed and Approved Development, March 2015, attached as Exhibit 3. The IS/ND is obligated to analyze the effect that the Project's traffic, together with traffic from planned development, would have on the County's roadways and intersections. These impacts certainly have the potential to be significant.

E. The County May Not Rely on Unrealistic and Ineffective Conditions of Project Approval to Avoid Potentially Significant Project Impacts.

Throughout the IS/ND the County asserts that potentially significant Project impacts will be mitigated through the imposition of conditions of approval. For example, as discussed previously, significant traffic impacts are purportedly addressed through restrictions on the time that employees will travel to work and visitors will travel to the winery. Revised IS/ND at 21-22. The County also claims that potentially significant noise impacts (which the County even declined to study) will be avoided because outdoor areas will not be used for events or wine tastings. *Id*. at 18. Similarly, potential impacts to water are addressed by a plan to reduce water use, but no enforceable conditions. COA at 9.

The California courts have soundly rejected the County's approach. Specifically, in *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, the California Department of Transportation ("Caltrans") asserted that many impacts associated with the Highway 101 widening would be avoided through conditions of project approval. Therefore, Caltrans did not study these impacts or impose mitigation on them. The Court of Appeal found that agencies may not avoid analyzing the

potentially significant impacts of a project by asserting they will be avoided through conditions of approval. Instead, the agency must conduct the analysis and then adopt mitigation measures that will reduce the project's impacts below a level of significance. 223 Cal.App.4th at 658; CEQA Guidelines §15126.4 (a)(1)(A). As stated by the court:

> The failure of the EIR to separately identify and analyze the significance of the impacts to the root zones of old growth redwood trees before proposing mitigation measures is not merely a harmless procedural failing. Contrary to the trial court's conclusion, this shortcutting of CEQA requirements subverts the purposes of CEQA by omitting material necessary to informed decisionmaking and informed public participation. It precludes both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences. The deficiency cannot be considered harmless.

Similarly here, the County failed to consider the environmental effects of the Project before simply assuming that measures, such as readjusting employee and visitor schedules or asserting that events be held indoors, would reduce these impacts to a level of insignificance.

This failing is made all the worse by the reliance on what are clearly unrealistic measures. CEQA requires that mitigation measures be feasible, effective, and capable of being implemented over the lifetime of the project. There can be no such assurance here. In fact, evidence in the record demonstrates that the owner of the Girard property, who also owns Clos Pegase Vineyards, has repeatedly failed to comply with either its conditional use permit or the limits of the County's zoning ordinance and the WDO. *See* Exhibit 4 (June 8, 2015 letter from Shute, Mihaly & Weinberger to Napa County). These violations extend beyond the weddings that the County has identified in the staff report and include any number of unpermitted events, such as "anniversaries, rehearsal dinners, birthdays, holiday parties, private parties and more" on its website. *See* Clos Pegase website attached as Exhibit 5. Notwithstanding the County's enforcement action against Clos Pegase, these events continue to this date and have caused substantial noise and disruption for surrounding neighbors.

Finally, because a fair argument can be made that the measures relied upon by the County to avoid the Project's significant impacts will not be effective, the County

must prepare an EIR. *Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d 296; *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359.

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

The County has not responded to arguments raised in our earlier letter regarding the Project's inconsistency with the Winery Definition Ordinance ("WDO") and the County General Plan. In particular, the Project is inconsistent with the WDO provisions that restrict the scope and maximum square footage of "accessory uses" such as "marketing of wine" and "tours and tastings." Specifically, 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., 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.").

In addition to the 3,800 square feet of accessory uses identified in the August 19, 2015 staff report, the Project also includes a 13,000 square foot outdoor garden and tasting area, as well as a 2,600 square foot covered veranda. Together these uses constitute 67 percent of the area of the production facility – far in excess of the 40 percent limit in the WDO.

The assertion in the Revised IS/ND that the outdoor areas will not be used for events is completely unrealistic as discussed above. The statement is also contradicted by earlier architectural renderings for the Project. Accordingly, excluding these outdoor areas from the 40 percent calculation is inconsistent with NCC section 18.104.200. This exclusion is also inconsistent with the manner in which the Planning Commission calculated accessory use square footage in two recent actions concerning the B Cellars and Titus Vineyards projects. For both projects, the outdoor terraced spaces were counted as part of the percentage of the project used for accessory uses. The County should treat the present Project in the same manner.

III. Conclusion

For the reasons set forth above, the Tofanelli family requests that the County defer action on the proposed Project until an EIR is prepared that fully complies with CEQA. As described above, there is substantial evidence to indicate that the

proposed Project may have a number of significant environmental impacts. Under CEQA, the County must provide an adequate analysis of these adverse effects and include feasible measures to mitigate impacts.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Laurel L. Impett, AICP, Urban Planner

cc: Norma Tofanelli
Vince Tofanelli
Pauline Tofanelli

List of Exhibits

Exhibit 1 Technical Memorandum from Tom Myers, Ph.D. re: Review of Girard Winery Use Permit P14-00053, Revised NegDec and County Responses to Previous Comments, August 15, 2015

Exhibit 2 Source Water Protection Practices Bulletin: Managing Septic Systems to Prevent Contamination of Drinking Water, U.S. EPA, July 2001

Exhibit 3 City of Calistoga Planning and Building Department Proposed and Approved Development, March 2015

Exhibit 4 Letter from Shute, Mihaly & Weinberger LLP to Napa County, June 8, 2015

Exhibit 5 Clos Pegase Event Hosting Webpage, Viewed August 17, 2015

EXHIBIT 1

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Technical Memorandum

Review of Girard Winery Use Permit P14-00053, Revised NegDec and County Responses to Previous Comments

August 15, 2015

Prepared for:

Ellison Folk
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396 Hayes Street
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Summary

The proposed expansion of pumping for the Girard Winery project could have three significant impacts. First, the pumping could unacceptably lower the groundwater levels because there is not as much recharge in the area as the County assumes. Second, the pumping could affect groundwater flow and decrease flow in the river. Third, pumping could cause arsenic and boron to be drawn from the northwest toward the project site. Groundwater pumping from the Project, combined with pumping from the other wells in the area, could cause each of these impacts to occur. The County's response to my January 20, 2015 memorandum on the project showed a lack of understanding of the cumulative and overlapping effects of this project with all of the other wells in the area.

Because of these potentially significant impacts, the project should not be permitted until a much more detailed hydrogeologic study is completed. All of the issues raised in this review could be analyzed with the completion of a numerical flow and transport model. A numerical model uses commonly available computer software which solves the equations of groundwater flow to simulate how groundwater and contaminants move around the area. The model would have to be large enough to include the significant pumping in the area so it should extend to the boundaries of the valley or to areas with reduced pumping, southeast of the site. It would help assess the potential change in groundwater levels, flow paths, and the extent of the boron and arsenic plumes. If the project goes forward after such a study, the flow and transport

model should be used on an ongoing basis to monitor groundwater levels, flow paths and water quality in the project vicinity.

Introduction

This memorandum reviews the revised negative declaration for the Girard Winery Use Permit P14-00053 (hereinafter NegDec), primarily the response by the Napa County Department of Public Works (Lederer 2015) to my January 20, 2015 memorandum reviewing the project (Myers 2015). The NegDec included a revised Water Availability Analysis, prepared by the applicant, dated March 26, 2015 (O'Connor 2015).

I described my experience and attached my curriculum vitae to my previous memorandum (Myers 2015) and that memorandum is incorporated here by reference.

I have divided the response into sections. Because those responses rely on Lederer (2015), I am also commenting on that report. Lederer's assessment incorrectly asserts that the Project would have a less that significant impact on groundwater supplies and groundwater quality. I address each of the issues raised in his assessment below.

Recharge

Lederer's assessment of recharge related specifically to water levels. Specifically, "based on the network of monitored groundwater levels in the area, the groundwater levels in the area south of Calistoga are stable, even in the context of the current drought" (Lederer 2015, p 2). Additionally, under Public Works Review, Lederer (2015) makes the following assertions:

1) *a. The suggested impact relating to recharge is technically unsupported. Groundwater levels in the Calistoga area are stable based on hydrographs that have been updated in the 2014 Annual Report. (Id.)*

Contrary to Lederer's interpretation of the 2014 Annual Groundwater Monitoring Report, the hydrographs in the Calistoga area (shown on Figure 5-7 of the 2014 Annual Groundwater Monitoring Report) still show the effects of pumping and drought, with recovery during wet years. As I describe below, the lower groundwater levels in the valley recover by drawing water from the river. Well NapaCounty-129 is a good example. The maximum level declined significantly from 2007 to 2009 and has been declining again since 2012 (with little recovery shown). Well NapaCounty-127 shows some extreme drawdowns in 2004 and 2012 with only marginal recovery. Well 08N06W10Q001M also shows much more drawdown occurring during dry years. The Girard Well was developed in a confined volcanic aquifer beneath the alluvium which is on the surface through much of the valley and much of the project area. It is not clear

that any of the wells in the 2014 Annual Monitoring Report are completed in the volcanics so there may be little indication of trends in the aquifer in which the Girard Well is completed.

The Lederer report also suggests that I relied on an incorrect recharge rate:

> The WAA continues by comparing proposed groundwater use on the parcels (8.23 acre-ft/year for both wineries combined) to a calculated recharge number (34.5 acre-ft/year) and found that the proposed use is only some 25% of the recharge rate. The Myers report also calculated a recharge rate, but then compared it to a use of 29 acre-ft/year, their presumed maximum use of the well if it was operated on a full basis. That assumption of 100% well run time is not contained in the project proposal. (Id.)

My prior report assumed a full-time use rate since water would be required to serve both Clos Pegas and the Girard Winery, as indicated on page 14 of the original Negative Declaration. Unless the County places a condition on the Project to pump at a reduced rate, sound engineering practice dictates that pumping rates are calculated assuming maximum usage.

> *1).b Myers discusses the recharge analyses conducted by LSCE & MBK (2013) and goes on to described why he believes recharge is overestimated. However, his analysis relies on very generalized application of base flow separation techniques which do not account for climatic variation or other factors that could affect base flow.*

Lederer's assertion regarding my recharge analysis is incorrect. My analysis of baseflow clearly encompasses climatic variation because it accounted for all available years at the relevant gage, meaning that all climate variations within that time period are accounted for. As my January report explains, annual recharge is frequently set equal to baseflow because baseflow by definition is groundwater discharge to streams (Cherkauer 2004, Scanlon et al. 2002).

The revised Water Availability Analysis (O'Conner (2015)) estimated recharge to the tuff aquifer to be on the order of 575 to 4943 af/y (O'Conner 2015, p 14) by applying the watershed-averaged recharge rates that they had discussed previously to the tuff outcrop area. This essentially means they used the product of the various rates expressed as a depth per year and the area of exposed tuff. This approach is not accurate because it does not account for differing ability of the formations to accept recharge. The tuff conductivity is about two orders of magnitude less than that in the alluvium so it would be expected to have a much lower recharge. Much of the precipitation on the tuff would runoff to the alluvium, although some of the runoff would recharge the tuff through the streambeds in the tuff, as O'Conner notes (Id.).

It is likely therefore that most of the recharge occurs in the alluvium. Because the primary groundwater discharge is to the Napa River (as baseflow, see Myers (2015)), this concept is consistent with total recharge amounts reported by O'Conner (2015) or Myers (2015); all of the methods are effectively based on a water balance. Myers (2015) set baseflow equal to

recharge, following Cherkauer (2004) (and Myers 2013) while L&S (2013) started with total precipitation and attempted a soil moisture balance.

In summary, it is essential to compare recharge above the point in the watershed at which the project would be constructed with all of the pumpage above that point to assess the overall impacts the project could have on water levels and river flow in the project area. The evidence discussed above in this section shows that current groundwater levels decline more during dry periods than in the past due to increased pumping which means that groundwater pumping affects water levels and groundwater discharge to or from the river more than in the past. Because the groundwater levels drop further prior to recover than they did previously, recovery draws more water from the river as described in the next section.

Drawing Water from the Napa River

The County compares only the proposed project to recharge in the watershed above the project rather than considering the cumulative draws of all pumping, which will determine whether the aquifer will be depleted. The NegDec (p. 14) suggests that because water levels are not on a long-term decline, recharge must be replenishing the aquifer. The Lederer letter states:

> *1).c There is no basis in the data presented to support his opinion that groundwater extraction is exceeding the rate of recharge to the aquifer system. On the contrary, groundwater levels for representative wells in the area suggest otherwise (Lederer 2015, p 2)*

Groundwater levels decline in some years, but then recover in other years. Most of the recovery is due to water being diverted from the river. This means the water never discharges into the river or it is being diverted from the river due the water level being drawn below the level of the river. Figures 1 and 2, below, demonstrate how this occurs. Figure 1 is a graph of water levels in the Girard Well included within the Water Availability Analysis (O'Connor (2015)). Water levels increased about 10 feet over the 11-day monitoring period, conducted in February 2015. O'Conner attributed the ten-day increase to the aquifer receiving recharge (O'Conner 2015, p 17), but does not identify the source of the recharge. February 2015 was the end of a dry winter, so O'Conner should have identified the source. Figure 2 is a hydrograph of flows in the Napa River at Napa showing that a significant flow began about five days before the period in Figure 1. Napa River flow increased from less than 30 cfs to relatively high rates, 1260, 855, 1860, and 1010 cfs for four days beginning February 7 (Figure 2). These high river flows would have recharged the aquifers near the river, including the volcanic tuffs in which the Girard well is constructed and caused the observed groundwater level increases. It is not known when the groundwater level actually began to increase but, at the most, it was five days after the river levels rose and recharge likely began. This means that, at most, the time for the

Girard Well to respond to changes in the water level in the river is five days. The Girard Well is from 1500 to 2000 feet from the Napa River (O'Conner 2015, Figure 1). In summary, O'Connor's graph of Girard well water levels (Figure 1) and the hydrograph of river flows (Figure 2) demonstrate that recharge from the river makes up the drawdown in the aquifer. If that drawdown had not existed, whatever its cause, the water would have remained in the river.

Cumulative pumping from all of the wells in the Napa alluvium and connected aquifers therefore cause a drawdown in the aquifers near the river. This drawdown is replenished with water from the river as described in the previous paragraph. Increasing the total cumulative pumpage from aquifers near the river will increase the deficit in those aquifers and decrease flow in the river by either drawing from the river or preventing groundwater flow from reaching the river. The revised negative declaration and the Lederer letter ignore this fact entirely.

The County also ignores how groundwater/surface water interactions occur. The Lederer letter states:

> *2) Myers states that "drawdown will eventually change the flow gradient for discharge to the Napa River and pumping will affect the river."*
>
> *a. There is no technical basis provided to justify this conclusion. Pumping of a well for some unspecified period of time at an uncertain rate from a well constructed in uncertain geologic conditions is not evidence that the gradient will change. He actually says "treating the aquifer as confined is preferable based on the low conductivity clay in the upper part of the log." This does not support his hypothesis relating to eventual change in the flow gradient for discharge to the River since a confined aquifer would, by definition, be physically separated from the surface waters by a confining unit. (Lederer 2015, p. 3.)*

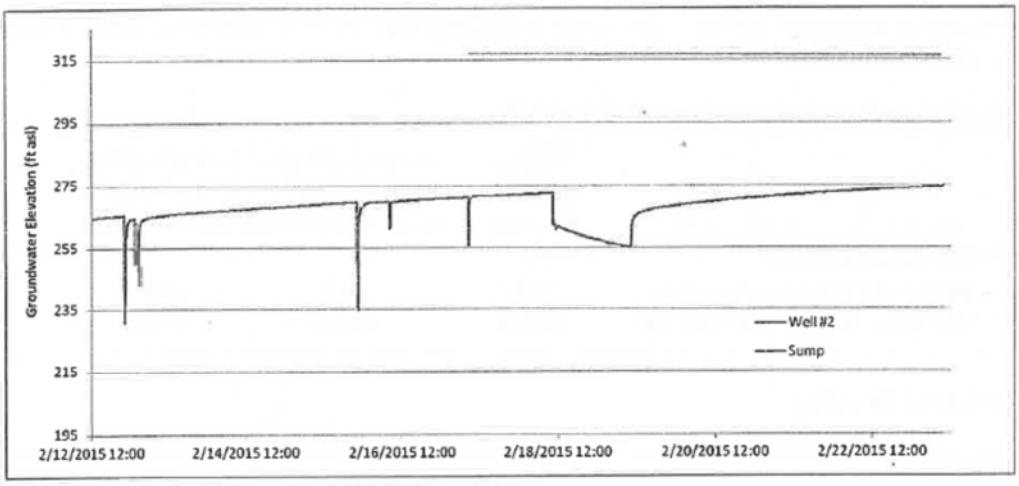


Figure 6: Hydrographs of groundwater elevations at Well #2 and the sump for the 2/12/2015 to 2/23/2015 observation period.

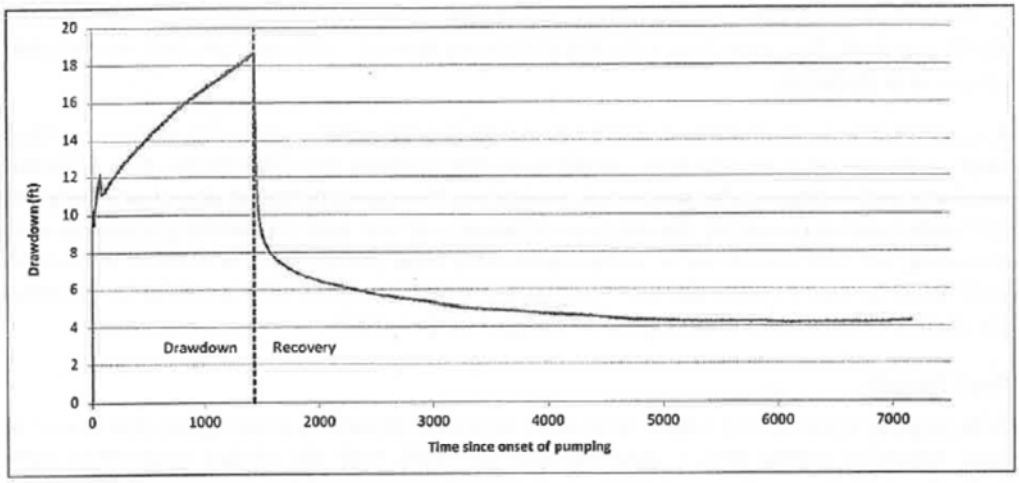


Figure 7: Time/drawdown data for the aquifer test conducted at Well #2.

Figure 1: Figures 6 and 7 from the Revised Water Availability Analysis (O'Conner (2015)) showing a hydrograph of groundwater elevation from February 12, 2015 through February 23, 2015 for the Girard Well and a drawdown time plot for a pump test on the well.

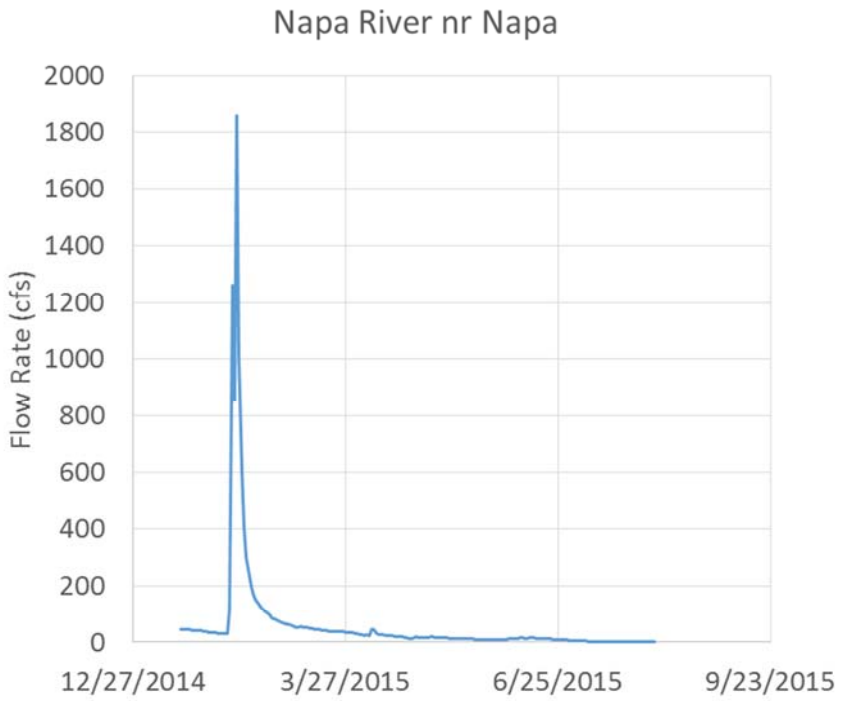


Figure 2: Flow hydrograph from January 16, 2015 to August 5, 2015, Napa River at Napa, #11458000

Every change in pumping from wells near a river will affect the river's flow gradient; that is simply well hydraulics (Fetter 2001). A well changes the gradient to draw water to the well. Conservation of mass requires that all groundwater pumping draw water from somewhere.

All discharge from a near-surface aquifer originated as recharge to that aquifer. Natural discharge is to rivers, springs, or groundwater-dependent vegetation. Groundwater pumping takes some of that natural discharge, as conservation of mass requires. Initially pumping will draw from storage and cause drawdown and change gradients for discharge to the river (or other natural discharge points). The change may be small enough to not be perceptible in the coarse scale of groundwater level monitoring, but basic science indicates it must occur. Pumping water from the valley near the river will take water from the river, either by diverting groundwater discharge to the river or actually pulling water from river. All pumping, past, current and future, takes or will take water from those discharges. The issue that requires analysis is the effect that the cumulative loss of flow has on the river. The revised negative declaration does not examine this impact.

Regarding the issue of whether pumping from a confined aquifer can pull water from the river, the log summary (O'Connor 2015) shows the wells are completed in volcanics (a fact not disclosed in the initial analysis) and also shows the alluvium above the volcanics to be clay (O'Connor 2015). Clay tends to have a low conductivity and would probably be a confining

layer so that the aquifer near the well would respond as if it is confined. Also, the pump test analyses included in the Water Availability Analysis (O'Connor 2015) were based on an assumption of a confined aquifer. Being confined in no way prevents the pumping from affecting the river because:

- The groundwater system is probably not confined everywhere and there is a mixing of the water
- The confined aquifer may outcrop near the river which facilitates the connection and mixing of the water.

Figures 1 and 2 above and the accompanying discussion document that pumping the aquifer draws flow from the river.

The County's final argument relating to impacts to the Napa River concerns incrementalism but actually confirms the County's failure to evaluate the Project's cumulative impacts on groundwater resources. Mr. Lederer states:

> *b. From a practical standpoint, the existing conditions surrounding the property argue against the hypothesis of this project causing a flow gradient change. The two wells involved are both existing (constructed in 1971 and 1985). In addition, according to the December 17, 2014 staff report, there are 10 other wineries operating within one mile of the proposed project, along with numerous residences and vineyards, all with their own groundwater wells. Given this existing network of groundwater wells, data indicating a stable water table, and the small increase in pumping associated with the proposed project, it is simply not credible in the eyes of this engineer that this small percentage of additional pumping is likely to change the direction of the flow gradient. (Lederer 2015, p 3)*

From a "practical standpoint", one more well may not "change the direction of the flow gradient", but as explained above, basic physics require that pumping changes the discharge to a river and changes the baseflow. The County must evaluate the cumulative effects of pumping from all of the wineries and all other proposed development that relies on groundwater.

Finally, the Lederer letter disagrees with my Theis calculations (Myers 2015):

> 3) *Myers describes use of the standard Theis equation to assess potential drawdown.*
>
> *a. Drawdown calculations conducted by the Girard WAA, and admittedly quick computations by LSCE using variables cited by Myers, came to an entirely different conclusion relating to drawdown. Drawdown estimates that we arrived at are a couple of orders of magnitude lower than what Myers shows in plots. There does not appear to*

be factually supported evidence that there would be a significant effect on wells in the vicinity of the project.

In response to this comment, I have revised the calculations to include the following assumptions: (1) transmissivity, 73 and 23 ft^2/d (the median and low values determined by O'Conner (2015)); (2) storage coefficient equal to 0.0001; and (3) pumping rates specified by O'Connor (2015). (See Figure 3). As I demonstrate below, even when using the applicant's assumptions, pumping the Girard Well will cause some drawdown to occur at distances that correspond to neighbors and the river. The County's dismissive way of considering drawdown misses two important points.

- The drawdown shown in Figure 3 is due to pumping just one well. Actual drawdown in the area will be considerably more than that caused by one well because it will be the cumulative amount from all of the wells pumped in the area.
- The Lederer letter implies that the Project's wells may not be pumped continuously, as I did in the creation of Figure 3. The Theis equation can only provide drawdown after a period of continuous pumping at a constant rate. Figure 3 shows drawdown that occurs after pumping for any time period up to 11 days. Actual pumping may involve starting and stopping, so that some recovery may occur between pumping periods, but over the long run, pumping any well creates a deficit because recovery is not instantaneous. Recovery also requires that water be drawn from a distance which eventually depletes the aquifer if the amount of water withdrawn exceeds the recharge rate. Or, pumping may increase recharge by drawing water from the overlying alluvial aquifer or from the river. The longer term recovery shown for the Girard Well (Figure 1, above) shows that drawdown can be residual, depending on its cause and the availability of recharge to replenish it.

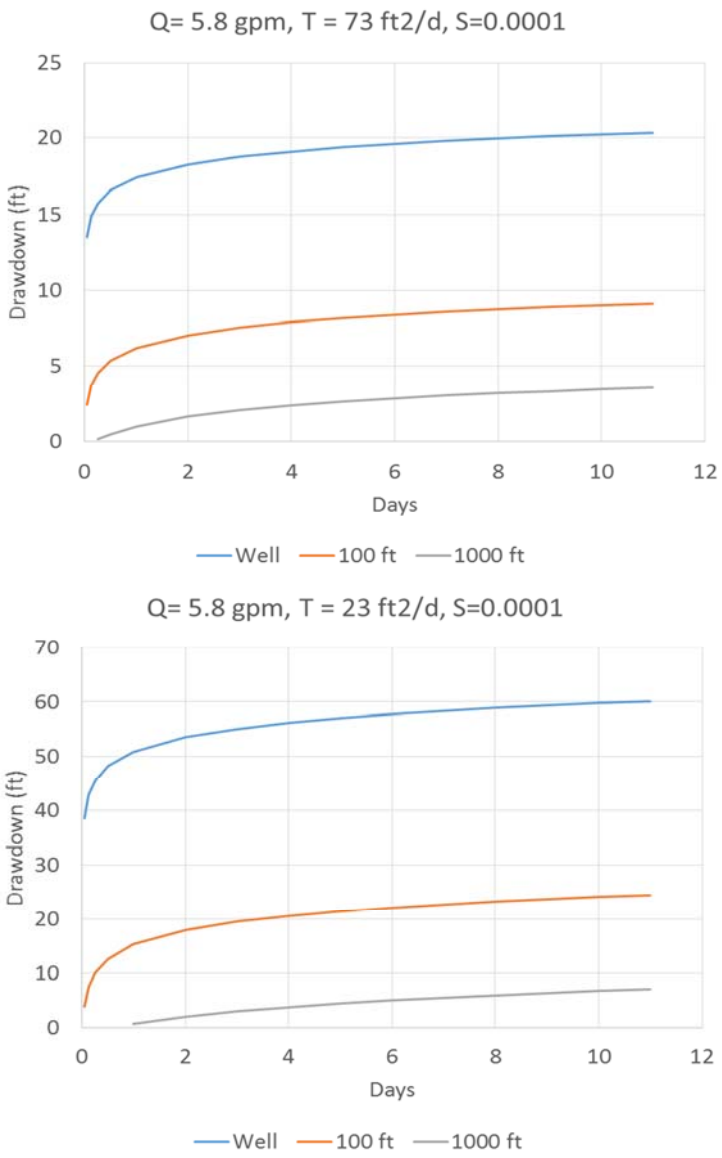


Figure 3: Drawdown with time plots for a well pumping 5.8 gpm with the specified transmissivity and storage coefficient.

Drawdown at the Girard well exceeds 60 feet and at a distance of 1000 feet is about 8 feet after 11 days of pumping at 5.8 gpm (Figure 3, above). Drawdown estimates for other times -- up to 11 days -- may be read from Figure 3. As shown on Figure 3, there will clearly be drawdown at neighboring wells within 1000 feet. Similar drawdown curves could be drawn for larger distance, including the river at about 1500 feet.

All pumping will draw water from the Napa River, but the Neg Dec's analysis of the project does not adequately assess the amount or the cumulative effects pumping would have on flows in the river.

Edge of the Cone of Depression

The Water Availability Analysis (O'Connor (2015)) made several claims that are not supported by evidence. The Analysis estimated the extent of the cone of depression resulting from 24 hours of continuous pumping at 5.37 gpm using an equation (Equation 1 in O'Connor 2015). This equation, however, was never intended for the purpose of identifying a point of zero drawdown. The equation is part of the Cooper-Jacob straight line method, which is a means of analyzing pumping-test data (Fetter 2001). Drawdown at any monitoring well at radius r from the pumping well is plotted against time with 0 drawdown on the top and increasing drawdown plotted downward on the y axis; time on the x axis is logarithmic, as shown on Figure 4 below. This is an example of the method from a textbook (Fetter 2001). The plot is semi-logarithmic which means on one axis, the y axis, points are plotted arithmetically while on the other axis, the x axis, the points are on a logarithmic scale (see Figure 4). Data collected from a pumping test, drawdown at a monitoring well a given distance from the well being pumped, is plotted against time (drawdown on the y axis and time on the x axis). The points form a straight line, except at very small times, if the Cooper-Jacob method is applicable. A straight line may be extended from the line drawn through the data to the top of the graph. The top of the graph corresponds to the point where drawdown equals 0. For zero drawdown, time can be read from the x axis (Figure 4). This time value is used in the Cooper-Jacobs equations but, as can be seen by the fact that the data points do not plot on the straight line near the point of zero drawdown, the zero drawdown point does not actually occur in the field. Assuming it does is a misapplication of the Cooper-Jacob method.

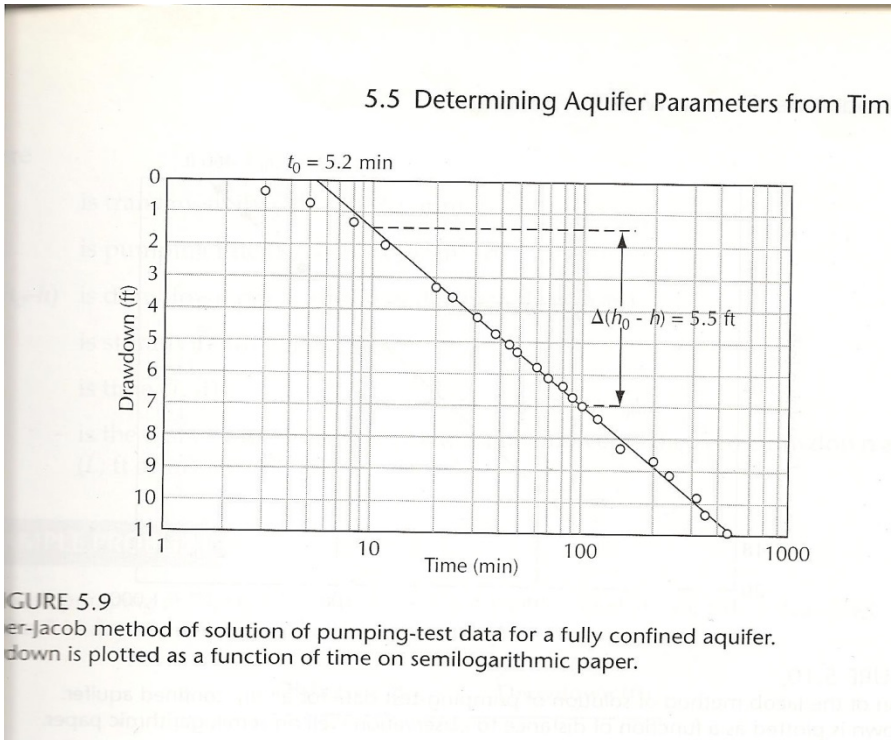


Figure 4: Figure 5.9 from Fetter (2001) showing an example of applying the Cooper-Jacob method to drawdown/time data.

The Water Availability Analysis (O'Connor (2015)) misapplied the equation to "estimate the duration of continuous pumping that would be necessary for the associated cone of depression to reach various points of interest" (O'Connor 2015, p 19). For this reason, the information in O'Conner's Tables 11 and 12 is not useful because they are based on an inappropriate application of a Cooper Jacob well-pumping test equation. The County should not rely on this analysis to assume there will be no drawdown beyond the points specified.

Arsenic and Boron

The Lederer Report ignores the discussion regarding the potential for arsenic and boron to be drawn from the northwest through the project site. The County's argument primarily relies on the fact that since the existing pumping has not drawn the contaminants, the increase in pumping from the Girard well would not cause groundwater contamination. The same argument as made above regarding flow directions due to cumulative pumping applies. Combined, the pumping of all wells in the area could certainly draw contaminants toward the project area. As I explained in my January 2015 report, cumulative pumping in the Calistoga area controls the flow directions in the area. Additional pumping downgradient of the high concentrations, in what appears to be both an arsenic and boron plume, will draw the contaminants further into Calistoga and beyond to the southeast. The County must analyze this potential impact using, for example, a flow and transport model.

Conclusion and Recommendation

This memorandum, along with my prior memorandum, demonstrates the proposed expansion of pumping for the Girard Winery project could have three potentially significant impacts. First, the pumping could unacceptably lower the groundwater levels because there is not as much recharge in the area as the County assumes. Second, the pumping could affect groundwater flow and decrease flow in the river. Third, pumping could cause arsenic and boron to be drawn from the northwest toward the project site. Groundwater pumping from the Project, combined with pumping from the other wells in the area, could cause each of these impacts to occur.

The County's response to my January 20, 2015 memorandum on the project showed a lack of understanding of the cumulative and overlapping effects of this project with all of the other wells in the area.

Because of these potentially significant impacts, a much more detailed hydrogeologic study is needed. All of the issues raised in this review should be analyzed with a numerical flow and transport model. A numerical model would use commonly available computer software which solves the equations of groundwater flow and contaminant transport to provide estimates of groundwater level, flow rates to and from the river, and the movement of contaminants. Such a model could be applied to this area and account for various recharge sources and all of the current and proposed future pumping. The County could then assess how much river flow existing pumping removes from the river, how drawdown would occur at the various wells, and whether the pumping can draw the boron and arsenic plumes toward the project site.

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Myers T (2015) Technical Memorandum, Review of Girard Winery Use Permit P14-00053. January 20, 2015.

Myers, T., 2013. Remediation scenarios for selenium contamination, Blackfoot Watershed, southeast Idaho, USA. *Hydrogeology.* DOI 10.1007/s10040-013-0953-8

O'Connor Environmental Inc (2015) Girard Winery Water Availability Analysis, Prepared for Vintage Wine Estates. Healdsburg CA

701572.4

EXHIBIT 2

United States Environmental Protection Agency | Office of Water (4606) | EPA 816-F-01-021 July 2001

Source Water Protection Practices Bulletin

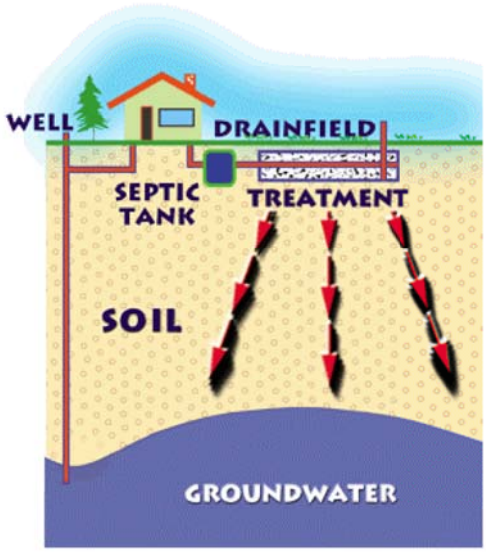
Managing Septic Systems to Prevent Contamination of Drinking Water

Septic systems (also known as onsite wastewater disposal systems) are used to treat and dispose of sanitary waste. When properly sited, designed, constructed, and operated, they pose a relatively minor threat to drinking water sources. On the other hand, improperly used or operated septic systems can be a significant source of ground water contamination that can lead to waterborne disease outbreaks and other adverse health effects.

This fact sheet discusses ways to prevent septic systems from contaminating sources of drinking water. Septic systems that receive non-sanitary wastes (e.g., industrial process wastewater) are considered industrial injection wells, and are not the primary focus of this fact sheet. Other fact sheets in this series address prevention measures for contamination sources such as fertilizers, pesticides, animal feeding operations, and vehicle washing.

SOURCES OF SEPTIC SYSTEM EFFLUENT

About 25 percent of U.S. households rely on septic systems to treat and dispose of sanitary waste that includes wastewater from kitchens, clothes washing machines, and bathrooms. Septic systems are primarily located in rural areas not served by sanitary sewers.



A typical household septic system consists of a septic tank, a distribution box, and a drain field. The septic tank is a rectangular or cylindrical container made of concrete, fiberglass, or polyethylene. Wastewater flows into the tank, where it is held for a period of time to allow suspended solids to separate out. The heavier solids collect in the bottom of the tank and are partially decomposed by microbial activity. Grease, oil, and fat, along with some digested solids, float to the surface to form a scum layer. (Note: Some septic tanks have a second compartment for additional effluent clarification.)

The partially clarified wastewater that remains between the layers of scum and sludge flows to the distribution box, which distributes it evenly through the drain field. The drain field is a network of perforated pipes laid in gravel-filled trenches or beds. Wastewater flows out of the pipes, through the gravel, and into the surrounding soil. As the wastewater effluent percolates down through the soil, chemical and biological processes remove some of the contaminants before they reach ground water.

Large capacity septic systems are essentially larger versions (with larger capacities and flow rates) of single family residential septic systems, but they may have more than one septic tank or drain field for additional treatment capacity. In some cases, an effluent filter may be added at the outlet of the large capacity septic tank to achieve further removal of solids. Many large systems rely on pumps rather than gravity to provide an even flow distribution into the drain field.

WHY IS IT IMPORTANT TO MANAGE SEPTIC SYSTEMS NEAR THE SOURCES OF YOUR DRINKING WATER?

Septic systems are a significant source of ground water contamination leading to waterborne disease outbreaks and other adverse health effects. The bacteria, protozoa, and viruses found in sanitary wastewater can cause numerous diseases, including gastrointestinal illness, cholera, hepatitis A, and typhoid.

Nitrogen, primarily from urine, feces, food waste, and cleaning compounds, is present in sanitary wastewater. Consumption of nitrates can cause methemoglobinemia (blue baby syndrome) in infants, which reduces the ability of the blood to carry oxygen. If left untreated, methemoglobinemia can be fatal for affected infants. Due to this health risk, a drinking water maximum contaminant level (MCL) of 10 milligrams per liter (mg/l) or parts per million (ppm) has been set for nitrate measured as nitrogen. Even properly functioning conventional septic systems, however, may not remove enough nitrogen to attain this standard in their effluent.

AVAILABLE PREVENTION MEASURES TO ADDRESS SEPTIC SYSTEMS

Septic systems can contribute to source water contamination for various reasons, including improper siting, poor design, faulty construction, and incorrect operation and maintenance. Most States and localities regulate siting, design, and construction of septic systems and only regulate operation and maintenance for large capacity septic systems. Some of the more widely used prevention measures are described below. Your local health department should be able to advise you on specific requirements for your community.

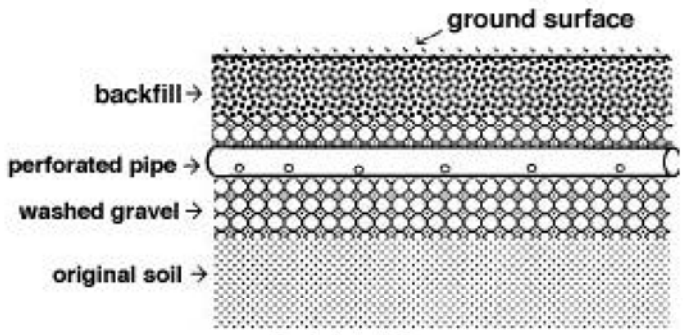
Please keep in mind that individual prevention measures may or may not be adequate to prevent contamination of source waters. Most likely, individual measures should be combined in an overall prevention approach that considers the nature of the potential source of contamination, the purpose, cost, operational, and maintenance requirements of the measures, the vulnerability of the source water, the public's acceptance of the measures, and the community's desired degree of risk reduction

Siting

Most jurisdictions have adopted, for septic systems, ***minimum horizontal setback distances*** from features such as buildings and drinking water wells and ***minimum vertical setback distances*** from impermeable soil layers and the water table. Septic systems should be located a safe distance from drinking water sources to avoid potential contamination. Areas with high water tables and shallow impermeable layers should be avoided because there is insufficient unsaturated soil thickness to ensure sufficient treatment. ***Soil permeability must be adequate*** to ensure proper treatment of septic system effluent. If permeability is too low, the drain field may not be able to handle wastewater flows, and surface ponding (thus contributing to the contamination of surface water through runoff) or plumbing back-ups may result. If permeability is too high, the effluent may reach ground water before it is adequately treated. As a result, alternative systems may be necessary in karst areas. Well-drained loamy soils are generally the most desirable for proper septic system operation. In making siting decisions, local health officials should also evaluate whether soils and receiving waters can absorb the combined effluent loadings from all of the septic systems in the area.

Design and Construction

Septic tanks and ***drain fields should be of adequate size*** to handle anticipated wastewater flows. In addition, soil characteristics and topography should be taken into account in designing the drain field. Generally speaking, the lower the soil permeability, the larger the drain field required for adequate treatment. Drain fields should be located in relatively flat areas to ensure uniform effluent flow.



Septic drain field

Effluent containing excessive amounts of grease, fats, and oils may clog the septic tank or drain field and lead to premature failure. The installation of ***grease interceptors*** is recommended for restaurants and other facilities with similar wastewater characteristics.

Construction should be performed by a ***licensed septic system installer*** to ensure compliance with applicable regulations. The infiltration capacity of the soil may be reduced if the soil is overly compacted. Care should be taken not to drive heavy vehicles over the drain field area during construction or afterward. Construction equipment should operate from upslope of the drain field area. Construction should not be performed when the soil is wet, or excessive soil smearing and soil compaction may result.

Operation and Maintenance

Proper operation and maintenance of septic systems is perhaps the most crucial prevention measure to preventing contamination. Inadequate septic system operation and maintenance can lead to failure even when systems are designed and constructed according to regulation. Homeowners associations and tenant associations can play an important role in educating their members about their septic systems. In commercial establishments such as strip malls, management companies can serve a similar role. Septic system owners should continuously monitor the drain field area for signs of failure, including odors, surfacing sewage, and lush vegetation. The septic tank should be ***inspected annually*** to ensure that the internal structures are in good working order and to monitor the scum level.

Many septic systems fail due to hydraulic overloading that leads to surface ponding. Reducing wastewater volumes through ***water conservation*** is important to extend the life of the drain field. Conservation measures include using water-saving devices, repairing leaky plumbing fixtures, taking shorter showers, and washing only full loads of dishes and laundry. Wastewater from basement sump pumps and water softeners should not be discharged into the septic system to minimize hydraulic load. In addition, surface runoff from driveways, roofs, and patios should be directed away from the drain field.

If an excessive amount of sludge is allowed to collect in the bottom of the septic tank, wastewater will not spend a sufficient time in the tank before flowing into the drain field. The increased concentration of solids entering the drain field can reduce soil permeability and cause the drain field to fail. Septic tanks should be pumped out every two to five years, depending on the tank size, wastewater volume, and types of solids entering the system. Garbage disposals increase the volume of solids entering the septic tank, requiring them to be pumped more often.





Household chemicals such as solvents, drain cleaners, oils, paint, pharmaceuticals, and pesticides can interfere with the proper operation of the septic system and cause ground water contamination. Homeowners should take advantage of ***local hazardous waste collection programs*** to dispose of these wastes whenever possible. Grease, cooking fats, coffee grounds, sanitary napkins, and cigarettes do not easily decompose, and contribute to the build-up of solids in the tank. The use of additives containing yeast, bacteria, enzymes, and solvents has not been proven to improve the performance of septic systems, and may interfere with their normal operation. Bacterial "starters" are not necessary because a wide range of bacteria are normally present in sewage entering the tank. Additives containing solvents or petrochemicals can cause ground water contamination.



Vehicles and heavy equipment should be kept off the drain field area to prevent soil compaction and damage to pipes. Trees should not be planted over the drain field because the roots can enter the perforated piping and lead to back-ups. Last, any type of construction over the drain field should be avoided. Impervious cover can reduce soil evaporation from the drain field, reducing its capacity to handle wastewater.

FOR ADDITIONAL INFORMATION

For information on septic system regulations in your community, contact your state or local health department. The information sources below contain information on measures to prevent septic system failures. All of the documents listed are available free of charge on the Internet.

Numerous documents on septic systems are available for download from U.S. Department of Agriculture Cooperative State Research, Education, and Extension Service State Partners. Links to the various State Partners can be found at http://www.reeusda.gov/1700/statepartners/usa.htm. Several examples of these documents are presented below:

Bicki, T.J. and D.G. Peterson. "Septic Systems: Operation and Maintenance of On-site Sewage Disposal Systems." *Land and Water: Conserving Natural Resources in Illinois*, Number 15, Cooperative Extension Service, University of Illinois at Urbana-Champaign. Retrieved February 26, 2001 from the World Wide Web: http://web.aces.uiuc.edu/vista/pdf_pubs/SEPTIC.PDF.

Hiller, Joe and Andrea Lewis. (October 1994). *Septic System Failure: What To Do.* University of Wyoming Cooperative Extension Service. B-1007. Retrieved February 27, 2001 from the World Wide Web: http://www.uwyo.edu/ag/ces/PUBS/Wy1007.pdf.

Hiller, Joe and Andrea Lewis. (October 1994). *Septic System Maintenance.* University of Wyoming Cooperative Extension Service. B-1008. Retrieved February 26, 2001 from the World Wide Web: http://www.uwyo.edu/ag/ces/PUBS/Wy1008.pdf.

Porter, E., R. Rynk, K. Babin, and B.N. Burnell. *Care and Maintenance of Your Home Septic System.* University of Idaho College of Agriculture, Cooperative Extension System. CIS 1027. Retrieved February 27, 2001 from the World Wide Web: http://info.ag.uidaho.edu/Resources/PDFs/CIS1027.pdf.

Powell, G. Morgan. (March 1996). *Get to Know Your Septic System.* Kansas Cooperative Extension Service, Kansas State University. MF-2179. Retrieved February 26, 2001 from the World Wide Web: http://www.oznet.ksu.edu/library/H20QL2/MF883.PDF.

Powell, G. Morgan. (July 1992). *Septic Tank – Soil Adsorption System.* Kansas Cooperative Extension Service, Kansas State University. MF-944. Retrieved February 27, 2001 from the World Wide Web: http://www.oznet.ksu.edu/library/H20QL2/MF944.PDF.

Powell, G. Morgan, Barbara L. Dallemand, Judith M. Willingham. (August 1998). *Septic Tank Maintenance: A Key to Longer Septic System Life.* Kansas Cooperative Extension Service, Kansas State University. MF-947. Retrieved February 28, 2001 from the World Wide Web: http://www.oznet.ksu.edu/library/H20QL2/MF947.PDF.

Powell, G. Morgan, Barbara L. Dallemand, Judith M. Willingham. (December 1998). *Why Do Septic Systems Fail?* Kansas Cooperative Extension Service, Kansas State University. MF-946. Retrieved February 27, 2001 from the World Wide Web: http://www.oznet.ksu.edu/library/H20QL2/MF946.PDF.

Runyan, R. Craig, *Septic Tank Maintenance.* Cooperative Extension Service, College of Agriculture and Home Economics, New Mexico State University, Guide M-113.

Washington State University Cooperative Extension and U.S. Department of Agriculture. (Reprinted January 1998). *Properly Managing Your Septic Tank System.* EB1671. Retrieved February 26, 2001 from the World Wide Web: http://cru.cahe.wsu.edu/CEPublications/eb1671/eb1671.html.

The National Small Flows Clearinghouse has developed a series of brochures on septic systems. They can be found at http://www.estd.wvu.edu/nsfc/NSFC_septic_news.html.

North Carolina State University Water Quality Group. *Septic Systems*. Retrieved February 27, 2001 from the World Wide Web: http://h2osparc.wq.ncsu.edu/estuary/rec/septic.html.

Septic Information Website: Inspecting, Designing, & Maintaining Residential Septic Systems. Retrieved February 28, 2001 from the World Wide Web: http://www.inspect-ny.com/septbook.htm.

Stormwater Manager's Resource Center. *Non-Stormwater Fact Sheet: Septic Systems*. Retrieved February 26, 2001 from the World Wide Web: http://www.stormwatercenter.net/Assorted%20Fact%20Sheets/Tool7-Non_Stormwater/SepticSystems.htm.

U.S. Environmental Protection Agency. (September 1999). *The Class V Underground Injection Control Study, Volume 5: Large Capacity Septic Systems*. Retrieved February 27, 2001 from the World Wide Web: http://www.epa.gov/safewater/uic/classv/volume5.pdf.

U.S. Environmental Protection Agency. *Decentralized Onsite Management for Treatment of Domestic Wastes.* Retrieved May 1, 2001 from the World Wide Web: http://www.epa.gov/seahome/decent.html.

U.S. Environmental Protection Agency. *Principles and Design of Onsite Waste Disposal with Septic Systems.* Retrieved May 1, 2001 from the World Wide Web: http://www.epa.gov/seahome/onsite.html.

EXHIBIT 3

CITY OF CALISTOGA
PLANNING AND BUILDING DEPARTMENT
PROPOSED AND APPROVED DEVELOPMENT REPORT
MARCH 2015

Location	Project Name/Applicant	Project Description	Status	Planner
411 Foothill Boulevard	**CALISTOGA HILLS (Formerly Enchanted Resorts)** Aaron Harkin 1019 Myrtle Street Calistoga, CA 94515 707-332-8917	Resort/Residential Project 13 single-family dwellings 20 Fractional Units 110 Hotel Units	Approved	Erik Lundquist
1300 Washington Street	**ROMAN SPA** Michael and Kathy Quast 1300 Washington Street Calistoga, CA 94515 707-942-4441 ext. 7242	Resort Expansion Project	Proposed	Erik Lundquist
207 Wappo Avenue	**Wappo Avenue Guest Accomodations** Thomas Hodge and Margaret Nicholson PO Box 6942 Napa, CA 707.501.8550	3 Family and/or Group Guest Suites	Approved	Erik Lundquist
1998 Cedar Street	**IMPER RESIDENCE** Patrick Mervin + Associates c/o Allisa McNair 4668 Petrified Forest Road Calistoga, CA 94515 707-942-6540	4,000+ sf single-family dwelling	Approved	Lynn Goldberg
400 Silverado Trail	**SILVER ROSE RESORT** Silver Rose Venture, LLC 1 Post Office Square 3520 Boston, MA 02109 650-868-3708	Resort/Residential Project 85 guest rooms 57,630 sf resort facilities 110-seat restaurant 21 single-family dwellings	Under Construction	Erik Lundqiust
1801 & 1805 Michael Way	**NEW VINE HOMES LLC** 1301 Farmer's Lane, Suite 302 Santa Rosa, CA 95405	2 New Single Family Dwellings	Pending	Erik Lundquist

CITY OF CALISTOGA
PLANNING AND BUILDING DEPARTMENT
PROPOSED AND APPROVED DEVELOPMENT REPORT
MARCH 2015

Location	Project Name/Applicant	Project Description	Status	Planner
957 Petrified Forest Road	**BRANSTAD PARCEL MAP PM 2014-4** c/o Robert Branstad PO Box 1009 Winnemucca, NV 89446 510.334.2232	2-lot Subdivision	Pending	Erik Lundquist
2085 Mora Avenue	**DECKARD AND FRANQUELIN PARCEL MAP PM 2014-3** 1718 Michael Way Calistoga, CA 94515 707.544.2104	3-lot Subdivision	Pending	Erik Lundquist
2960 Foothill Boulevard	**CALISTOGA PET CLINIC PARCEL MAP PM 2014-1** c/o RKMS Investments, LLC (Jimmy Quita) 34501 7th Street Union City, CA 94587 510-385-2236	2-lot Subdivision	Pending	Erik Lundquist
2309 Grant Street	**CARAVAS SETBACK VARIANCE** 2309 Grant Street Calistoga, CA 94515	Front Yard Setback Variance	Pending	Erik Lundquist
2960 Foothill Boulevard	**CALISTOGA PET CLINIC USE PERMIT AMENDMENT UP 2013-7** Steve Franquelin 2960 Foothill Boulevard Calistoga, CA 94515 707.942.0404	Expansion of Use	Pending	Erik Lundquist

CITY OF CALISTOGA
PLANNING AND BUILDING DEPARTMENT
PROPOSED AND APPROVED DEVELOPMENT REPORT
MARCH 2015

Location	Project Name/Applicant	Project Description	Status	Planner
1213 & 1303 Foothill Boulevard	**General Plan Amendment 2015-2 and Zoning Map Amendment ZOA 2015-4** Nicholas Kite 1213 Foothill Boulevard Calistoga, CA 94515	Designate Property Downtown Commercial	Pending	Erik Lundquist
2412 Foothill Boulevard	**Rancho de Calistoga Clubhouse Design Review DR 2015-1 and Variance VR 2015-1** HCA Management c/o Dean Moser 7250 Redwood Blvd., #350 Novato, CA 94945 415.892.4795 x217	New Clubhouse	Pending	Erik Lundquist

EXHIBIT 4

SHUTE, MIHALY
& WEINBERGER LLP

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ROBERT "PERL" PERLMUTTER
Attorney
perlmutter@smwlaw.com

June 8, 2015

Via U.S. Mail

County of Napa
Board of Supervisors
1195 Third Street, Suite 310
Napa, California 94559

Re: Enforcement Action Against Clos Pegase Winery, Inc.

Dear Chair of the Board:

This firm represents the Tofanelli family on matters related to the unpermitted use of the Clos Pegase Winery. These uses include weddings and similar social events, such as anniversaries, rehearsal dinners, birthdays, holiday parties, and private parties unrelated to the education and development of customers and potential customers. We are writing to support Napa County's enforcement action against Clos Pegase and to detail why there is no legal basis under which Clos Pegase can pursue such a practice.

In 1990, the Board of Supervisors adopted the Winery Definition Ordinance (WDO), which limits commercial activities on wineries approved in agricultural zoning districts to ensure that winery management remains focused on the production of world-class wines. The WDO was amended in 2010 to allow for "[c]ultural and social events directly related to the education and development of customers and potential customers" under a use permit for the "marketing of wine," as long as "such events are clearly incidental, related and subordinate to the primary use of the winery." Napa County Code § 18.08.370 (as amended by Ord. No. 1340, § 1, May 11, 2010). The WDO also states that these marketing events "must be conducted at no charge except to the extent of recovery of variable costs, and any business content unrelated to wine must be limited." *Id.*

The County's Planning, Building and Environmental Services Department has interpreted the WDO, even after the 2010 amendments, as prohibiting wineries from holding weddings, parties, and other similar cultural and social events. *See* Memo From

Hillary Gitelman to Napa County Planning Commission, October 26, 2009 ("Gitelman Memo," attached); *see also* Email from David Morrison to Norma Tofanelli, January 20, 2015 (attached). Thus, under the WDO, Clos Pegase cannot legally use its winery as a wedding venue or special event center. Nonetheless, Clos Pegase continues to advertise "anniversaries, rehearsal dinners, birthdays, holiday parties, private parties and more" on its website. *See http://www.clospegase.com/eventhosting*.

There are two limited exceptions to the WDO's restriction on the use of wineries for weddings and other social and cultural events, but neither apply to Clos Pegase. The ordinance first makes an exception for existing wineries that commenced operations prior to 1974, "and whose activities were lawful when established and have not been abandoned." Ord. No. 947, § 2. Under this provision, wineries that held weddings or similar social events on their premises prior to 1974 and have continued to do so since that time may operate as legally nonconforming wedding venues or special event centers, as long as the nonconforming use is not expanded beyond the pre-1974 levels and is recognized via a county-approved certificate of conformity. *Id.*; *see* Gitelman Memo. Clos Pegase commenced operations in 1984 and, thus, cannot make an argument under this exception. *See* Clos Pegase Use Permit, October 3, 1984 ("1984 Use Permit," attached)("request to establish a winery…").

The second exception concerns wineries that commenced operations after 1974 and secured the required use permit to make their social event-hosting activities lawful. Ord. No. 947, § 3. This exception allows wineries the continued "right to operate within the conditions of their approved use permits," if those use permits explicitly allowed for social and cultural event hosting. *Id.* Any activity beyond the winery's use permit could only be allowed "upon securing a modification of said use permit in accordance with [the Winery Definition Ordinance]." *Id.* Clos Pegase also has no argument under this exception. Its use permit, dated October 3, 1984, provides only for "public tours and tastings" and contains no language authorizing the use of the winery for weddings or other similar social and cultural events. *See* 1984 Use Permit. Clos Pegase sought and received a second use permit in 1987, which also makes no mention of using the winery for weddings or social events. *See* Clos Pegase Use Permit, May 28, 1987 ("1987 Use Permit," attached); *see also* Letter from Jeffrey Redding to Michael Wilson, April 6, 1990 (indicating that the 1987 use permit for public tours and tastings does not extend to general social events) (attached). Thus, Clos Pegase's right to operate within the conditions of its pre-1990 use permits does not in any way allow it to function as a wedding venue or a special event center.

Clos Pegase may argue that its winery had been continuously used for weddings and similar social events before the adoption of the WDO, but any such prior

practices are irrelevant. Since 1974, the County required all winery owners to obtain use permits for myriad uses, including marketing of wine and tours and tastings. Napa County Code § 18.16.030. In the absence of a pre-1990 permit expressly authorizing use of Clos Pegase Winery for weddings and similar social and cultural events, such actions, even if proven, were illegal. Those illegal actions cannot now be leveraged to create a legal, permitted use. *See, e.g., Edmonds v. Cnty. of Los Angeles* (1953) 40 Cal.2d 642, 651 (a vested right is the right to continue a legal activity that existed prior to the enactment of a regulatory program); *Hansen Bros. v. Bd. of Supervisors of Nevada Cnty.* (1996) 12 Cal.4th 533, 540 fn. 1, 541 (Nonconforming uses do not require permits because they "*existed lawfully* before a zoning restriction became effective," even though they are "not in conformity with the ordinance when it continues thereafter." [emphasis added]). Because Clos Pegase did not have a legal right to use its winery for weddings or other social and cultural events between 1984 and 1990, it does not have a vested right to do so after the enactment of the WDO in 1990. This nonconforming use must cease.

Should Clos Pegase seek to modify its use permit or claim a vested right, neighboring property owners "are entitled to reasonable notice and an opportunity to be heard in an evidentiary public adjudicatory hearing before that vested rights claim is determined." *Calvert v. Cnty. of Yuba* (2006) 145 Cal.App.4th 613, 627 ("approvals . . . which 'substantially affect' the property rights of adjacent landowners may constitute property 'deprivation[s]' within the context of procedural due process, requiring reasonable notice and an opportunity to be heard for those landowners before the land use decision is made" [citations omitted]). For the reasons outlined above, there are no means by which Clos Pegase's use of its winery as a wedding and special events venue can be considered a legal nonconforming use under Napa County law; nevertheless, should the County entertain the possibility of granting Clos Pegase a certificate of conformity, we request the County provide notice and an opportunity to be heard to our firm and to the Tofanelli family prior to making that decision.

In closing, we commend the County for bringing an enforcement action to prevent Clos Pegase's illegal operation as a wedding venue and special event center, but express our dismay and disappointment regarding the County's five-month delay in preventing unauthorized activities at this winery. Though Clos Pegase's website no longer promotes use of the winery as a wedding venue, Clos Pegase continues to advertise use of its premises for various social events, including "anniversaries, rehearsal dinners, birthdays, holiday parties, private parties and more." *See* http://www.clospegase.com/eventhosting. Despite the County's ongoing investigation, Cos Pegase's event calendar web page is currently riddled with activities unrelated to the primary use of the winery. *See* http://www.clospegase.com/upcomingevents (advertising

"Yoga in the Vineyards," "Floral Arranging with EV Floral Design," "Puppies and Pinot," etc.). In order to introduce some much-needed transparency into the enforcement process, we request that the County advise us in writing as to exactly what is allowed under Clos Pegase's use permit: how many events, the nature and size of those events, and how frequently they may occur.

We request the County to enforce its laws and stop the unauthorized use of Clos Pegase Winery to ensure protection of the public and avoid unnecessary litigation over what is a clear violation of Clos Pegase's use permit.

Thank you for your attention to this matter.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Robert "Perl" Perlmutter

Attachments

663883.5

1. Memo From Hillary Gitelman to Napa County Planning Commission, October 26, 2009.

2. Email from David Morrison to Norma Tofanelli, January 20, 2015.

3. Clos Pegase Use Permit, October 3, 1984.

4. Clos Pegase Use Permit, May 28, 1987.

5. Letter from Jeffrey Redding to Michael Wilson, April 6, 1990.

683109.1

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Hillary Gitelman
Director

A Tradition of Stewardship
A Commitment to Service

MEMORANDUM

To:	Napa County Planning Commission and Interested Stakeholders	From:	Hillary Gitelman
Date:	October 26, 2009	Re:	WDO & Temporary Events

At the October 6, 2009 joint meeting of the Planning Commission and the Board of Supervisors, planning staff was directed to:

1. quickly review any options that might exist for using our temporary events ordinance as a way to permit social and cultural events at wineries;
2. offer support to industry group discussions about potential changes to the Winery Definition Ordinance (WDO) of 1990; and
3. assemble some data regarding regional economic conditions and characteristics of Napa County wineries.

The first of these subjects is addressed in this memo via a series of five questions and answers which reference relevant sections of the Napa County General Plan and Napa County Code. The staff interpretations and suggestions inherent in these questions and answers are simply initial thoughts, and are provided to frame discussion by the Commission at their November 18, 2009 meeting. Based on input from the Commission and interested stakeholders at that time and in the weeks that follow, staff will formulate a recommendation for consideration by the Commission and the Board around the end of January, when the Board of Supervisors has requested a report on industry group discussions and staff's data gathering efforts.

Question 1: Are wineries currently allowed to hold weddings, parties and similar cultural and social events?

Answer: Generally no, but it depends on when the winery was established and on what conditions were placed on the winery at the time of its approval. Some wineries were established prior to 1974, before there was a requirement for a use permit. These wineries may continue to host cultural and social events if it was part of their operations prior to 1974 (and if they are recognized via a county-approved certificate of conformity). Wineries approved between 1974 and when the WDO was adopted in 1990 may only host cultural and social events

if they were permitted as part of the winery's use permit. Wineries approved after adoption of the WDO in 1990 may not host cultural and social events because of language included in the definition of "marketing" adopted at that time unless the event qualifies as a "temporary event" and has required permits. Generally, "temporary events" are events protected under the First Amendment of the US Constitution, and are open to the public. (See Question 4 & the definitions provided.)

It should be noted that the prohibition on cultural and social events at post-WDO wineries does not mean that marketing events cannot have a cultural or social component. For example, wine club members may be invited to an event featuring the winery's wine, which also involves music, art, etc. However, the code has been consistently interpreted to prohibit these wineries from hosting weddings, birthday parties, wedding anniversary celebrations, and other purely social events because they have been deemed "unrelated to... education and development" of the persons/groups specified in the definition of "marketing."

Question 2: Are wineries currently allowed to hold business meetings, conferences, and similar events?

Answer: Only if the business meetings are non-commercial and primarily focused on wine education and development. As noted above, wineries established prior to 1974 -- before there was a requirement for a use permit -- may continue to host business meetings, conferences, etc. if these activities were part of their operations prior to 1974 (and if they are recognized via a county-approved certificate of conformity). Wineries approved between 1974 and when the WDO was adopted in 1990 may hold such events if they were permitted as part of the winery's use permit.

Since adoption of the WDO, it has not always been clear whether business meetings and similar events qualify as marketing events. A strict reading of the ordinance would suggest that wineries may *not* host business meetings and the like unless they are "limited to activities for the education and development" of the persons or group involved and are singularly focused on "wine which can be sold at the winery on a retail basis." Under this interpretation, only a business meeting solely focused on the production and sale of wine would be acceptable. However, business meetings that have a marketing objective (e.g. a wine tasting or education event scheduled for a group of bankers as part of a corporate retreat), have often been considered marketing events, as long as a prevalence of such events does not constitute commercial activity or turn the winery into a conference center. Clearly this is one area of the code and the WDO that would benefit from clarification via a code amendment, or the kind of "administrative interpretation" discussed in response to Question 3.

Question 3: Could the County use an "administrative interpretation," rather than a code amendment to allow wineries to hold weddings, parties, business meetings, etc?

Answer: The County could use an interpretation to clarify when business meetings are acceptable. However the County could not use an administrative interpretation to allow weddings, parties, and similar social events. Also, administrative interpretations in general have significant disadvantages over formal code amendments.

By law, "administrative interpretations" or other policies that are adopted by staff or decision-makers may not conflict with regulations or policies formally adopted as part of the County's zoning ordinance or General Plan. Also, because such interpretations may be reversed or re-interpreted with little public notice any time there is a change in staff or a change in the composition of the Commission and/or the Board, they can be considered arbitrary and are not generally viewed as good public policy. Use of an interpretation may also be at odds with General Plan Policy AG/LU-107 which states that "The County shall provide a clear, consistent, timely, *and predictable* review process..." [emphasis added].

With that said, planning staff understands that the prohibition on cultural and social events and the issues surrounding business meetings described in response to Question 1 & 2 are themselves based on interpretations of code language. In the case of cultural and social events, County staff and policy makers have routinely interpreted birthday parties, weddings, etc. to be cultural and social events that are "unrelated to ... education and development" of the persons and groups called out in the definition of "marketing." This interpretation is supported by the last statement in the definition of marketing: "...but shall not include cultural and social events unrelated to such education and development..."

In the case of business meetings, County staff and policy makers have interpreted some business meetings as falling within the definition of "marketing," while acknowledging that the practice of hosting other business meetings can be considered a commercial activity outside the definition of "marketing." Careful consideration should be given to legal issues and potentially preferable alternatives before using an administrative interpretation to clarify when business meetings are acceptable. While there is no phrase in the code expressly describing these meetings as <u>not</u> falling within the definition of marketing (as there is for social and cultural events), there is still the disadvantage that an administrative interpretation can be reversed with little public notice (i.e. only by posting an agenda 72 hours in advance of the meeting) whenever the composition of the Commission or the Board changes.

Question 4: Could the County use the existing temporary events ordinance to allow weddings, parties, business meetings, etc. at wineries?

Answer: Not without amending the ordinance. Temporary events are by definition (see below) related to "expressive activities" protected by the First Amendment of the US Constitution and are open to the public. Common examples include concerts, lectures, and benefit dinners held by non-profit organizations. Wineries may hold social, cultural, and business-related events using the temporary event ordinance (and independent of their approved marketing programs), but only if the events are open to the public (with or without

payment of an admission charge), and are permitted via the procedures outlined in Chapter 5.36 of Napa County Code. Generally, any temporary event with more than 50 attendees requires a permit, which must be applied for at least 60 days in advance of the event. Obviously, weddings, birthday parties and other events that are *by invitation only* do not fall within the definition of temporary events, so the ordinance would have to be amended to provide another category of temporary event that is by invitation, presuming the Commission and the Board can make the case that such events are expressive activities protected under the First Amendment. This idea is discussed in response to Question 5, below.

Question 5: How could the existing temporary events ordinance be amended to permit weddings, parties and similar cultural or social events at wineries?

Answer: While it would be possible to amend the rules governing temporary events to permit "by invitation only" cultural and social events if these events were considered a form of public expression related to First Amendment rights, there may be unintended consequences of such a change and alternative code amendments would be preferable. Four options are evaluated here.

If the temporary events ordinance was simply amended to allow events that are by invitation only (events like weddings, birthday parties, etc.) by making the argument that these events provide for public expression, then these types of events could be permitted at homes, barns, warehouses, and at other properties throughout the County as well as at wineries. As a result, there could be an excessive number of events, and properties that hold regular events could become commercial enterprises in violation of General Plan policies and zoning restrictions.

This unintended consequence (i.e. the potential over-proliferation of events) could be addressed by enacting a new special events ordinance that is unrelated to the First Amendment and that limits the number of events allowed by invitation only (e.g. up to 100 weddings per year on a first come first served basis, and no more than one such event per property per year). The new special events ordinance would not be specific to wineries, and would allow events at a wide variety of locations via an administrative permit, similar to permit required for hot air balloon launching facilities. Strict limitations would have to be included in the new ordinance to avoid conflicting with General Plan policies and zoning restrictions prohibiting commercial activities in agricultural areas.

Another variation on this theme would be to create a new special events ordinance allowing social and cultural events, but only at wineries and only when such events are held in lieu of permitted marketing events. This approach could make use of the same kind of administrative permit process described above, but also would necessitate changing the definition of "marketing" to avoid internal inconsistencies within Napa County Code. Specifically, the definition of "marketing" would need to be amended along the following lines (proposed new text is underlined):

"*Marketing of wine*" means any activity of a winery identified in this paragraph which is conducted at the winery and is limited to members of the wine trade, persons who have pre-established business or personal relationships with the winery or its owners, or members of a particular group for which the activity is being conducted on a prearranged basis. Marketing of wine is limited to activities for the education and development of the persons or groups listed above with respect to wine which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20, and may include food service without charge except to the extent of cost recovery when provided in association with such education and development, but shall not include cultural and social events unrelated to such education and development *except as provided in Section [insert section number]*.

The most efficient way to provide wineries with greater flexibility regarding events would be to avoid establishment of a new administrative permit process and simply adjust the definition of "marketing" further. For example, the following amendment was proposed in 2005 (proposed new text is underlined):

"*Marketing of wine*" means any activity of a winery identified in this paragraph which is conducted at the winery and is limited to members of the wine trade, persons who have pre-established business or personal relationships with the winery or its owners, or members of a particular group for which the activity is being conducted on a prearranged basis. Marketing of wine is limited to activities for the education and development of the persons or groups listed above with respect to wine which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20, and may include food service without charge except to the extent of cost recovery when provided in association with such education and development, but shall not include cultural and social events unrelated to such education and development.

Notwithstanding the preceding paragraph, "marketing of wine" may include a cultural, social or business event if such event occurs during the period commencing on the effective date of Ordinance No. 1267 and ending two years from the effective date of Ordinance No. 1267 and if the event conforms to all of the following requirements:

A. *the winery has a valid use permit which specifically allows marketing events to be held at the winery;*
B. *the event is limited to members of the wine trade or persons who have pre-established relationships with the winery or its owners, or is being conducted for a particular group on a prearranged basis;*
C. *the event involves the education and development of customers for the winery;*
D. *the only alcoholic beverages served at the event are wines which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20 of this Code;*
E. *the only food service provided in association with the event is without charge, except to the extent of cost recovery;*
F. *the event is not scheduled to begin or end during "peak" travel times of 4:00 to 6:00 p.m. on weekdays and 1:00 to 4:00 p.m. on weekends;*

G. *the event may not include the use of outdoor amplified music unless it is specifically authorized by a use permit modification approved by the zoning administrator pursuant to section 18.10.020 of this Code and is based on an analysis outlining feasible methods for complying with the County's noise ordinance and those methods are included as conditions of approval on the use permit modification;*

H. *events within one-quarter mile of residential uses must end (including clean-up) by 10:00 p.m. unless a different time is authorized by a use permit modification approved by the zoning administrator and is based on an analysis outlining feasible methods for complying with the County's noise ordinance and such methods are included as conditions of approval on the use permit modification pursuant to section 18.12.020 of this Code;*

I. *the event will not exceed the number of attendees specified in the winery's use permit for visitors to a particular marketing event; and*

J. *the event will be counted towards the total number of marketing events per year authorized by a winery's use permit.*

Pre-WDO wineries which have not established specific marketing plans may continue to do marketing activities consistent with the visitation allowed in their existing use permits. Where it is unclear what marketing activities were previously authorized, a use permit modification request or a certificate of extent of legal non-conformity shall be submitted by the permittee to clarify the intensity of marketing activities allowed.

Definitions from Napa County Code

- *"Agriculture"* means the raising of crops or livestock and includes the following:
  A. Growing and raising trees, vines, shrubs, berries, vegetables, nursery stock, hay, grain and similar food crops and fiber crops;
  B. Grazing of livestock and feeding incidental thereto;
  C. Animal husbandry, including, without limitation, the breeding and raising of cattle, sheep, horses, goats, pigs, rabbits and poultry and egg production;
  D. Sale of agricultural products grown, raised or produced on the premises;
  E. Farm management uses meeting all of the standards in subsections (E)(1) through (E)(6) of this section.... (excerpt from Napa County Code Section 18.08.040)

- "*Marketing of wine*" means any activity of a winery identified in this paragraph which is conducted at the winery and is limited to members of the wine trade, persons who have pre-established business or personal relationships with the winery or its owners, or members of a particular group for which the activity is being conducted on a prearranged basis. Marketing of wine is limited to activities for the education and development of the persons or groups listed above with respect to wine which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20, and may include food service without charge except to the extent of cost recovery when provided in association with such education and development, but shall not include cultural and social events unrelated to such education and development. (Napa County Code Section 18.08.370)

- "*Commercial use*" means a use that involves the exchange of cash, goods or services, barter, forgiveness of indebtedness, or any other remuneration in exchange for goods, services, lodging, meals, entertainment in any form, or the right to occupy space over a period of time. It does not include the growing and subsequent sale of crops or livestock, the manufacturing, assembly, or processing and subsequent sale at wholesale of a product, or the operation of a telecommunication facility. (Napa County Code Section 18.08.170)

- *"Temporary event"* or *"event"* means any festival, fair, show, showcase, house or garden design tour, concert, dance, rally, parade, demonstration or competition of creative athletic form, or any other gathering or assemblage of individuals for the purpose of observing or engaging in expressive activities within the ambit of the First Amendment of the United States Constitution and Sections 2, 3 and 4 of Article 1 of the California Constitution, including, but not limited to, music, dance, theater, speech, athletics, or any other visual, audio, or tactile arts or combination thereof, including incidental retail sales of the products of such activities, as long as such sales are not advertised off-site; which is held at any place other than a highway as defined in Section 10.24.010 of this code, a permanent building or installation constructed and primarily used for the

purpose of conducting such activity or one similar thereto, property owned or leased by the state of California, or property owned or leased by a public school district for use as a public school site, and to which the public is invited or admitted with or without the payment of an admission charge. (excerpt from Napa Count Code Section 5.36.101)

Relevant Policies from the Napa County General Plan

Goal AG/LU-1: Preserve existing agricultural land uses and plan for agriculture and related activities as the primary land uses in Napa County.

Policy AG/LU-1: Agriculture and related activities are the primary land uses in Napa County.

Policy AG/LU-2: "Agriculture" is defined as the raising of crops, trees, and livestock; the production and processing of agricultural products; and related marketing, sales and other accessory uses. Agriculture also includes farm management businesses and farm worker housing.

Action Item AG/LU-2.1: Amend County Code to reflect the definition of agriculture" as set forth within this plan, ensuring that wineries and other production facilities remain as conditional uses except as provided for in Policy AG/LU-16, and that marketing activities and other accessory uses remain incidental and subordinate to the main use.

Policy AG/LU-13: The 1990 Winery Definition Ordinance, recognized certain pre-existing wineries and winery uses as well as new wineries. For wineries approved after the effective date of that ordinance, agricultural processing includes tours and tastings by appointment only, retail sales of wine produced by or for the winery partially or totally from Napa County grapes, retail sale of wine-related items, activities for the education and development of consumers and members of the wine trade with respect to wine produced by or at the winery, and limited non-commercial food service. The later activity may include wine-food parings. All tours and tastings, retail sales, marketing activities, and non-commercial food service must be accessory to the principal use of the facility as an agricultural processing facility. Nothing in this policy shall alter the definition of "agriculture" set forth in Policy AG/LU-2.

Policy AG/LU-16: In recognition of their limited impacts, the County will consider affording small wineries a streamlined permitting process. For purposes of this policy, small wineries are those that produce a small quantity of wine

using grapes mostly grown on site and host a limited number of small marketing events per year.

Action Item AG/LU-16.1: Consider amendments to the Zoning Ordinance defining "small wineries," a "small quantity of wine," "small marketing events," and "mostly grown on site," and establishing a streamlined permitting process for small wineries which retains the requirement for a use permit when the winery is in proximity to urban areas.

NAPA COUNTY
CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT

USE PERMITS

DEPARTMENT REPORT AND RECOMMENDATION

Meeting of October 3, 1984

Agenda Item: 2A

APPLICATION DATA:

APPLICANT: Clos Pegase, Inc (#U-698384, filed 6-21-84)

REQUEST FOR: To establish a 55,000 gallons/year Winery with public tours and tasting on a 21.92 acre parcel.

LOCATION: on the west side of Dunaweal Lane, 600 feet south of its intersection with the Silverado Trail within an AP District (AP #20-150-12)

FINDINGS: [All checked (X) Items Apply to This Application]

SPECIAL INFORMATION:

☒ 1. Details of the proposal are contained in the attached supplemental information sheet.

☒ 2. Comments and recommendations from various County departments and other agencies are attached.

[ ] 3. _____

ENVIRONMENTAL ANALYSIS:

[ ] 4. General Rule (Not Subject to CEQA).

[ ] 5. Categorically Exempt pursuant to the California Enviornmental Quality Act (Class # _____).

[ ] 6. Final Environmental Impact Report # _____ prepared by:

_____

(See Agenda Item # _____).

☒ 7. The project is not anticipated to result in significant environmental effects, either individually or cumulatively. There are no unique or rare biological or physical resources that will be adversely effected. A Negative Declaration is recommended. See attached copy.

[ ] 8. Denial Not Subject to CEQA.

Agenda Item: 2-4

Report and Recommendation

Meeting Date: October 3, 1984

Use Permit #U-698384

PLANNING AND ZONING ANALYSIS:

☒ 9. The procedural requirements for Use Permit outlined in the Zoning Ordinance have been satisfied in regard to this application.

☒ 10. The submitted proposal is in general compliance with Ordinance requirements.

☒ 11. Approval of this proposal would not result in detrimental effects to the public health, safety or general welfare.

☒ 12. The proposal is in conformance with the General Plan designation of Agricultural Resource specified for the property.

☐ 13. The property is within the district boundary and/or the Sphere of Influence of the following districts:

American Canyon County Water District (See attached map).	☐ Within district	☐ Within Sphere
American Canyon Fire Protection District (See attached map).	☐ Within district	☐ Within Sphere
_____	☐ _____	☐ _____
_____		

☐ 14. This proposal should be denied pursuant to findings contained in the attached Exhibit _____.

☐ 15. _____

_____

_____

_____

RECOMMENDATION:

☐ Continue to meeting of _____.

☒ Action

ENVIRONMENTAL:

☐ None Required.

☒ Adopt a Negative Declaration.

☒ Find that the Commission has read and considered the environmental documents relative to #U-698384.

☐ Certify Final EIR as adequate.

PLANNING:

☐ DENIAL based on Finding #_____.

☒ APPROVAL with Findings and subject to the attached Conditions of Approval.

CONDITIONS OF APPROVAL

Agenda Item: 2A

Meeting Date: October 3, 1984

Use Permit: #U-698384

1) ☒ The permit be limited to: Construction of a 55,000 gallons/year winery with public tours and tasting.

Any expansion or changes in use to be by separate Use Permit submitted for Commission consideration.

2) ☒ Submission of a detailed landscaping, fencing and parking plan to the Department for review and approval indicating names and locations of plant materials, method of maintenance and location of off-street parking spaces. Said plan to be submitted prior to issuance of the Building Permit. Landscaping, fencing and parking to be completed prior to finalization of Building Permit.

3) ☒ Provisions for a minimum of 20 off-street parking spaces on a dust free, all weather surface approved by Public Works.

4) ☒ Plans for any outdoor signs be submitted to the Department for review and approval with regard to design, area, height and placement.

☐ The applicant enter into an agreement with the County not to oppose annexation to an appropriate service district when deemed necessary by the County. The agreement to be reviewed by Environmental Health and approved by County Counsel.

☐ Annexation of the property to the following districts:

- ☐ American Canyon County Water District
- ☐ American Canyon Fire Protection District
- ☐ _____

☐ All open storage of _____ be screened from view of _____ and adjacent properties by a visual barrier. No open storage to exceed height of screening.

☐ The permit be limited to a ____ year period.

5) ☒ Compliance with all applicable building codes, zoning standards and requirements of various County departments and agencies.

6) ☒ Mitigation Measures contained in the attached Negative Declaration

CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT
SUPPLEMENTAL INFORMATION SHEET
USE PERMIT APPLICATION

1. DESCRIPTION OF PROPOSED USE:

USE: Winery and Vineyard Operation

PRODUCT OR SERVICE PROVIDED: Table wines

FLOOR AREA: EXISTING STRUCTURES none SQ. FT. NEW CONSTRUCTION 25,000 SQ. FT.±

INDICATE SQUARE FOOTAGE ON EACH FLOOR DEVOTED TO EACH SEPARATE USE WITHIN ~~AN EXISTING~~ AND/OR PROPOSED BUILDING: See attached letter.

SEATING CAPACITY: RESTAURANT N/A BAR N/A OTHER

EXISTING STRUCTURES OR IMPROVEMENTS TO BE REMOVED: 1100 sq. ft. residence

RELATED NECESSARY CONCURRENT OR SUBSEQUENT PROJECTS ON THE SITE OR IN SURROUNDING AREAS: None

2. NEW CONSTRUCTION:

PROJECT PHASING: 1) 8,000 cases (tours & tasting) 2) 25,000 cases 3) 50,000 cas

CONSTRUCTION TIME REQUIRED (EACH PHASE): 1) 1 year 2) 3 years 3) 5 years

TYPE OF CONSTRUCTION: Conc. slab/ Wd. frame/ Stucco/ Tunnels

MAX. HEIGHT (FT.): EXISTING STRUCTURES N/A PROPOSED STRUCTURES 35'

DESCRIPTION OF PROPOSED EXTERIOR NIGHT LIGHTING: Security and crushing pad. H.I.D. fixtures

3. AVERAGE OPERATION:

HOURS OF OPERATION 8 A.M. TO 5 P.M. DAYS OF OPERATION 5 days/wk.

NUMBER OF SHIFTS: N/A (CURRENTLY) EMPLOYEES PER SHIFT: N/A (CURRENTLY) FULL TIME N/A PART TIME N/A

NUMBER OF SHIFTS PROPOSED: 1 TOTAL EMPLOYEES PER SHIFT PROPOSED: 3 (initially) FULL TIME 3 PART TIME 0

NUMBER OF DELIVERIES OR PICK-UPS: PER DAY 3 PER WEEK 15

NO. VISITORS ANTICIPATED: PER DAY 100 PER WEEK

ARE THERE SPECIAL OPERATIONS? PLEASE DESCRIBE ON SEPARATE PAGE

4. LANDSCAPING AND PARKING:

EXISTING LANDSCAPING PLAN SUBMITTED: YES X NO Existing vineyard and oak forest (See aerial photo)

PROPOSED LANDSCAPING PLAN SUBMITTED: YES NO X To be designed.

PARKING SPACES: EXISTING SPACES 0 EMPLOYEE CUSTOMER

PROPOSED SPACES 20 EMPLOYEE 3 CUSTOMER 17

5. UTILITIES:

WATER SUPPLY SOURCE: Existing well, storage tank & reservoir METHOD OF SEWAGE DISPOSAL: Underground septic system

IS ANNEXATION TO A SPECIAL SERVICE DISTRICT PROPOSED?: YES _____ NO X

NAME OF DISTRICT: _____

6. LICENSES OR APPROVALS REQUIRED:

DISTRICT N/A REGIONAL N/A

STATE A.B.C. FEDERAL B.A.T.F. (Bond)

7. WINERY OPERATION:

Yes CRUSHING Yes FERMENTATION Yes STORAGE/AGING Yes BOTTLING/PACKING

Yes SHIPPING: VIA: Truck; Yes ADMINISTRATIVE: Yes TOURS/PUBLIC TASTING

No OTHER: _____

GALLONS OF WINE TO BE PRODUCED:

INITIAL OR CURRENT PRODUCTION 20K GALLONS/YEAR

ULTIMATE ESTIMATED PRODUCTION ~~120K~~ 55,000 GALLONS/YEAR

REQUESTED PRODUCTION CAPACITY ~~120K~~ 55,000 GALLONS/YEAR

METHOD OF DOMESTIC WASTE DISPOSAL: Underground septic & leach lines

METHOD OF INDUSTRIAL WASTE DISPOSAL: " " " "

GALLONS OF DOMESTIC WASTE PRODUCED: 300 gal. PER day (100 visitors)

GALLONS OF INDUSTRIAL WASTE PRODUCED: 30,000 gal. PER year (Phase I)

METHOD OF SOLID WASTE DISPOSAL: Returned to and plowed into vineyard.

CAPACITY OF WATER SUPPLY: Well ~~GALLONS~~ GALLONS.

WATER AVAILABILITY: _____ GALLONS PER MINUTE.

ON-SITE FIRE PROTECTION: Yes

EMERGENCY WATER STORAGE; 6,000 GALLONS. and 14 acre-ft. reservoir

TYPE OF STORAGE FACILITY: 6,000 gallon tank and reservoir

8. SPECIFIC INFORMATION FOR REST HOMES/DAY CARE CENTERS: N/A

TYPE OF CARE: _____

TOTAL NUMBER OF GUESTS: EXISTING: _____ PROPOSED: _____

NUMBER OF BEDROOMS: EXISTING: _____ PROPOSED: _____

SPECIAL CARE HOME WITHIN 300 FEET OF PROPERTY?: _____

NUMBER OF EMPLOYEES: FULL TIME: _____ PART TIME: _____

NAPA COUNTY

CONSERVATION — DEVELOPMENT
AND PLANNING DEPARTMENT

JAMES H. HICKEY
Director

1195 THIRD STREET, ROOM 210 • NAPA, CALIFORNIA 94559-3092
AREA CODE 707/253-4416

May 28, 1987

Assessor's Parcel # 20-150-12

Clos Pegase Winery
P.O. Box 305
Calistoga, Ca. 94515

Please be advised that Use Permit Application Number U-458687 to expand the winery with the increase in annual production, roof an existing work area, add 19,000 sq. ft. in caves on the winery site and to construct wastewater treatment ponds on the adjacent parcel across Dunaweal Lane located along Dunaweal Lane approximately 500 feet south of Silverado Trail within an AP (AGricultural Preserve) District. has been approved by the Napa County Conservation, Development and Planning Commission based upon the following conditions:

(SEE ATTACHED LIST OF CONDITIONS OF APPROVAL)

APPROVAL DATE: May 27, 1987

The use permit becomes effective ten (10) working days from the approval date unless an appeal is filed with the Napa County Board of Supervisors pursuant to Title XIII of the Napa County Code. In the event an appeal is made to the Board, you will be notified.

Pursuant to Section 12806 of the Napa County Code, the use permit must be activated within one (1) year and ten (10) calendar days from the approval date or the use permit shall automatically expire and become void. A one-year extension of time in which to activate the use permit may be granted by the County provided that such extension request is made thirty (30) days prior to the expiration date. A request for an extension of time is subject to payment of a $190.00 filing fee.

Very truly yours,

JAMES H. HICKEY
Secretary/Director

JHH:ml:1

NOTE: Approved with modification of condition #3:

Director authorized to increase minimum parking spaces to 70 if circumstances require.

Approved with additional Mitigation Measures (see Attachment A)

cc: Bill L. Hall, Building Codes Administrator
Assessor's Office

EXHIBIT 15

Rev. 4/87

-23-

PAGE 1 OF 2

ATTACHMENT A

Additional Mitigation Measures
imposed by the Conservation, Development and
Planning Commission

Meeting: May 27, 1987
File #: U-450687

AESTHETICS

- Screen visibile portions of the waste water treatment ponds from residences along the Silverado Trail south easterly of Dunaweal Lane with strategically placed native vegetation.

AIR QUALITY

- Use gravel and chemical suppressants as often as necessary for on-site roads used by heavy equipment, to mitigate particulate emission impacts.

- Use watering of working areas, storage pile surfaces and traffic areas, to mitigate particulate emission impacts.

- Cover cave tailings storage pile surfaces with topsoil and revegetate prior to the start of the wet season (October 15), to prevent erosion and minimize particulate emission impacts.

EXHIBIT 15

PAGE 2 OF 2

CONDITIONS OF APPROVAL

Agenda Item: 10

Meeting Date: May 20, 1987
Use Permit: #U-458687

1. The permit be limited to an increase in annual production capacity not to exceed 200,000 gallons.

2. Winery expansion shall be in accordance with project description and drawings submitted on January 23, 1987, made as part of this application, including 1) project phasing, 2) location and 3) design (as maybe modified by the Commission).

   Any expansion or changes in use to be by separate Use Permit submitted for Commission consideration.

3. Provisions for a minimum of 35 off-street parking spaces on a dust free, all weather surface approved by Public Works Department the

4. Excavated material related to 19,000 square feet of addition tunnels, shall not be sold for commercial purposes, but shall be disposed of in a manner approved by the Director.

5. Compliance with all applicable building codes, zoning standards and requirements of various County departments and agencies.

6. Mitigation measures contained in the attached Negative Declaration.

:3f

ATTACHMENT 1

Mitigation Measures for
Clos Pegase - Kiriko Ltd.
Use Permit (#U-458687)

HYDROLOGY, WATER QUALITY

1. Plans for the proposed private sewage disposal system shall be designed by a licensed Civil Engineer and be accompanied by complete design criteria based upon local conditions and shall be subject to approval by the Department of Environmental Health prior to issuance of any permits.

2. That the use of the drainfield area be restricted to activities which will not contribute to compaction of the soil with consequent reduction in soil aeration. This includes equipment storage, traffic, livestock, etc., over the system.

3. The applicant shall maintain regular monitoring of the waste water system required by the Department of Environmental Health and submit quarterly reports. An annual permit is required.

4. Since the proposed ponds are to be installed on a separate parcel from the facility they are to serve, an agreement to grant a sewage easement must be filed with the Department of Environmental Health prior to issuance of sewage permits.

5. That the water supply system comply with the California Safe Drinking Water Act. This will require an annual permit from the Department of Environmental Health. A plan review of the water system will also be required.

6. That all solid waste be stored and disposed of in a manner to prevent nuisances or health threats from insects, vectors and odors.

7. Restriction of all ground disturbing activities (i.e., grading) to the dry season between April 15 and October 15.

8. Replanting of all areas disturbed by grading and construction activities prior to the beginning of the rainy season (by mid-October) to the satisfaction of the Resource Conservation District. It is recommended that topsoil be stockpiled to be redistributed on cut and fill slopes for more successful revegetation efforts.

9. Erosion control be provided to dispose of any concentrated runoff from all buildings constructed on parcel, including a storm drain plan indicating energy dissipation structures to be installed.

10. Water shall not be allowed to flow over cut and fill slopes. Drainage shall be intercepted and diverted away from cut and fill slopes by use of up slope berms or interceptor ditches and energy dissipation structures shall be installed when necessary.

11. Sediment catch basins shall be installed to contain the sediment runoff and keep it from moving into water channels beyond the property boundaries.

NOISE

12. Limitation of all construction activities on the proposed facilities to weekdays between Monday and Friday when they will cause the least amount of annoyance (i.e., between 7:30 AM and 4:30 PM).

13. All construction equipment shall be property and adequately mufflered at all times.

14. Place noisy stationary equipment such as compressors and pumps away from developed areas off-site and/or the provision of acoustical shielding around such equipment.

AESTHETICS

15. All exterior lighting shall be shielded and directed away from residences and roadways off-site.

CULTURAL

16. Placement in the specifications covering this project of a stipulation binding the applicant, his employees, and/or contractor(s) to stop all work within 35 feet if buried archaeological or historic materials are discovered during future development. A qualified archaeologist shall be retained to evaluate the find(s) and to recommend mitigation procedures, if necessary. Prehistoric archaeological materials include, but are not limited to, obsidian, chert, and basalt flakes and artifacts, groundstone (such as portars and pestles), shell beads and pendants, midden (locally darkened soil), and human graves. Historic archaeological materials include, but are not limited to, glass bottles, privys, and ceramics. All such recommendations, with the concurrence of the County Planning Director, be implemented.

TRAFFIC

17. Right of way widening to 30 feet from the centerline of Dunaweal Lane be granted to the County for roadway and utility purposes.

18. The access road serving the winery be a minimum width of 20 feet and consist of a minimum structural section equivalent to 5 inches of Class II Aggregate Base plus 2 inches of Asphalt Concrete.

19. Visitor parking areas shown on the site plan and any additional visitor parking required by the Commission have a minimum structural section equivalent to the same as the above access road.

20. Employee parking areas shown on the site plan and any additional areas required by the Commission have a minimum structural section equivalent to 5 inches of Class II Aggregate Base plus a double seal coat.

21. Any necessary storm drainage improvements be constructed.

22. All the above improvements be constructed according to plans prepared by a registered civil engineer and reviewed and approved by this department. A plan check and inspection fee in an amount equal to 3% of the estimated cost of construction of the above improvements be paid this department.

23. All construction within the County road right of way be in accordance with an encroachment permit issued by the Department of Public Works.

PUBLIC HEALTH

24. Compliance with Napa County Mosquito Abatement District Guidelines including:

    A. Access to ponds for maintaining mosquito control, weed control, and aquatic midge (gnats) control.

    B. Good access road to ponds.

    C. All levees, cross levees, and dikes wide enough for vehicular traffic (minimum 12 feet).

    D. Keys to locks or a place for Mosquito Abatement District lock on any gate to ponds.

    E. Fences on outside of levees enough to facilitate vehicular traffic.

    F. All levees, cross levees, and dikes clear of obstructions (pipes, pumps, electrical boxes, fuel tanks, etc.) to permit vehicular traffic.

25. Weed Control

    A. Property owners shall furnish soil sterilant (Aetrex, Krovar, Karmex, etc.).

    B. Mosquito Abatement District will apply on yearly basis.

26. Aquatic Midge Control

    A. Be able to launch boat in ponds (or lakes) for midge control.

NOTE: Any pond, lake, or reservoir, is a good potential midge source.

I understand and explicitly agree that with regards to all CEQA and Permit Streamlining Act (i.e., GCS 63920-63962) processing deadlines, this revised application will be treated as a new project. The new date on which said application will be considered complete is the date this project revision statement is received by the Napa County Conservation, Development and Planning Department.

I AGREE TO INCLUDE THE ABOVE MITIGATION MEASURES IN THE PROJECT.

_____ 4/21/87
Date

_____
Date

CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT
SUPPLEMENTAL INFORMATION SHEET
USE PERMIT APPLICATION

DESCRIPTION OF PROPOSED USE:

USE: operation of vineyard and bonded winery

PRODUCT OR SERVICE PROVIDED: Table wine

FLOOR AREA: EXISTING STRUCTURES 25,000 SQ. FT. NEW CONSTRUCTION 1,600 SQ. FT. of for existing work area and 19,000 sq.ft. additional tunnels.
INDICATE SQUARE FOOTAGE ON EACH FLOOR DEVOTED TO EACH SEPARATE USE WITHIN AN EXISTING ground floor: 1,600 sq.ft. roof for existing work area;
AND/OR PROPOSED BUILDING: 19.000 sq.ft. caves for barrel and bottle aging of (underground)

SEATING CAPACITY: RESTAURANT N/A BAR N/A OTHER N/A

EXISTING STRUCTURES OR IMPROVEMENTS TO BE REMOVED: N/A

RELATED NECESSARY CONCURRENT OR SUBSEQUENT PROJECTS ON THE SITE OR IN SURROUNDING
Install process wastewater system of approx. 1.5 million gallons capacit
AREAS: on approx. 2 acres of AP# 20-150-17 with pipelines

2. NEW CONSTRUCTION: PHASE I: pave drive, install process wastewater system an 1,600 sq.ft. roof. PHASE II: install aging caves.
PROJECT PHASING:

CONSTRUCTION TIME REQUIRED (EACH PHASE): PHASE I: 1987-1988. PHASE II: 1988-

TYPE OF CONSTRUCTION: Wood Frame Roof and Supports; Earth-fill Ponds; Excava Caves

MAX. HEIGHT (FT.): EXISTING STRUCTURES 35' PROPOSED STRUCTURES 10'±(Pc 25'±/Ba

DESCRIPTION OF PROPOSED EXTERIOR NIGHT LIGHTING: No change

3. AVERAGE OPERATION: N-Normal Season H-Harvest Season

HOURS OF OPERATION 0700 N / 0500 H A.M. TO 1800 N / 2400 H P.M. DAYS OF OPERATION M-F N / 7 Days

NUMBER OF SHIFTS: 1 N / 2 H (CURRENTLY) EMPLOYEES PER SHIFT: 5 N / 10 H (CURRENTLY) FULL TIME X PART TIME ___

NUMBER OF SHIFTS PROPOSED: 1 N / 2 H TOTAL EMPLOYEES PER SHIFT PROPOSED: 10 N / 15 H FULL TIME Y PART TIME ___

NUMBER OF DELIVERIES OR PICK-UPS: PER DAY 2N / 6 H PER WEEK 10 N / 30 H

NO. VISITORS ANTICIPATED: PER DAY 75 Average (est.) / 200 Peak (est.) PER WEEK 725 week (e

ARE THERE SPECIAL OPERATIONS? PLEASE DESCRIBE ON SEPARATE PAGE No Change.

4. LANDSCAPING AND PARKING:

EXISTING LANDSCAPING PLAN SUBMITTED: YES X NO ___

PROPOSED LANDSCAPING PLAN SUBMITTED: YES No Chang NO ___

PARKING SPACES: EXISTING SPACES 35 EMPLOYEE 15 CUSTOMER 20

PROPOSED SPACES No Change EMPLOYEE CUSTOMER

5. UTILITIES: Domestic-septic tank and leach field Process-aerated lagoons w/spray dispos on vineyard and landscaping, existing t

WATER SUPPLY SOURCE: Two wells METHOD OF SEWAGE DISPOSAL: _____

IS ANNEXATION TO A SPECIAL SERVICE DISTRICT PROPOSED? YES _____ NO X

NAME OF DISTRICT: N/A

6. LICENSES OR APPROVALS REQUIRED:

DISTRICT N/A REGIONAL N/A

STATE No Change FEDERAL No Change

7. WINERY OPERATION:

X CRUSHING Y FERMENTATION X STORAGE/AGING X BOTTLING/PACKING

X SHIPPING: VIA: truck; X ADMINISTRATIVE: Y TOURS/PUBLIC TASTING

X OTHER: Process wastewater treatment and disposal.

GALLONS OF WINE TO BE PRODUCED: INITIAL OR CURRENT PRODUCTION 55,000 GALLONS/YR

REQUESTED PRODUCTION CAPACITY 200,000 GALLONS/YR

METHOD OF DOMESTIC WASTE DISPOSAL: Septic tank and leachfield.

METHOD OF INDUSTRIAL WASTE DISPOSAL: Septic tank and mound (existing) Aerated lagoons and spray disposal (prop

GALLONS OF DOMESTIC WASTE PRODUCED: 450 Average 800 Peak PER Day

GALLONS OF INDUSTRIAL WASTE PRODUCED: 4,000 Normal 8,000 Harvest PER Day

METHOD OF SOLID WASTE DISPOSAL: Removal by contract garbage service and/or application of pomace and stems to vineyards

CAPACITY OF WATER SUPPLY: 37 GPM GALLONS.

WATER AVAILABILITY: 200 GPM GALLONS PER MINUTE. (To winery)

ON-SITE FIRE PROTECTION: Hydrant/1,000GPM @ 50 PSI

EMERGENCY WATER STORAGE: 70,000 GALLONS. Tank and reservoir

TYPE OF STORAGE FACILITY: Concrete tank and frost control pond

8. SPECIFIC INFORMATION FOR RESIDENTIAL CARE FACILITY/DAY CARE CENTERS:

TYPE OF CARE: N/A

TOTAL NUMBER OF GUESTS/CHILDREN: EXISTING: N/A PROPOSED: N/A

NUMBER OF BEDROOMS: EXISTING: N/A PROPOSED: N/A

IS FACILITY LOCATED WITHIN 300 FEET OF ANOTHER FACILITY?: N/A

NUMBER OF EMPLOYEES: FULL TIME: N/A PART TIME: N/A

20-150-12
17

NAPA COUNTY

CONSERVATION — DEVELOPMENT
AND PLANNING DEPARTMENT

JEFFREY R. REDDING
Director

1195 THIRD STREET, ROOM 210 • NAPA, CALIFORNIA 94559-3092
AREA CODE 707/253-4416

April 6, 1990

Michael Wilson
Clos Pegase
P.O. Box 305
Calistoga, California 94515

Re: Request for Approval of Fund-Raiser for Calistoga Educational Foundation--May 20, 1990

Dear Mr. Wilson:

This letter is in response to your March 8, 1990 request for approval to hold a fund raiser to benefit the Calistoga Educational Foundation on May 20, 1990 from 4-8:00 p.m. at the Clos Pegase Winery, 1060 Dunaweal Lane, Calistoga, under the Board of Supervisors One-Time Only Special Events policy Reference is also made to the March 6, 1990 letter from Steven W. Spadarotto, Controller, Clos Pegase Winery relating to the approved uses at the Clos Pegase facility, approved as part of use permit #U-458687.

As I indicated in a previous letter (dated February 23, 1990), one-time only special events of a charitable nature are approvable administratively only if similar events have taken place in the preceding year. To date, evidence that only one such event took place at Clos Pegase Winery during 1989 has been provided to the Department. The approval of this event in 1989 (held to benefit the Calistoga Educational Foundation--May 21, 1989) was used as the basis for approving the fund-raising event for the Napa Valley Opera House at the Clos Pegase Winery on March 31, 1990. Therefore, unless evidence can be provided to the Department that additional events of a similar nature were held at the Winery in 1989 and specifically authorized by the Director, the May 20th event cannot be approved administratively.

Mr. Spadarotto indicated by letter of March 6, 1990 that he felt the fund-raising event on May 20th and indeed any such event was authorized by use permit #U-458687 as part of the approved public tours and tasting permit, currently held by the Winery. After consultation with the County Counsel, it is our judgement that the public tours and tasting authorization does not authorize events such as you describe in your March letter.

Therefore, in order for the May 20th event to be approved by the County, you must demonstrate that more than one similar event was specifically authorized by the County in 1989. Alternately, the May 20th event may be approvable by the Board of Supervisors under the procedure and authority granted by section 8020 of the Napa

County Code. Should you decide to pursue a permit under section 8020, please contact Agnes Del Zompo, Clerk of the Board of Supervisors.

If I can provide any additional clarification or answer any questions please contact me.

Sincerely,

Jeffrey Redding

Jeffrey Redding
Director

cc: Board of Supervisors
Jay Hull, County Administrator
Agnes Del Zompo, Clerk of the Board
Robert Westmeyer, County Counsel
Michael Miller, Supervising Planner

JR/jr
HmeDsc
ClsPgse1

INTER-OFFICE MEMO

TO: Agnes Del Zompo,
Clerk of the Board of Supervisors

FROM: Jeffrey R. Redding, Director
Conservation, Development and Planning Department

SUBJECT: Request for Approval of an Outdoor Festival Permit--Sharpsteen Museum Association, Inc. to be held at the Clos Pegase Winery on October 12, 13, and 14, 1990. Assessor's Parcel No. 20-150-12.

DATE: July 19, 1990

The Department has reviewed the June 27, 1990 request from Marlys Gilmore, President, Sharpsteen Museum Association, Inc., to hold a fundraising event at the Clos Pegase Winery on Friday and Saturday, October 12 and 13 from 6:00 p.m. to 10:00 p.m. and Sunday, October 14, 1990 from 10:00 a.m. to 4:00 p.m..

Staff has reviewed this request in light of the recently adopted Winery Definition Ordinance (WDO), the provisions of the use permit which governs the operation of the Clos Pegase Winery and the previous activities authorized at the Winery under the Board of Supervisors One-Time Only Special Events Policy. In reviewing the permit history for the Clos Pegase Winery, only one (1) permit for a one-time only charitable event was issued to the Winery in 1989. Since these events now represent legal, non-conforming uses, future events under the Board's One-Time Special Events Policy may be authorized by the Director only at previously approved levels. The Clos Pegase Winery received approval for a one-time only event, benefitting the Napa Valley Opera House, on March 16, 1990 for an event held March 31, 1990. Therefore, no further approvals may be given by the Director in 1990 for activities authorized by this Board policy.

The Department has reviewed the provisions of use permit #U-458687 issued to the Clos Pegase Winery and in consultation with the County Counsel, has determined that the approved use permit does not authorize activities such as the event described in materials furnished by the applicant as part of the application for an Outdoor Festival Permit.

The Outdoor Festival Ordinance appears to be applicable to the event requested by the Sharpsteen Museum Association, Inc. since the event involves both outdoor music and events. Therefore, the following conditions are recommended, should the Board of Supervisors approve the requested Outdoor Festival Permit:

1. Provisions be made for all guest and employee parking to be on-site. However, if this is not possible and there is off-site parking beyond walking distance of the site, the applicant shall provide shuttle service to and from the events.

2. Any temporary signs of a limited size and number identifying each event be located on the site area. Such signs shall not be placed earlier than the day of the event. All such signs shall be removed no later than 5:00 p.m. the day following the event.

3. Adequate on-site refuse disposal facilities be provided.

4. The California Highway Patrol be alerted at least three days in advance of each event.

5. Provisions be made for adequate on-site and off-site traffic control to ensure maximum protection and safety of all persons using Dunaweal Lane as well as persons attending the event.

6. Maintain all normal access clear of obstructions so that fire equipment and other emergency vehicles will not be impeded.

7. The applicant shall submit letters to the Clerk of the Board of Supervisors obtained from the Napa County Public Works Department, Division of Environmental Management and the Sheriff's Department, as well as the State Division of Forestry and California Highway Patrol as evidence of said agencies' and Departments' review of the proposed events, including a listing of such conditions as said agencies and departments feel are appropriate for the proposed event.

8. Provide security and medical needs as necessary to ensure public health, safety and welfare.

cc: Robert Westmeyer, County Counsel
Marlys Gilmore, President, Sharpsteen Museum Ass'n. Inc.

JRR:jcact2/sharpmus.fes

NAPA COUNTY

CONSERVATION -- DEVELOPMENT
AND PLANNING DEPARTMENT

JEFFREY REDDING
Director

1195 THIRD STREET, ROOM 210 • NAPA, CALIFORNIA 94559-3092
AREA CODE 707/253-4416

December 9, 1991

Patrick R. Connelly, Events Coordinator
Clos Pegase
P. O. Box 305
Calistoga, California 94515

Dear Mr. Connelly:

This letter is in response to your request to sponsor the Spring Benefit Auction, a benefit for the Calistoga Educational Foundation on May 17, 1992 at Clos Pegase Winery, 1060 Dunaweal Lane, Calistoga. All proceeds from the proposed event will be used directly to enhance the educational opportunities for students in Calistoga's public schools. You have also indicated that the Calistoga Educational Foundation is a non-profit organization that will receive the proceeds from the event to be held at the Winery.

As your letter indicates, one-time only social events under the Board of Supervisors' Limited Social Events Policy may only be granted by the Director if such events were previously authorized by the Director under this policy prior to 1990. A review of County files indicated that one (1) such event was authorized by the Director for the Close Pegase Winery prior to 1990. As a consequence, one event of the type that your described in your letter was authorized both in 1990 and 1991. Thus, you will be permitted to sponsor/conduct one event per year authorized under the March 1988 Limited Social Events Policy. You have proposed that the May 17, 1992 be that event for 1992. Therefore, the May 17, 1992 event for the Calistoga Educational Foundation is approved and will constitute the sole event that may be authorized by the Director in calendar year 1992 under the Board of Supervisors' Limited Social Events Policy, adopted in August 1983 and revised in March, 1988.

The following conditions are applicable to this approval:

1. Provisions shall be made for all guest and employee parking to be on-site.

2. Any temporary signs of a limited size and number identifying each event be located on the site area. Such signs shall not be placed earlier than the day of the event. All such signs shall be removed no later than 5:00 P.M. the day following the event.

3. The applicant shall provide adequate on-site refuse disposal facilities.

4. The California Highway Patrol shall be alerted at least three days in advance of the event.

5. Provisions shall be made for adequate on-site and off-site traffic control to ensure maximum protection and safety of all persons using Dunaweal Lane as well as persons attending the event.

6. The applicant shall maintain all normal access clear of obstructions so that fire equipment and other emergency vehicles will not be impeded.

7. The applicant shall submit letters to the Director obtained from the Napa County Public Works Department, Division of Environmental Management and the Sheriff's Department, as well as the State Division of Forestry and California Highway Patrol as evidence of said agencies' and Departments' review of the proposed events, including a listing of such conditions as said agencies and departments feel are appropriate for the proposed event.

8. The applicant shall provide security and medical needs as necessary to ensure public health, safety and welfare.

Please call me if you have any questions.

Very truly yours,

Jeffrey R. Redding

JEFFREY R. REDDING
Director

cc: Board of Supervisors
Robert Westmeyer, County Counsel
Michael Miller, Deputy Planning Director
Bill Bickell, Director of Public Works
Trent Cave, Director of Environmental Management
Byron Carniglia, State Division of Forestry
Gary Simpson, Napa County Sheriff
Captain Charles Weaver, California Highway Patrol
Joan Rubadeau, Calistoga Educational Foundation

JRR:rl:4a:ClisPeg.Evt

NAPA COUNTY

CONSERVATION -- DEVELOPMENT
AND PLANNING DEPARTMENT

1195 THIRD STREET, ROOM 210 • NAPA, CALIFORNIA 94559-3092
AREA CODE 707/253-4416

JEFFREY REDDING
Director

January 18, 1995

Patrick R. Connelly
Clos Pegas Winery
P.O. Box 305
Calistoga, CA 94515

RE: Limited Social Event/Temporary Events License
APN: 20-150-12

Dear Connelly:

We have received your letter of January 3, 1995, wherein you have requested approval of a Limited Social Event at your winery facility for the Spring Benefit Auction, to be held by the Calistoga Education Foundation on May 13, 1995.

The County adopted a new ordinance in March, 1994, which now regulates any festival, fair, show, showcase, house or garden design tour, concert, dance, public fireworks display, rally, parade, demonstration or competition of creative athletic form, or any other gathering or assemblage of individuals, including, but not limited to music, dance, theater, speech, athletics or any other visual, audio or tactile arts or combination thereof to which the public is invited or admitted with or without payment of an admission charge. A **Temporary Event License** from the County is required prior to holding such events.

This ordinance replaced the Outdoor Festival License and the Limited Social Events Policy.

It would appear that the non-marketing public event you propose would be subject to the temporary events ordinance. Enclosed is an application package for a Temporary Events License. Please contact me or Barbara Abate in our office weekdays, between 12:00 and 5:00 PM, if you should have any questions.

Please note that the adopted ordinance requires that applications for **Temporary Event Licenses** must be submitted to this office, at least **90 days** prior to the proposed events.

Sincerely,

Wyntress Chatman Balcher
Planner III

cc: Mel Varrelman, Supervisor, District 3
Jeffrey Redding, Director
Sylvia Toth, Supervising Planner
Gail Feldman, Administrative Analyst

EXHIBIT 5



EVENTS
Event Hosting
Upcoming Events
WINE
All Wines
Hommage
White & Rosé Wines
Red Wine
Dessert Wine
Library

EVENT HOSTING



Dazzling maypole lights illuminate the night sky

Plan an Event:

To speak with our Event Team, call:

707.921.2631

EMAIL US »

AT CLOS PEGASE WINERY WE HELP YOU CREATE the most unique and memorable experiences. From anniversaries, rehearsal dinners, birthdays, holiday parties, private parties and more, we will transform our winery into your unique vision for the event. Along with the stunning setting, dramatic architecture, and world-class wines, we will provide you with best in class hospitality and get all of the details just right, including food, décor, and live entertainment. No matter the occasion, events at Clos Pegase reflect a welcoming blend of elegance and magic for you to create memories you will never forget.

Clos Pegase provides several distinct spaces for your event, each delivering a unique experience depending on your needs. Whether you are looking for an indoor or outdoor location, a large area for hundreds of guests or an intimate space, Clos Pegase has several different options from which to choose.

A few locations for our events:

- Portico entrance
- Courtyard
- Cave Theater
- Visitor Center
- Cask Room
- Harvest Dining Room
- Vineyard Picnic Area

Contact our Event Team at 707.921.2631 to work with you on all of the details to have the perfect event at Clos Pegase Winery.

SHUTE, MIHALY & WEINBERGER LLP

396 HAYES STREET, SAN FRANCISCO, CA 94102
T: (415) 552-7272 F: (415) 552-5816
www.smwlaw.com

LAUREL L. IMPETT, AICP
Urban Planner
impett@smwlaw.com

August 18, 2015

Via E-Mail

Wyntress Balcher, Planner
Napa County Planning
Building & Environmental Services Department
1195 Third Street, Suite 210
Napa, CA 94559
Wyntress.Balcher@countyofnapa.org

Re: Girard Winery Use Permit P14-00053 Initial Study/Proposed Negative Declaration

Dear Ms. Balcher:

On behalf of the Tofanelli family, we submit these comments on the Initial Study/ proposed revised Negative Declaration ("Revised IS/ND") for the proposed Girard Winery Use Permit ("Project"). Substantial evidence shows that the Project could have a number of potentially significant impacts on the environment. Accordingly, and as a matter of law, the County would be in violation of 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").

On January 20, 2015, this firm submitted a letter on the prior IS/ND for the proposed Project. That letter is incorporated by reference into this letter. The issues raised in the January 20, 2015 letter remain valid. This letter focuses on the new issues raised in the Revised IS/ND. One of the most significant revisions to the prior IS/ND relates to the treatment of the Project's impacts on water supply, and specifically the potential for the Project to impact neighboring wells and the Napa River. Accordingly, we include a second technical memorandum prepared by Tom Myers Ph.D. Our two letters, the two reports prepared by Dr. Myers (January 20, 2015 and August 15, 2015, the latter is attached as Exhibit 1) constitute the Tofanelli family's comments on the Revised IS/ND.

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. The Revised IS/ND's Analysis of Groundwater Impacts Is Inadequate and There is a Fair Argument That These Impacts Would Be Significant.

The Revised IS/ND incorrectly concludes the Project would have a less than significant impact on groundwater supplies and groundwater quality. Revised IS/ND at 12. Contrary to this conclusion, and as the reports prepared by Dr. Myers clearly demonstrate, the Project has the potential to result in a significant impact on groundwater supplies and groundwater quality with corresponding impacts on neighboring residential and agricultural wells and the Napa River.

A letter from Steve Lederer, the County's Director of Public Works, included in the Revised IS/ND states that there is substantial evidence in the record that: (1) the groundwater table in the area shows a long term stable trend; (2) impacts on neighboring wells or the Napa River are not anticipated; and (3) the Project is unlikely to cause directional flow changes which would draw chemicals from Calistoga into the area. *See* April 3, 2015 Letter from S. Lederer.

We disagree with Mr. Lederer's statements; the record does not provide this evidence. Moreover, even if it did, this is not the standard for preparation of an EIR. Under CEQA, an EIR is required whenever substantial evidence in the administrative record supports a "fair argument" that significant impacts may occur, *even if other substantial evidence supports the opposite conclusion*. Guidelines §§15064(a)(1), (f)(1 (emphasis added). CEQA further 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. *The Pocket Protectors v. City of Sacramento*, 124 Cal.App.4th 903, 928 (2005). An impact need not be momentous or of a long enduring nature; the word "significant" "covers a spectrum ranging from 'not trivial' through 'appreciable' to 'important' and even 'momentous.'" *No Oil, Inc. v. City of Los Angeles*, 13 Cal.3d 68, 83 n. 16 (1974). The fair argument test thus reflects a "low threshold requirement for initial preparation of an EIR" and expresses "a preference for resolving doubts in favor of environmental review." *Stanislaus Audubon Society, Inc. v. County of Stanislaus,* 33 Cal.App.4th 144, 151 (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* (1988), 202 Cal.App.3d 296, 311. 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.

1. The Groundwater Table Does Not Show A Long Term Stable Trend.

Dr. Myers' January 20, 2015 memorandum ("Myers' January report") explained that the prior IS/ND erred in its assertion that the groundwater levels in the Napa Valley floor exhibit stable long-term trends with shallow depth to water. The County now looks to a new groundwater monitoring report to suggest that groundwater levels in the Project vicinity are stable. Lederer letter at 2. Yet, the 2014 Groundwater Monitoring Report does not show stable groundwater levels. The hydrographs in the Calistoga area (shown on Figure 5-7 of the 2014 Annual Groundwater Monitoring Report) still show the effects of pumping and drought. *See* Myers August 15, 2015 report at 2. Well NapaCounty-129 is a good example. The maximum level declined significantly from 2007 to 2009 and has been declining again since 2012 (with little recovery shown). Well NapaCounty-127 also shows extreme drawdowns in 2004 and 2012 with only marginal recovery, and Well 08N06W10Q001M shows much more drawdown occurring during dry years. *Id*.

Other evidence exists demonstrating deficient groundwater supplies in the area. Residents near the proposed Project site have informed the County that their wells are drying up and that some area residents are trucking water to their properties. Under CEQA, an agency should heed personal observations of environmental conditions near a project site. *See Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 34 (residents' observations can constitute substantial evidence of traffic impacts). David Clark, for example (4704 Silverado Trail – about one mile north of the proposed Project), explains a situation where his neighbor's valley floor winery vineyard and home needed more water than their existing three wells could provide. *See* letter from D. Clark to J. McDowell, January 19, 2015, included in August 19, 2015 Planning Commission Hearing Supporting Documents (Exhibit P: Public Comments Received). Mr. Clark states that the neighbor

drilled another well fifty feet from Mr. Clark's well at which point Mr. Clark's available water decreased. He explains:

> Later, new owners converted some of that vineyard into Venge Winery, and constructed a large metal water storage tank to increase their capacity. However, during the growing season, despite pumping as much as they can from groundwater, their system does not supply enough. They've had to truck water in regularly for years, perhaps more than once a week. They probably would have had to show sufficient supply was available to get their winery permit, but that "proof" clearly turned out to be wrong.
>
> Properties around us have multiple wells (some abandoned) in order to try to meet their water needs. After the neighboring vineyards reduced our well's output, we drilled 3 or 4 "dry" wells before we found more water. Only the variety of terrain on our property allowed that; we could have drilled on the valley floor forever without success, and simply drilling deeper to reach more water was not an option because drillers want to avoid hitting boron and geothermal, common to the Calistoga area. *Id*.

There is ample documentation, from the County's own groundwater reports to personal observations, that this area of the County already experiences groundwater deficiencies. Pumping from the Project will exacerbate these deficiencies which, in turn, will adversely affect neighboring wells and the Napa River.

2. The Project, Together With Other Projects, Has the Potential to Result in Significant Impacts on Neighboring Wells and the Napa River.

A fundamental flaw in the Revised IS/ND's analysis is its failure to take into account the effects of cumulative pumping on neighboring wells and the Napa River. Instead, the County's analysis only identifies the demand from the proposed Project alone, ignoring entirely other uses and projects that will extract groundwater. This approach is a clear violation of CEQA.

CEQA requires the lead agency to analyze and mitigate a Project's potentially significant cumulative impacts. CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which

compound or increase other environmental impacts." Guidelines § 15355; *see also Communities for a Better Env't v. Cal. Res. Agency*, 103 Cal.App.4th at 120. An effect is "cumulatively considerable" when the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Guidelines § 15065(a)(3). A proper cumulative impact analysis is "absolutely critical," *Bakersfield Citizens for Local Control v. City of Bakersfield,* 124 Cal.App.4th 1184, 1217 (2004) , as it is a mechanism for controlling "the piecemeal approval of several projects that, taken together, could overwhelm the natural environment," *Las Virgenes Homeowners Fed'n, Inc. v. County of Los Angeles,* 177 Cal.App.3d 300, 306 (1986). The revised IS/ND provides no analysis of cumulative impacts on water supply. Specifically, as the Myers' reports explain, cumulative pumping from all of the wells in the Napa alluvium and connected aquifers has the potential to impact the Napa River and neighboring wells.

Pumping from multiple wells can cause a drawdown in the aquifers near the Napa River. Drawdown is replenished with water diverted from the river. This means the water never discharges into the river or it is being diverted from the river due to the water level being drawn down below the level of the river. Most of the recovery is due to water being diverted from the river. Increasing the total cumulative pumpage from aquifers near the river will increase the deficit in those aquifers and decrease flow in the river by either drawing from the river or preventing groundwater flow from reaching the river. The Revised IS/ND and the Lederer letter ignore this fact entirely.

In addition, and in direct contrast to Mr. Lederer's assertion that drawdown will not change the flow gradient for discharge to the river, Dr. Myers' explains that any pumping from wells near the river will affect the river's flow gradient; that is simply well hydraulics (Fetter 2001). Myers August 15, 2015 report at 7. A well changes the gradient to draw water to the well. All discharge from a near-surface aquifer originated as recharge to that aquifer. Natural discharge is to rivers, springs, or groundwater-dependent vegetation. Groundwater pumping takes some of that natural discharge, as conservation of mass requires. Initially pumping will draw from storage and cause drawdown and change gradients for discharge to the river (or other natural discharge points). Pumping water from the valley near the river will take water from the river, either by diverting groundwater discharge to the river or actually pulling water from river. All pumping, past, current and future, takes or will take water from those discharges. Groundwater extraction from the Project and other cumulative development certainly has the potential to result in significant effects on the River.

Groundwater extraction from the Project and other cumulative development also has the potential to impact neighboring wells. The Lederer letter asserts that "there does not appear to be factually supported evidence that there would be a significant effect on wells in the vicinity of the project." Lederer letter at 3. This is incorrect. Dr. Myers performed calculations to determine groundwater drawdown in the Project vicinity. He concludes that, "even when using the applicant's assumptions, pumping the Girard well will cause some drawdown to occur at distances that correspond to neighbors' wells." *See* Myers August 2015 Report at 9. Drawdown at the Girard well exceeds 60 feet and at a distance of 1,000 feet (the estimated distance of certain neighboring wells) is about 8 feet after 11 days of pumping at 5.8 gpm. "There will clearly be drawdown at neighboring wells within 1,000 feet." *Id*.

We can find no credible explanation for the County's failure to take into account cumulative development. This is especially disconcerting because, in our January 20, 2015 letter on the prior IS/ND, we identified at least 19 new or modified wineries that were proposed to be developed in the County. In addition, Sterling Winery, within one-half mile of the proposed Project site, drilled a new well in May 2015. Water demand from these projects will further tax already constrained groundwater supplies. In addition to these other projects, the Clos Pegase Winery is expected to substantially increase its winery production. Clos Pegase is currently producing about 25,000 cases or 60,000 gallons. It plans to increase that production to 200,000 gallons. *See* January 19, 2015 letter from D. Clark, citing *Wine Spectator* 8/21/13. Together with the Girard application, the total production of the two wineries would be 400,000 gallons or 6.7 times the current 60,000 gallons of Clos Pegase. *Id*.

Nor does the Revised IS/ND provide any evidentiary support that the applicant will be restricted to using the amount of water specified in the revised IS/ND.[1] The County's draft Conditions of Approval ("COA") purport to limit the Project to a "not to exceed" volume of 10-acre feet ("ac/ft") per year. *See* August 19, 2015 COA at 9.

[1] The Project's (and the Clos Pegase winery) projected water demand has declined substantially compared to the amount identified in the prior IS/ND, yet the revised IS/ND does not provide a satisfactory explanation for this reduction. The revised IS/ND states that the overall water use for the proposed Girard Winery and the existing Clos Pegase winery would be 8.22 af/yr. whereas the prior IS/ND identified the total demand for both wineries as 12.49 af/yr. Revised IS/ND at 15; prior IS/ND at 14. We can find no logical explanation for this discrepancy since both versions of the IS/ND state that all vineyard irrigation (both parcels) and all winery landscaping is and will be provided for using the existing process wastewater irrigation pond located on the Girard winery property. *Id*.

Yet, rather than require the winery operations to be discontinued if its water use exceeds 10 ac/ft. per year, the COA call for the applicant to provide "the plan the winery has for reducing water use." COA at 9. A plan for reducing water use provides no assurance that water use will, in fact, be reduced. More importantly, a plan does not ensure the protection of neighboring wells or the Napa River. Indeed, if this "condition" is indicative of the conditions being placed on each of the pending winery projects proposed by the County, existing groundwater deficiencies in the County are likely to be greatly exacerbated.

In addition to causing diminished groundwater supplies, the Project also has the potential to cause groundwater contamination. The Revised IS/ND concludes that it is "highly unlikely" that the proposed pumping would affect boron and arsenic levels. Revised IS/ND at 13. The document arrives at this conclusion based on the assertion that the proposed pumping is significantly less than the mean annual recharge and that long-term reduction in groundwater elevations are unlikely to occur as a result of the project pumping. *Id*. As discussed previously, there is ample evidence that contradicts these findings. As Dr. Myers explains. additional pumping downgradient of the high concentrations of arsenic and boron could certainly draw these contaminants toward the Project area. *See* Myers' August 15, 2015 report at 12. Moreover as the Clark letter explains, arsenic and boron could also contaminate adjacent groundwater if neighbors are forced to drill deeper wells as a result of diminishing groundwater.

Given the uncertainty about the effects of groundwater pumping, especially pumping on a cumulative basis, the Revised IS/ND cannot simply assert that the Project would not result in boron and /or arsenic contaminating area wells. To conclude that an impact is less than significant, the IS/ND must be supported by 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). Because the Revised IS/ND's conclusion of insignificance is premised on unsupported assumptions, it fails far short of this threshold.

Faced with overwhelming evidence of deficient groundwater conditions in the area, and the potential for the Project, together with cumulative development, to impact neighboring wells and the Napa River, the County must prepare an EIR prior to taking action on the proposed Project.

B. The Revised IS/ND's Analysis of Impacts Relating to Wastewater Treatment is Inadequate, and There is a Fair Argument that the Project May Have Significant Groundwater Impacts.

The revised IS/ND raises more questions than it answers with regard to the Project's processing of wastewater. The IS/ND states that the Project includes a new sanitary sewage system. Revised IS/ND at 10. Yet the IS/ND does not describe this system or provide any analysis of the potential impacts that could accompany the installation of a septic system on the Project site.

Septic systems are a significant source of groundwater contamination that can lead to waterborne disease outbreaks and other adverse health effects. *See* Source Water Protection Practices Bulletin: Managing Septic Systems to Prevent Contamination of Drinking Water, U.S. EPA, July 2001, attached as Exhibit 2. A septic system's potential to contaminate surface and groundwater is dependent upon soil types and groundwater depths. It is critical to avoid areas with high water tables and shallow impermeable layers because there is insufficient unsaturated soil thickness to ensure sufficient treatment septic system effluent. *Id*.

It is clear that the applicant has no idea whether the site can even support a septic system. According to the IS/ND, the applicant attempted to evaluate the site in November 2013 but there was not sufficient rainfall to perform groundwater monitoring. Revised IS/ND at 10. Nevertheless, the applicant simply assumed that the site's soils would be adequate for a septic system. *Id*. Later, however, the revised IS/ND states that in the event groundwater monitoring cannot occur prior to the application for construction permits, an irrigation reuse alternative system would be implemented. The document does not describe this alternative system nor does it explain how or whether such a system would avoid groundwater impacts. Instead it simply asserts that any alternative system would require approval from the Regional Water Quality Control Board ("RWQCB"). Revised IS/ND at 10.

Details relating to the processing of the Project's wastewater are critical details; they cannot be deferred until after Project approval. *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296, 306-07 (1988). Nor can the County evade its obligation to conduct this necessary impact analysis by suggesting that the Project would require approval from the RWQCB. The fact that a wastewater system would need regulatory approval does not release an agency from its obligation to fully describe the system and analyze all impacts that would arise from the system.

The County must provide a comprehensive analysis of the potential impacts from the Project's proposed wastewater treatment system in an EIR as evidence indicates that these impacts could be significant.

C. The Revised IS/ND's Noise Analysis is Inadequate, and There is a Fair Argument that the Project May Have Significant Noise Impacts.

Notwithstanding our request that the County study the effects of the increase in noise associated with construction and operation of the proposed Project, the Revised IS/ND fails to conduct this necessary evaluation. This omission is especially egregious since the IS/ND acknowledges that the County General Plan EIR confirms that concerns relating to a project's noise impacts should be addressed and considered in the planning and environmental review process. Revised IS/ND at 18.

The Revised ND concedes that the proposed marketing activities could create additional noise impacts. Revised IS/ND at 18. Yet the IS/ND stops short of actually analyzing the effect these marketing events would have on surrounding properties. Instead it states that the potential for the creation of significant noise from visitation would be significantly reduced since large gatherings for events will occur indoors within the barrel areas of the winery. *Id*. The County's conditions of approval do not include a prohibition on outdoor events. Moreover, the Revised IS/ND indicates that lawn areas will be used for tasting and picnic areas. Revised IS/ND at 2. As discussed below, as the current owners of Clos Pegase, the applicant conducts events in violation of its current conditional use permit. Napa County has not effectively monitored Clos Pegase for these violations and there is no indication that the Girard Winery will be monitored for event violations. Consequently, the Revised IS/ND lacks the evidentiary basis that the Project's noise impacts would be less than significant.

D. The Revised IS/ND's Transportation Analysis is Inadequate, and There is a Fair Argument that the Project May Have Significant Transportation Impacts.

As we discussed in our prior letter, SR 29 immediately adjacent to Dunaweal Lane is projected to operate at LOS F in 2030. Traffic generated by the Project will contribute to this deficient service level resulting in a significant impact. This fact is confirmed by Napa County's Deputy Director of Public Works. He explains that the increase in vehicular trips caused by the Project will result in a significant impact because nearby roads and intersections will operate at an unacceptable level. *See* Letter from Rick Marshall, June 3, 2015.

Rather than identify this impact as significant, the applicant now asserts that the Project's PM peak hour vehicular trips can be *eliminated* altogether. Revised IS/ND at 21 (emphasis added). While it may be possible to manage employee's schedules, unless the County places a condition on the Project to close the winery during peak hours, the Revised IS/ND does not provide the necessary assurance that visitors will not travel to the winery during these hours.

Nor as we discussed in our prior letter does the Revised IS/ND take into account traffic from the Project, together with planned development projects in the area. In addition to the numerous new wineries or winery expansions in the area, two massive development projects are proposed within the City of Calistoga. The Calistoga Hills resort includes the development of a 110-room luxury hotel with 20 villas and 13 estate homes. The Silver Rose Project includes the development of 57,630 square feet of resort facilities, 85 guest rooms, a 110-seat restaurant and 21 single family dwellings. *See* City of Calistoga Planning and Building Department Proposed and Approved Development, March 2015, attached as Exhibit 3. The IS/ND is obligated to analyze the effect that the Project's traffic, together with traffic from planned development, would have on the County's roadways and intersections. These impacts certainly have the potential to be significant.

E. The County May Not Rely on Unrealistic and Ineffective Conditions of Project Approval to Avoid Potentially Significant Project Impacts.

Throughout the IS/ND the County asserts that potentially significant Project impacts will be mitigated through the imposition of conditions of approval. For example, as discussed previously, significant traffic impacts are purportedly addressed through restrictions on the time that employees will travel to work and visitors will travel to the winery. Revised IS/ND at 21-22. The County also claims that potentially significant noise impacts (which the County even declined to study) will be avoided because outdoor areas will not be used for events or wine tastings. *Id*. at 18. Similarly, potential impacts to water are addressed by a plan to reduce water use, but no enforceable conditions. COA at 9.

The California courts have soundly rejected the County's approach. Specifically, in *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, the California Department of Transportation ("Caltrans") asserted that many impacts associated with the Highway 101 widening would be avoided through conditions of project approval. Therefore, Caltrans did not study these impacts or impose mitigation on them. The Court of Appeal found that agencies may not avoid analyzing the

potentially significant impacts of a project by asserting they will be avoided through conditions of approval. Instead, the agency must conduct the analysis and then adopt mitigation measures that will reduce the project's impacts below a level of significance. 223 Cal.App.4th at 658; CEQA Guidelines §15126.4 (a)(1)(A). As stated by the court:

> The failure of the EIR to separately identify and analyze the significance of the impacts to the root zones of old growth redwood trees before proposing mitigation measures is not merely a harmless procedural failing. Contrary to the trial court's conclusion, this shortcutting of CEQA requirements subverts the purposes of CEQA by omitting material necessary to informed decisionmaking and informed public participation. It precludes both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences. The deficiency cannot be considered harmless.

Similarly here, the County failed to consider the environmental effects of the Project before simply assuming that measures, such as readjusting employee and visitor schedules or asserting that events be held indoors, would reduce these impacts to a level of insignificance.

This failing is made all the worse by the reliance on what are clearly unrealistic measures. CEQA requires that mitigation measures be feasible, effective, and capable of being implemented over the lifetime of the project. There can be no such assurance here. In fact, evidence in the record demonstrates that the owner of the Girard property, who also owns Clos Pegase Vineyards, has repeatedly failed to comply with either its conditional use permit or the limits of the County's zoning ordinance and the WDO. *See* Exhibit 4 (June 8, 2015 letter from Shute, Mihaly & Weinberger to Napa County). These violations extend beyond the weddings that the County has identified in the staff report and include any number of unpermitted events, such as "anniversaries, rehearsal dinners, birthdays, holiday parties, private parties and more" on its website. *See* Clos Pegase website attached as Exhibit 5. Notwithstanding the County's enforcement action against Clos Pegase, these events continue to this date and have caused substantial noise and disruption for surrounding neighbors.

Finally, because a fair argument can be made that the measures relied upon by the County to avoid the Project's significant impacts will not be effective, the County

must prepare an EIR. *Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d 296; *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359.

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

The County has not responded to arguments raised in our earlier letter regarding the Project's inconsistency with the Winery Definition Ordinance ("WDO") and the County General Plan. In particular, the Project is inconsistent with the WDO provisions that restrict the scope and maximum square footage of "accessory uses" such as "marketing of wine" and "tours and tastings." Specifically, 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., 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.").

In addition to the 3,800 square feet of accessory uses identified in the August 19, 2015 staff report, the Project also includes a 13,000 square foot outdoor garden and tasting area, as well as a 2,600 square foot covered veranda. Together these uses constitute 67 percent of the area of the production facility – far in excess of the 40 percent limit in the WDO.

The assertion in the Revised IS/ND that the outdoor areas will not be used for events is completely unrealistic as discussed above. The statement is also contradicted by earlier architectural renderings for the Project. Accordingly, excluding these outdoor areas from the 40 percent calculation is inconsistent with NCC section 18.104.200. This exclusion is also inconsistent with the manner in which the Planning Commission calculated accessory use square footage in two recent actions concerning the B Cellars and Titus Vineyards projects. For both projects, the outdoor terraced spaces were counted as part of the percentage of the project used for accessory uses. The County should treat the present Project in the same manner.

III. Conclusion

For the reasons set forth above, the Tofanelli family requests that the County defer action on the proposed Project until an EIR is prepared that fully complies with CEQA. As described above, there is substantial evidence to indicate that the

proposed Project may have a number of significant environmental impacts. Under CEQA, the County must provide an adequate analysis of these adverse effects and include feasible measures to mitigate impacts.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Laurel L. Impett, AICP, Urban Planner

cc: Norma Tofanelli
Vince Tofanelli
Pauline Tofanelli

List of Exhibits

Exhibit 1 Technical Memorandum from Tom Myers, Ph.D. re: Review of Girard Winery Use Permit P14-00053, Revised NegDec and County Responses to Previous Comments, August 15, 2015

Exhibit 2 Source Water Protection Practices Bulletin: Managing Septic Systems to Prevent Contamination of Drinking Water, U.S. EPA, July 2001

Exhibit 3 City of Calistoga Planning and Building Department Proposed and Approved Development, March 2015

Exhibit 4 Letter from Shute, Mihaly & Weinberger LLP to Napa County, June 8, 2015

Exhibit 5 Clos Pegase Event Hosting Webpage, Viewed August 17, 2015

EXHIBIT 1

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Technical Memorandum

Review of Girard Winery Use Permit P14-00053, Revised NegDec and County Responses to Previous Comments

August 15, 2015

Prepared for:

Ellison Folk
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Summary

The proposed expansion of pumping for the Girard Winery project could have three significant impacts. First, the pumping could unacceptably lower the groundwater levels because there is not as much recharge in the area as the County assumes. Second, the pumping could affect groundwater flow and decrease flow in the river. Third, pumping could cause arsenic and boron to be drawn from the northwest toward the project site. Groundwater pumping from the Project, combined with pumping from the other wells in the area, could cause each of these impacts to occur. The County's response to my January 20, 2015 memorandum on the project showed a lack of understanding of the cumulative and overlapping effects of this project with all of the other wells in the area.

Because of these potentially significant impacts, the project should not be permitted until a much more detailed hydrogeologic study is completed. All of the issues raised in this review could be analyzed with the completion of a numerical flow and transport model. A numerical model uses commonly available computer software which solves the equations of groundwater flow to simulate how groundwater and contaminants move around the area. The model would have to be large enough to include the significant pumping in the area so it should extend to the boundaries of the valley or to areas with reduced pumping, southeast of the site. It would help assess the potential change in groundwater levels, flow paths, and the extent of the boron and arsenic plumes. If the project goes forward after such a study, the flow and transport

model should be used on an ongoing basis to monitor groundwater levels, flow paths and water quality in the project vicinity.

Introduction

This memorandum reviews the revised negative declaration for the Girard Winery Use Permit P14-00053 (hereinafter NegDec), primarily the response by the Napa County Department of Public Works (Lederer 2015) to my January 20, 2015 memorandum reviewing the project (Myers 2015). The NegDec included a revised Water Availability Analysis, prepared by the applicant, dated March 26, 2015 (O'Connor 2015).

I described my experience and attached my curriculum vitae to my previous memorandum (Myers 2015) and that memorandum is incorporated here by reference.

I have divided the response into sections. Because those responses rely on Lederer (2015), I am also commenting on that report. Lederer's assessment incorrectly asserts that the Project would have a less that significant impact on groundwater supplies and groundwater quality. I address each of the issues raised in his assessment below.

Recharge

Lederer's assessment of recharge related specifically to water levels. Specifically, "based on the network of monitored groundwater levels in the area, the groundwater levels in the area south of Calistoga are stable, even in the context of the current drought" (Lederer 2015, p 2). Additionally, under Public Works Review, Lederer (2015) makes the following assertions:

1) *a. The suggested impact relating to recharge is technically unsupported. Groundwater levels in the Calistoga area are stable based on hydrographs that have been updated in the 2014 Annual Report. (Id.)*

Contrary to Lederer's interpretation of the 2014 Annual Groundwater Monitoring Report, the hydrographs in the Calistoga area (shown on Figure 5-7 of the 2014 Annual Groundwater Monitoring Report) still show the effects of pumping and drought, with recovery during wet years. As I describe below, the lower groundwater levels in the valley recover by drawing water from the river. Well NapaCounty-129 is a good example. The maximum level declined significantly from 2007 to 2009 and has been declining again since 2012 (with little recovery shown). Well NapaCounty-127 shows some extreme drawdowns in 2004 and 2012 with only marginal recovery. Well 08N06W10Q001M also shows much more drawdown occurring during dry years. The Girard Well was developed in a confined volcanic aquifer beneath the alluvium which is on the surface through much of the valley and much of the project area. It is not clear

that any of the wells in the 2014 Annual Monitoring Report are completed in the volcanics so there may be little indication of trends in the aquifer in which the Girard Well is completed.

The Lederer report also suggests that I relied on an incorrect recharge rate:

> The WAA continues by comparing proposed groundwater use on the parcels (8.23 acre-ft/year for both wineries combined) to a calculated recharge number (34.5 acre-ft/year) and found that the proposed use is only some 25% of the recharge rate. The Myers report also calculated a recharge rate, but then compared it to a use of 29 acre-ft/year, their presumed maximum use of the well if it was operated on a full basis. That assumption of 100% well run time is not contained in the project proposal. (Id.)

My prior report assumed a full-time use rate since water would be required to serve both Clos Pegas and the Girard Winery, as indicated on page 14 of the original Negative Declaration. Unless the County places a condition on the Project to pump at a reduced rate, sound engineering practice dictates that pumping rates are calculated assuming maximum usage.

> *1).b Myers discusses the recharge analyses conducted by LSCE & MBK (2013) and goes on to described why he believes recharge is overestimated. However, his analysis relies on very generalized application of base flow separation techniques which do not account for climatic variation or other factors that could affect base flow.*

Lederer's assertion regarding my recharge analysis is incorrect. My analysis of baseflow clearly encompasses climatic variation because it accounted for all available years at the relevant gage, meaning that all climate variations within that time period are accounted for. As my January report explains, annual recharge is frequently set equal to baseflow because baseflow by definition is groundwater discharge to streams (Cherkauer 2004, Scanlon et al. 2002).

The revised Water Availability Analysis (O'Conner (2015)) estimated recharge to the tuff aquifer to be on the order of 575 to 4943 af/y (O'Conner 2015, p 14) by applying the watershed-averaged recharge rates that they had discussed previously to the tuff outcrop area. This essentially means they used the product of the various rates expressed as a depth per year and the area of exposed tuff. This approach is not accurate because it does not account for differing ability of the formations to accept recharge. The tuff conductivity is about two orders of magnitude less than that in the alluvium so it would be expected to have a much lower recharge. Much of the precipitation on the tuff would runoff to the alluvium, although some of the runoff would recharge the tuff through the streambeds in the tuff, as O'Conner notes (Id.).

It is likely therefore that most of the recharge occurs in the alluvium. Because the primary groundwater discharge is to the Napa River (as baseflow, see Myers (2015)), this concept is consistent with total recharge amounts reported by O'Conner (2015) or Myers (2015); all of the methods are effectively based on a water balance. Myers (2015) set baseflow equal to

recharge, following Cherkauer (2004) (and Myers 2013) while L&S (2013) started with total precipitation and attempted a soil moisture balance.

In summary, it is essential to compare recharge above the point in the watershed at which the project would be constructed with all of the pumpage above that point to assess the overall impacts the project could have on water levels and river flow in the project area. The evidence discussed above in this section shows that current groundwater levels decline more during dry periods than in the past due to increased pumping which means that groundwater pumping affects water levels and groundwater discharge to or from the river more than in the past. Because the groundwater levels drop further prior to recover than they did previously, recovery draws more water from the river as described in the next section.

Drawing Water from the Napa River

The County compares only the proposed project to recharge in the watershed above the project rather than considering the cumulative draws of all pumping, which will determine whether the aquifer will be depleted. The NegDec (p. 14) suggests that because water levels are not on a long-term decline, recharge must be replenishing the aquifer. The Lederer letter states:

> *1).c There is no basis in the data presented to support his opinion that groundwater extraction is exceeding the rate of recharge to the aquifer system. On the contrary, groundwater levels for representative wells in the area suggest otherwise (Lederer 2015, p 2)*

Groundwater levels decline in some years, but then recover in other years. Most of the recovery is due to water being diverted from the river. This means the water never discharges into the river or it is being diverted from the river due the water level being drawn below the level of the river. Figures 1 and 2, below, demonstrate how this occurs. Figure 1 is a graph of water levels in the Girard Well included within the Water Availability Analysis (O'Connor (2015)). Water levels increased about 10 feet over the 11-day monitoring period, conducted in February 2015. O'Conner attributed the ten-day increase to the aquifer receiving recharge (O'Conner 2015, p 17), but does not identify the source of the recharge. February 2015 was the end of a dry winter, so O'Conner should have identified the source. Figure 2 is a hydrograph of flows in the Napa River at Napa showing that a significant flow began about five days before the period in Figure 1. Napa River flow increased from less than 30 cfs to relatively high rates, 1260, 855, 1860, and 1010 cfs for four days beginning February 7 (Figure 2). These high river flows would have recharged the aquifers near the river, including the volcanic tuffs in which the Girard well is constructed and caused the observed groundwater level increases. It is not known when the groundwater level actually began to increase but, at the most, it was five days after the river levels rose and recharge likely began. This means that, at most, the time for the

Girard Well to respond to changes in the water level in the river is five days. The Girard Well is from 1500 to 2000 feet from the Napa River (O'Conner 2015, Figure 1). In summary, O'Connor's graph of Girard well water levels (Figure 1) and the hydrograph of river flows (Figure 2) demonstrate that recharge from the river makes up the drawdown in the aquifer. If that drawdown had not existed, whatever its cause, the water would have remained in the river.

Cumulative pumping from all of the wells in the Napa alluvium and connected aquifers therefore cause a drawdown in the aquifers near the river. This drawdown is replenished with water from the river as described in the previous paragraph. Increasing the total cumulative pumpage from aquifers near the river will increase the deficit in those aquifers and decrease flow in the river by either drawing from the river or preventing groundwater flow from reaching the river. The revised negative declaration and the Lederer letter ignore this fact entirely.

The County also ignores how groundwater/surface water interactions occur. The Lederer letter states:

> *2) Myers states that "drawdown will eventually change the flow gradient for discharge to the Napa River and pumping will affect the river."*
>
> *a. There is no technical basis provided to justify this conclusion. Pumping of a well for some unspecified period of time at an uncertain rate from a well constructed in uncertain geologic conditions is not evidence that the gradient will change. He actually says "treating the aquifer as confined is preferable based on the low conductivity clay in the upper part of the log." This does not support his hypothesis relating to eventual change in the flow gradient for discharge to the River since a confined aquifer would, by definition, be physically separated from the surface waters by a confining unit. (Lederer 2015, p. 3.)*

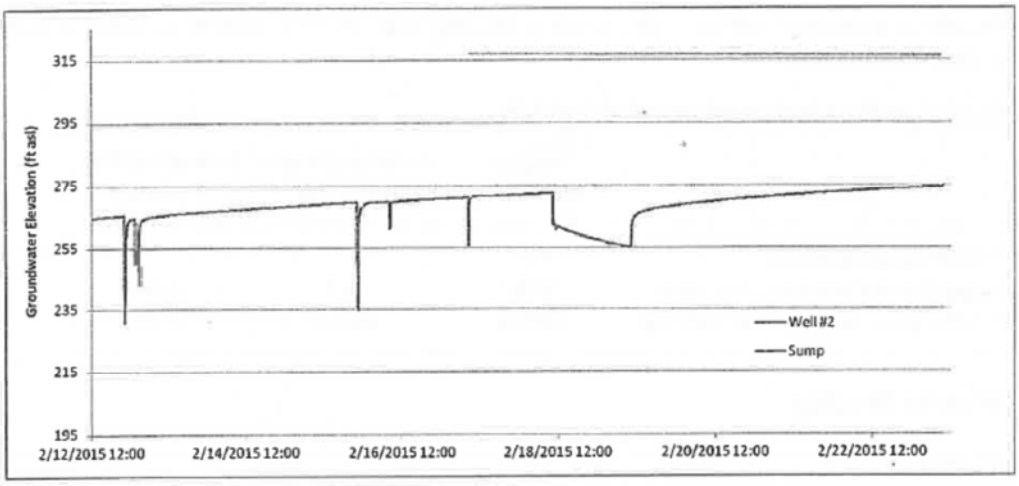


Figure 6: Hydrographs of groundwater elevations at Well #2 and the sump for the 2/12/2015 to 2/23/2015 observation period.

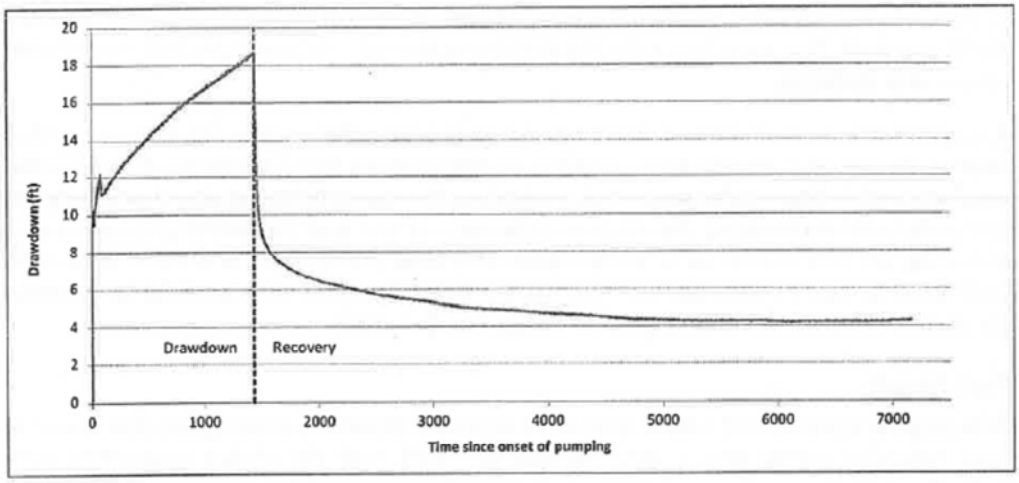


Figure 7: Time/drawdown data for the aquifer test conducted at Well #2.

Figure 1: Figures 6 and 7 from the Revised Water Availability Analysis (O'Conner (2015)) showing a hydrograph of groundwater elevation from February 12, 2015 through February 23, 2015 for the Girard Well and a drawdown time plot for a pump test on the well.

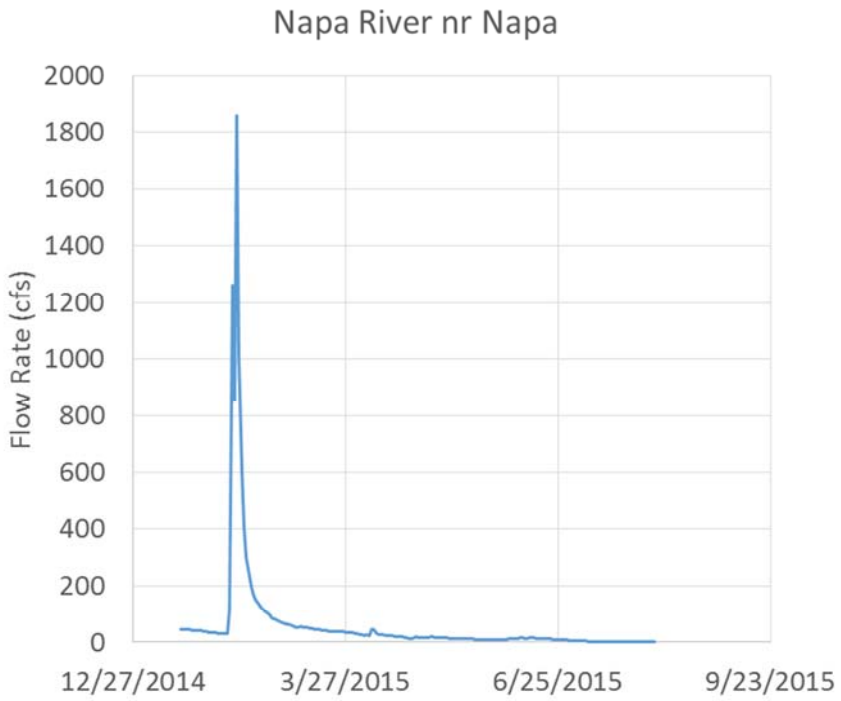


Figure 2: Flow hydrograph from January 16, 2015 to August 5, 2015, Napa River at Napa, #11458000

Every change in pumping from wells near a river will affect the river's flow gradient; that is simply well hydraulics (Fetter 2001). A well changes the gradient to draw water to the well. Conservation of mass requires that all groundwater pumping draw water from somewhere.

All discharge from a near-surface aquifer originated as recharge to that aquifer. Natural discharge is to rivers, springs, or groundwater-dependent vegetation. Groundwater pumping takes some of that natural discharge, as conservation of mass requires. Initially pumping will draw from storage and cause drawdown and change gradients for discharge to the river (or other natural discharge points). The change may be small enough to not be perceptible in the coarse scale of groundwater level monitoring, but basic science indicates it must occur. Pumping water from the valley near the river will take water from the river, either by diverting groundwater discharge to the river or actually pulling water from river. All pumping, past, current and future, takes or will take water from those discharges. The issue that requires analysis is the effect that the cumulative loss of flow has on the river. The revised negative declaration does not examine this impact.

Regarding the issue of whether pumping from a confined aquifer can pull water from the river, the log summary (O'Connor 2015) shows the wells are completed in volcanics (a fact not disclosed in the initial analysis) and also shows the alluvium above the volcanics to be clay (O'Connor 2015). Clay tends to have a low conductivity and would probably be a confining

layer so that the aquifer near the well would respond as if it is confined. Also, the pump test analyses included in the Water Availability Analysis (O'Connor 2015) were based on an assumption of a confined aquifer. Being confined in no way prevents the pumping from affecting the river because:

- The groundwater system is probably not confined everywhere and there is a mixing of the water
- The confined aquifer may outcrop near the river which facilitates the connection and mixing of the water.

Figures 1 and 2 above and the accompanying discussion document that pumping the aquifer draws flow from the river.

The County's final argument relating to impacts to the Napa River concerns incrementalism but actually confirms the County's failure to evaluate the Project's cumulative impacts on groundwater resources. Mr. Lederer states:

> *b. From a practical standpoint, the existing conditions surrounding the property argue against the hypothesis of this project causing a flow gradient change. The two wells involved are both existing (constructed in 1971 and 1985). In addition, according to the December 17, 2014 staff report, there are 10 other wineries operating within one mile of the proposed project, along with numerous residences and vineyards, all with their own groundwater wells. Given this existing network of groundwater wells, data indicating a stable water table, and the small increase in pumping associated with the proposed project, it is simply not credible in the eyes of this engineer that this small percentage of additional pumping is likely to change the direction of the flow gradient. (Lederer 2015, p 3)*

From a "practical standpoint", one more well may not "change the direction of the flow gradient", but as explained above, basic physics require that pumping changes the discharge to a river and changes the baseflow. The County must evaluate the cumulative effects of pumping from all of the wineries and all other proposed development that relies on groundwater.

Finally, the Lederer letter disagrees with my Theis calculations (Myers 2015):

> 3) *Myers describes use of the standard Theis equation to assess potential drawdown.*
>
> *a. Drawdown calculations conducted by the Girard WAA, and admittedly quick computations by LSCE using variables cited by Myers, came to an entirely different conclusion relating to drawdown. Drawdown estimates that we arrived at are a couple of orders of magnitude lower than what Myers shows in plots. There does not appear to*

be factually supported evidence that there would be a significant effect on wells in the vicinity of the project.

In response to this comment, I have revised the calculations to include the following assumptions: (1) transmissivity, 73 and 23 ft^2/d (the median and low values determined by O'Conner (2015)); (2) storage coefficient equal to 0.0001; and (3) pumping rates specified by O'Connor (2015). (See Figure 3). As I demonstrate below, even when using the applicant's assumptions, pumping the Girard Well will cause some drawdown to occur at distances that correspond to neighbors and the river. The County's dismissive way of considering drawdown misses two important points.

- The drawdown shown in Figure 3 is due to pumping just one well. Actual drawdown in the area will be considerably more than that caused by one well because it will be the cumulative amount from all of the wells pumped in the area.
- The Lederer letter implies that the Project's wells may not be pumped continuously, as I did in the creation of Figure 3. The Theis equation can only provide drawdown after a period of continuous pumping at a constant rate. Figure 3 shows drawdown that occurs after pumping for any time period up to 11 days. Actual pumping may involve starting and stopping, so that some recovery may occur between pumping periods, but over the long run, pumping any well creates a deficit because recovery is not instantaneous. Recovery also requires that water be drawn from a distance which eventually depletes the aquifer if the amount of water withdrawn exceeds the recharge rate. Or, pumping may increase recharge by drawing water from the overlying alluvial aquifer or from the river. The longer term recovery shown for the Girard Well (Figure 1, above) shows that drawdown can be residual, depending on its cause and the availability of recharge to replenish it.

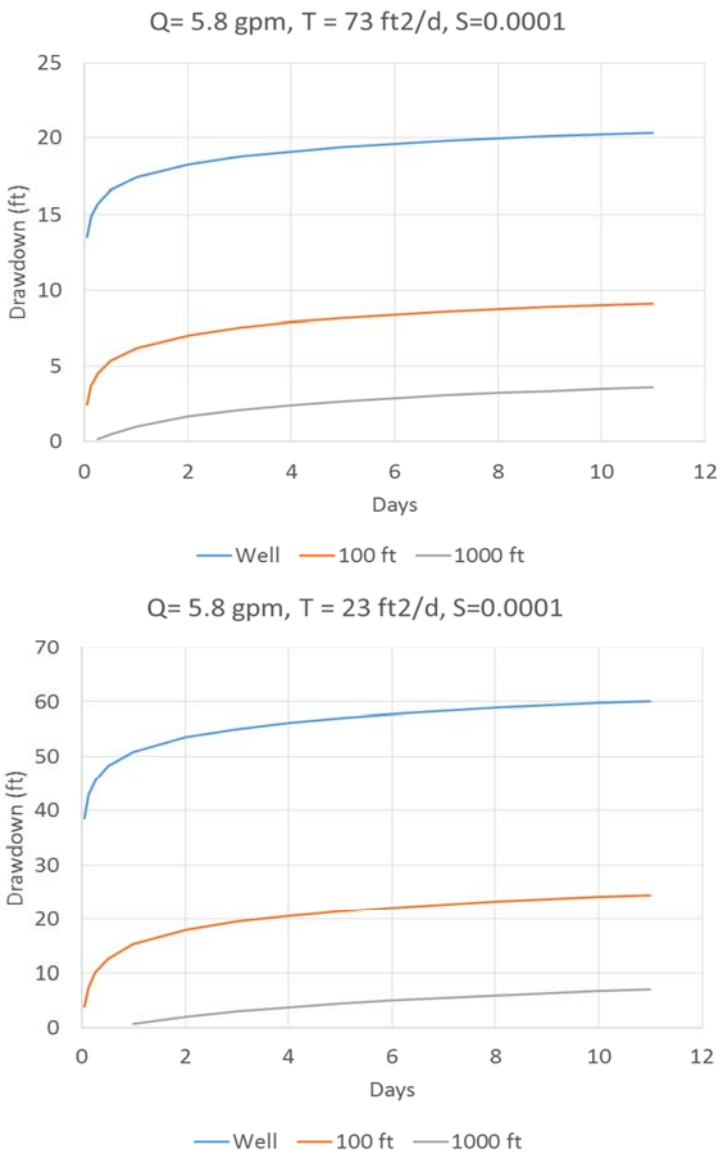


Figure 3: Drawdown with time plots for a well pumping 5.8 gpm with the specified transmissivity and storage coefficient.

Drawdown at the Girard well exceeds 60 feet and at a distance of 1000 feet is about 8 feet after 11 days of pumping at 5.8 gpm (Figure 3, above). Drawdown estimates for other times -- up to 11 days -- may be read from Figure 3. As shown on Figure 3, there will clearly be drawdown at neighboring wells within 1000 feet. Similar drawdown curves could be drawn for larger distance, including the river at about 1500 feet.

All pumping will draw water from the Napa River, but the Neg Dec's analysis of the project does not adequately assess the amount or the cumulative effects pumping would have on flows in the river.

Edge of the Cone of Depression

The Water Availability Analysis (O'Connor (2015)) made several claims that are not supported by evidence. The Analysis estimated the extent of the cone of depression resulting from 24 hours of continuous pumping at 5.37 gpm using an equation (Equation 1 in O'Connor 2015). This equation, however, was never intended for the purpose of identifying a point of zero drawdown. The equation is part of the Cooper-Jacob straight line method, which is a means of analyzing pumping-test data (Fetter 2001). Drawdown at any monitoring well at radius r from the pumping well is plotted against time with 0 drawdown on the top and increasing drawdown plotted downward on the y axis; time on the x axis is logarithmic, as shown on Figure 4 below. This is an example of the method from a textbook (Fetter 2001). The plot is semi-logarithmic which means on one axis, the y axis, points are plotted arithmetically while on the other axis, the x axis, the points are on a logarithmic scale (see Figure 4). Data collected from a pumping test, drawdown at a monitoring well a given distance from the well being pumped, is plotted against time (drawdown on the y axis and time on the x axis). The points form a straight line, except at very small times, if the Cooper-Jacob method is applicable. A straight line may be extended from the line drawn through the data to the top of the graph. The top of the graph corresponds to the point where drawdown equals 0. For zero drawdown, time can be read from the x axis (Figure 4). This time value is used in the Cooper-Jacobs equations but, as can be seen by the fact that the data points do not plot on the straight line near the point of zero drawdown, the zero drawdown point does not actually occur in the field. Assuming it does is a misapplication of the Cooper-Jacob method.

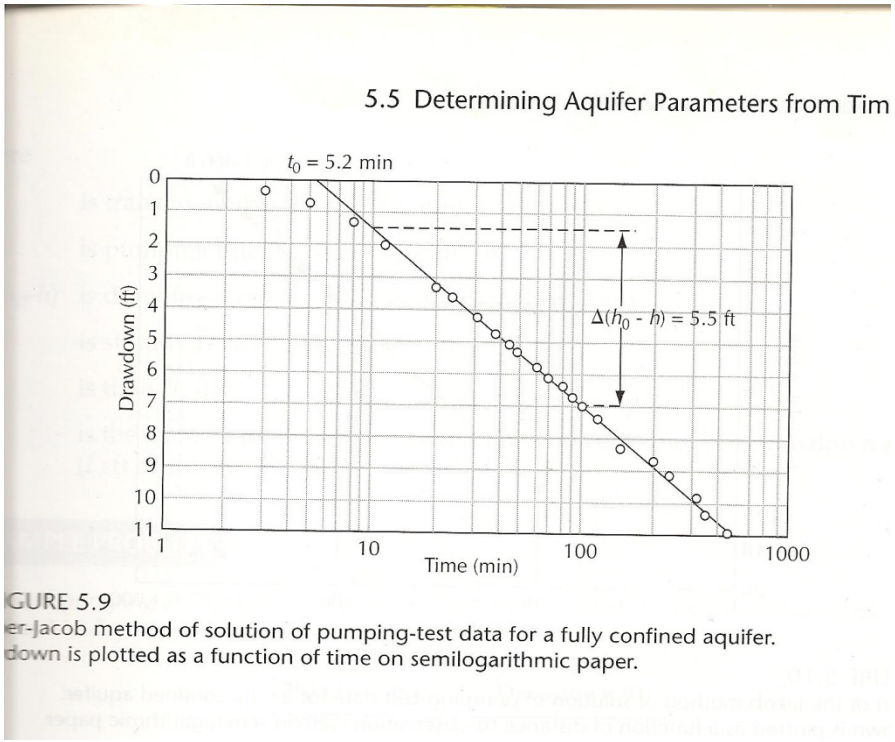


Figure 4: Figure 5.9 from Fetter (2001) showing an example of applying the Cooper-Jacob method to drawdown/time data.

The Water Availability Analysis (O'Connor (2015)) misapplied the equation to "estimate the duration of continuous pumping that would be necessary for the associated cone of depression to reach various points of interest" (O'Connor 2015, p 19). For this reason, the information in O'Conner's Tables 11 and 12 is not useful because they are based on an inappropriate application of a Cooper Jacob well-pumping test equation. The County should not rely on this analysis to assume there will be no drawdown beyond the points specified.

Arsenic and Boron

The Lederer Report ignores the discussion regarding the potential for arsenic and boron to be drawn from the northwest through the project site. The County's argument primarily relies on the fact that since the existing pumping has not drawn the contaminants, the increase in pumping from the Girard well would not cause groundwater contamination. The same argument as made above regarding flow directions due to cumulative pumping applies. Combined, the pumping of all wells in the area could certainly draw contaminants toward the project area. As I explained in my January 2015 report, cumulative pumping in the Calistoga area controls the flow directions in the area. Additional pumping downgradient of the high concentrations, in what appears to be both an arsenic and boron plume, will draw the contaminants further into Calistoga and beyond to the southeast. The County must analyze this potential impact using, for example, a flow and transport model.

Conclusion and Recommendation

This memorandum, along with my prior memorandum, demonstrates the proposed expansion of pumping for the Girard Winery project could have three potentially significant impacts. First, the pumping could unacceptably lower the groundwater levels because there is not as much recharge in the area as the County assumes. Second, the pumping could affect groundwater flow and decrease flow in the river. Third, pumping could cause arsenic and boron to be drawn from the northwest toward the project site. Groundwater pumping from the Project, combined with pumping from the other wells in the area, could cause each of these impacts to occur.

The County's response to my January 20, 2015 memorandum on the project showed a lack of understanding of the cumulative and overlapping effects of this project with all of the other wells in the area.

Because of these potentially significant impacts, a much more detailed hydrogeologic study is needed. All of the issues raised in this review should be analyzed with a numerical flow and transport model. A numerical model would use commonly available computer software which solves the equations of groundwater flow and contaminant transport to provide estimates of groundwater level, flow rates to and from the river, and the movement of contaminants. Such a model could be applied to this area and account for various recharge sources and all of the current and proposed future pumping. The County could then assess how much river flow existing pumping removes from the river, how drawdown would occur at the various wells, and whether the pumping can draw the boron and arsenic plumes toward the project site.

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Cherkauer DS (2004) Quantifying ground water recharge at multiple scales using PRMS and GIS. Ground Water 42(10:97-110

Fetter CW (2001) Applied Hydrogeology, 4th Edition. Prentice-Hall

Myers T (2015) Technical Memorandum, Review of Girard Winery Use Permit P14-00053. January 20, 2015.

Myers, T., 2013. Remediation scenarios for selenium contamination, Blackfoot Watershed, southeast Idaho, USA. *Hydrogeology.* DOI 10.1007/s10040-013-0953-8

O'Connor Environmental Inc (2015) Girard Winery Water Availability Analysis, Prepared for Vintage Wine Estates. Healdsburg CA

701572.4

EXHIBIT 2

United States Environmental Protection Agency | Office of Water (4606) | EPA 816-F-01-021 July 2001

Source Water Protection Practices Bulletin

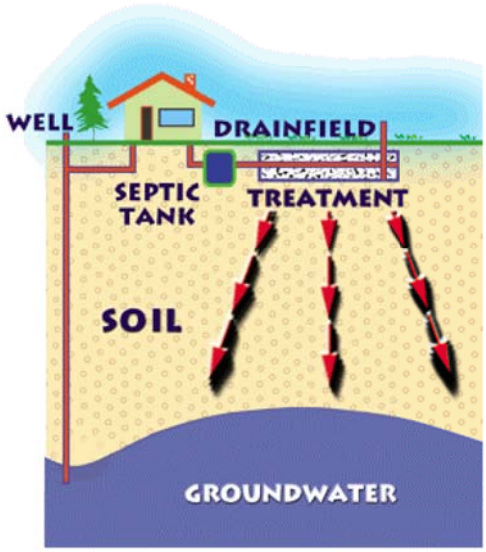
Managing Septic Systems to Prevent Contamination of Drinking Water

Septic systems (also known as onsite wastewater disposal systems) are used to treat and dispose of sanitary waste. When properly sited, designed, constructed, and operated, they pose a relatively minor threat to drinking water sources. On the other hand, improperly used or operated septic systems can be a significant source of ground water contamination that can lead to waterborne disease outbreaks and other adverse health effects.

This fact sheet discusses ways to prevent septic systems from contaminating sources of drinking water. Septic systems that receive non-sanitary wastes (e.g., industrial process wastewater) are considered industrial injection wells, and are not the primary focus of this fact sheet. Other fact sheets in this series address prevention measures for contamination sources such as fertilizers, pesticides, animal feeding operations, and vehicle washing.

SOURCES OF SEPTIC SYSTEM EFFLUENT

About 25 percent of U.S. households rely on septic systems to treat and dispose of sanitary waste that includes wastewater from kitchens, clothes washing machines, and bathrooms. Septic systems are primarily located in rural areas not served by sanitary sewers.



A typical household septic system consists of a septic tank, a distribution box, and a drain field. The septic tank is a rectangular or cylindrical container made of concrete, fiberglass, or polyethylene. Wastewater flows into the tank, where it is held for a period of time to allow suspended solids to separate out. The heavier solids collect in the bottom of the tank and are partially decomposed by microbial activity. Grease, oil, and fat, along with some digested solids, float to the surface to form a scum layer. (Note: Some septic tanks have a second compartment for additional effluent clarification.)

The partially clarified wastewater that remains between the layers of scum and sludge flows to the distribution box, which distributes it evenly through the drain field. The drain field is a network of perforated pipes laid in gravel-filled trenches or beds. Wastewater flows out of the pipes, through the gravel, and into the surrounding soil. As the wastewater effluent percolates down through the soil, chemical and biological processes remove some of the contaminants before they reach ground water.

Large capacity septic systems are essentially larger versions (with larger capacities and flow rates) of single family residential septic systems, but they may have more than one septic tank or drain field for additional treatment capacity. In some cases, an effluent filter may be added at the outlet of the large capacity septic tank to achieve further removal of solids. Many large systems rely on pumps rather than gravity to provide an even flow distribution into the drain field.

WHY IS IT IMPORTANT TO MANAGE SEPTIC SYSTEMS NEAR THE SOURCES OF YOUR DRINKING WATER?

Septic systems are a significant source of ground water contamination leading to waterborne disease outbreaks and other adverse health effects. The bacteria, protozoa, and viruses found in sanitary wastewater can cause numerous diseases, including gastrointestinal illness, cholera, hepatitis A, and typhoid.

Nitrogen, primarily from urine, feces, food waste, and cleaning compounds, is present in sanitary wastewater. Consumption of nitrates can cause methemoglobinemia (blue baby syndrome) in infants, which reduces the ability of the blood to carry oxygen. If left untreated, methemoglobinemia can be fatal for affected infants. Due to this health risk, a drinking water maximum contaminant level (MCL) of 10 milligrams per liter (mg/l) or parts per million (ppm) has been set for nitrate measured as nitrogen. Even properly functioning conventional septic systems, however, may not remove enough nitrogen to attain this standard in their effluent.

AVAILABLE PREVENTION MEASURES TO ADDRESS SEPTIC SYSTEMS

Septic systems can contribute to source water contamination for various reasons, including improper siting, poor design, faulty construction, and incorrect operation and maintenance. Most States and localities regulate siting, design, and construction of septic systems and only regulate operation and maintenance for large capacity septic systems. Some of the more widely used prevention measures are described below. Your local health department should be able to advise you on specific requirements for your community.

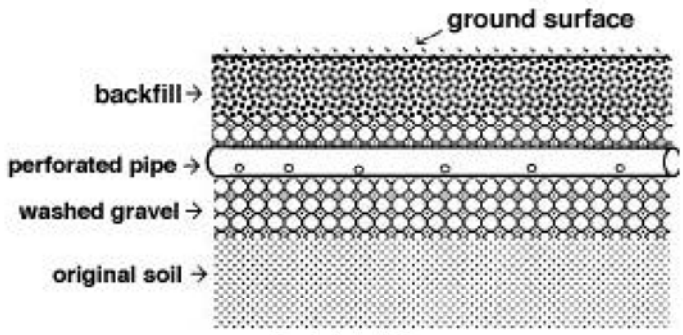
Please keep in mind that individual prevention measures may or may not be adequate to prevent contamination of source waters. Most likely, individual measures should be combined in an overall prevention approach that considers the nature of the potential source of contamination, the purpose, cost, operational, and maintenance requirements of the measures, the vulnerability of the source water, the public's acceptance of the measures, and the community's desired degree of risk reduction

Siting

Most jurisdictions have adopted, for septic systems, ***minimum horizontal setback distances*** from features such as buildings and drinking water wells and ***minimum vertical setback distances*** from impermeable soil layers and the water table. Septic systems should be located a safe distance from drinking water sources to avoid potential contamination. Areas with high water tables and shallow impermeable layers should be avoided because there is insufficient unsaturated soil thickness to ensure sufficient treatment. ***Soil permeability must be adequate*** to ensure proper treatment of septic system effluent. If permeability is too low, the drain field may not be able to handle wastewater flows, and surface ponding (thus contributing to the contamination of surface water through runoff) or plumbing back-ups may result. If permeability is too high, the effluent may reach ground water before it is adequately treated. As a result, alternative systems may be necessary in karst areas. Well-drained loamy soils are generally the most desirable for proper septic system operation. In making siting decisions, local health officials should also evaluate whether soils and receiving waters can absorb the combined effluent loadings from all of the septic systems in the area.

Design and Construction

Septic tanks and ***drain fields should be of adequate size*** to handle anticipated wastewater flows. In addition, soil characteristics and topography should be taken into account in designing the drain field. Generally speaking, the lower the soil permeability, the larger the drain field required for adequate treatment. Drain fields should be located in relatively flat areas to ensure uniform effluent flow.



Septic drain field

Effluent containing excessive amounts of grease, fats, and oils may clog the septic tank or drain field and lead to premature failure. The installation of ***grease interceptors*** is recommended for restaurants and other facilities with similar wastewater characteristics.

Construction should be performed by a ***licensed septic system installer*** to ensure compliance with applicable regulations. The infiltration capacity of the soil may be reduced if the soil is overly compacted. Care should be taken not to drive heavy vehicles over the drain field area during construction or afterward. Construction equipment should operate from upslope of the drain field area. Construction should not be performed when the soil is wet, or excessive soil smearing and soil compaction may result.

Operation and Maintenance

Proper operation and maintenance of septic systems is perhaps the most crucial prevention measure to preventing contamination. Inadequate septic system operation and maintenance can lead to failure even when systems are designed and constructed according to regulation. Homeowners associations and tenant associations can play an important role in educating their members about their septic systems. In commercial establishments such as strip malls, management companies can serve a similar role. Septic system owners should continuously monitor the drain field area for signs of failure, including odors, surfacing sewage, and lush vegetation. The septic tank should be ***inspected annually*** to ensure that the internal structures are in good working order and to monitor the scum level.

Many septic systems fail due to hydraulic overloading that leads to surface ponding. Reducing wastewater volumes through ***water conservation*** is important to extend the life of the drain field. Conservation measures include using water-saving devices, repairing leaky plumbing fixtures, taking shorter showers, and washing only full loads of dishes and laundry. Wastewater from basement sump pumps and water softeners should not be discharged into the septic system to minimize hydraulic load. In addition, surface runoff from driveways, roofs, and patios should be directed away from the drain field.

If an excessive amount of sludge is allowed to collect in the bottom of the septic tank, wastewater will not spend a sufficient time in the tank before flowing into the drain field. The increased concentration of solids entering the drain field can reduce soil permeability and cause the drain field to fail. Septic tanks should be pumped out every two to five years, depending on the tank size, wastewater volume, and types of solids entering the system. Garbage disposals increase the volume of solids entering the septic tank, requiring them to be pumped more often.





Household chemicals such as solvents, drain cleaners, oils, paint, pharmaceuticals, and pesticides can interfere with the proper operation of the septic system and cause ground water contamination. Homeowners should take advantage of ***local hazardous waste collection programs*** to dispose of these wastes whenever possible. Grease, cooking fats, coffee grounds, sanitary napkins, and cigarettes do not easily decompose, and contribute to the build-up of solids in the tank. The use of additives containing yeast, bacteria, enzymes, and solvents has not been proven to improve the performance of septic systems, and may interfere with their normal operation. Bacterial "starters" are not necessary because a wide range of bacteria are normally present in sewage entering the tank. Additives containing solvents or petrochemicals can cause ground water contamination.



Vehicles and heavy equipment should be kept off the drain field area to prevent soil compaction and damage to pipes. Trees should not be planted over the drain field because the roots can enter the perforated piping and lead to back-ups. Last, any type of construction over the drain field should be avoided. Impervious cover can reduce soil evaporation from the drain field, reducing its capacity to handle wastewater.

FOR ADDITIONAL INFORMATION

For information on septic system regulations in your community, contact your state or local health department. The information sources below contain information on measures to prevent septic system failures. All of the documents listed are available free of charge on the Internet.

Numerous documents on septic systems are available for download from U.S. Department of Agriculture Cooperative State Research, Education, and Extension Service State Partners. Links to the various State Partners can be found at http://www.reeusda.gov/1700/statepartners/usa.htm. Several examples of these documents are presented below:

Bicki, T.J. and D.G. Peterson. "Septic Systems: Operation and Maintenance of On-site Sewage Disposal Systems." *Land and Water: Conserving Natural Resources in Illinois*, Number 15, Cooperative Extension Service, University of Illinois at Urbana-Champaign. Retrieved February 26, 2001 from the World Wide Web: http://web.aces.uiuc.edu/vista/pdf_pubs/SEPTIC.PDF.

Hiller, Joe and Andrea Lewis. (October 1994). *Septic System Failure: What To Do.* University of Wyoming Cooperative Extension Service. B-1007. Retrieved February 27, 2001 from the World Wide Web: http://www.uwyo.edu/ag/ces/PUBS/Wy1007.pdf.

Hiller, Joe and Andrea Lewis. (October 1994). *Septic System Maintenance.* University of Wyoming Cooperative Extension Service. B-1008. Retrieved February 26, 2001 from the World Wide Web: http://www.uwyo.edu/ag/ces/PUBS/Wy1008.pdf.

Porter, E., R. Rynk, K. Babin, and B.N. Burnell. *Care and Maintenance of Your Home Septic System.* University of Idaho College of Agriculture, Cooperative Extension System. CIS 1027. Retrieved February 27, 2001 from the World Wide Web: http://info.ag.uidaho.edu/Resources/PDFs/CIS1027.pdf.

Powell, G. Morgan. (March 1996). *Get to Know Your Septic System.* Kansas Cooperative Extension Service, Kansas State University. MF-2179. Retrieved February 26, 2001 from the World Wide Web: http://www.oznet.ksu.edu/library/H20QL2/MF883.PDF.

Powell, G. Morgan. (July 1992). *Septic Tank – Soil Adsorption System.* Kansas Cooperative Extension Service, Kansas State University. MF-944. Retrieved February 27, 2001 from the World Wide Web: http://www.oznet.ksu.edu/library/H20QL2/MF944.PDF.

Powell, G. Morgan, Barbara L. Dallemand, Judith M. Willingham. (August 1998). *Septic Tank Maintenance: A Key to Longer Septic System Life.* Kansas Cooperative Extension Service, Kansas State University. MF-947. Retrieved February 28, 2001 from the World Wide Web: http://www.oznet.ksu.edu/library/H20QL2/MF947.PDF.

Powell, G. Morgan, Barbara L. Dallemand, Judith M. Willingham. (December 1998). *Why Do Septic Systems Fail?* Kansas Cooperative Extension Service, Kansas State University. MF-946. Retrieved February 27, 2001 from the World Wide Web: http://www.oznet.ksu.edu/library/H20QL2/MF946.PDF.

Runyan, R. Craig, *Septic Tank Maintenance.* Cooperative Extension Service, College of Agriculture and Home Economics, New Mexico State University, Guide M-113.

Washington State University Cooperative Extension and U.S. Department of Agriculture. (Reprinted January 1998). *Properly Managing Your Septic Tank System.* EB1671. Retrieved February 26, 2001 from the World Wide Web: http://cru.cahe.wsu.edu/CEPublications/eb1671/eb1671.html.

The National Small Flows Clearinghouse has developed a series of brochures on septic systems. They can be found at http://www.estd.wvu.edu/nsfc/NSFC_septic_news.html.

North Carolina State University Water Quality Group. *Septic Systems*. Retrieved February 27, 2001 from the World Wide Web: http://h2osparc.wq.ncsu.edu/estuary/rec/septic.html.

Septic Information Website: Inspecting, Designing, & Maintaining Residential Septic Systems. Retrieved February 28, 2001 from the World Wide Web: http://www.inspect-ny.com/septbook.htm.

Stormwater Manager's Resource Center. *Non-Stormwater Fact Sheet: Septic Systems*. Retrieved February 26, 2001 from the World Wide Web: http://www.stormwatercenter.net/Assorted%20Fact%20Sheets/Tool7-Non_Stormwater/SepticSystems.htm.

U.S. Environmental Protection Agency. (September 1999). *The Class V Underground Injection Control Study, Volume 5: Large Capacity Septic Systems*. Retrieved February 27, 2001 from the World Wide Web: http://www.epa.gov/safewater/uic/classv/volume5.pdf.

U.S. Environmental Protection Agency. *Decentralized Onsite Management for Treatment of Domestic Wastes.* Retrieved May 1, 2001 from the World Wide Web: http://www.epa.gov/seahome/decent.html.

U.S. Environmental Protection Agency. *Principles and Design of Onsite Waste Disposal with Septic Systems.* Retrieved May 1, 2001 from the World Wide Web: http://www.epa.gov/seahome/onsite.html.

EXHIBIT 3

CITY OF CALISTOGA
PLANNING AND BUILDING DEPARTMENT
PROPOSED AND APPROVED DEVELOPMENT REPORT
MARCH 2015

Location	Project Name/Applicant	Project Description	Status	Planner
411 Foothill Boulevard	**CALISTOGA HILLS (Formerly Enchanted Resorts)** Aaron Harkin 1019 Myrtle Street Calistoga, CA 94515 707-332-8917	Resort/Residential Project 13 single-family dwellings 20 Fractional Units 110 Hotel Units	Approved	Erik Lundquist
1300 Washington Street	**ROMAN SPA** Michael and Kathy Quast 1300 Washington Street Calistoga, CA 94515 707-942-4441 ext. 7242	Resort Expansion Project	Proposed	Erik Lundquist
207 Wappo Avenue	**Wappo Avenue Guest Accomodations** Thomas Hodge and Margaret Nicholson PO Box 6942 Napa, CA 707.501.8550	3 Family and/or Group Guest Suites	Approved	Erik Lundquist
1998 Cedar Street	**IMPER RESIDENCE** Patrick Mervin + Associates c/o Allisa McNair 4668 Petrified Forest Road Calistoga, CA 94515 707-942-6540	4,000+ sf single-family dwelling	Approved	Lynn Goldberg
400 Silverado Trail	**SILVER ROSE RESORT** Silver Rose Venture, LLC 1 Post Office Square 3520 Boston, MA 02109 650-868-3708	Resort/Residential Project 85 guest rooms 57,630 sf resort facilities 110-seat restaurant 21 single-family dwellings	Under Construction	Erik Lundqiust
1801 & 1805 Michael Way	**NEW VINE HOMES LLC** 1301 Farmer's Lane, Suite 302 Santa Rosa, CA 95405	2 New Single Family Dwellings	Pending	Erik Lundquist

CITY OF CALISTOGA
PLANNING AND BUILDING DEPARTMENT
PROPOSED AND APPROVED DEVELOPMENT REPORT
MARCH 2015

Location	Project Name/Applicant	Project Description	Status	Planner
957 Petrified Forest Road	**BRANSTAD PARCEL MAP PM 2014-4** c/o Robert Branstad PO Box 1009 Winnemucca, NV 89446 510.334.2232	2-lot Subdivision	Pending	Erik Lundquist
2085 Mora Avenue	**DECKARD AND FRANQUELIN PARCEL MAP PM 2014-3** 1718 Michael Way Calistoga, CA 94515 707.544.2104	3-lot Subdivision	Pending	Erik Lundquist
2960 Foothill Boulevard	**CALISTOGA PET CLINIC PARCEL MAP PM 2014-1** c/o RKMS Investments, LLC (Jimmy Quita) 34501 7th Street Union City, CA 94587 510-385-2236	2-lot Subdivision	Pending	Erik Lundquist
2309 Grant Street	**CARAVAS SETBACK VARIANCE** 2309 Grant Street Calistoga, CA 94515	Front Yard Setback Variance	Pending	Erik Lundquist
2960 Foothill Boulevard	**CALISTOGA PET CLINIC USE PERMIT AMENDMENT UP 2013-7** Steve Franquelin 2960 Foothill Boulevard Calistoga, CA 94515 707.942.0404	Expansion of Use	Pending	Erik Lundquist

CITY OF CALISTOGA
PLANNING AND BUILDING DEPARTMENT
PROPOSED AND APPROVED DEVELOPMENT REPORT
MARCH 2015

Location	Project Name/Applicant	Project Description	Status	Planner
1213 & 1303 Foothill Boulevard	**General Plan Amendment 2015-2 and Zoning Map Amendment ZOA 2015-4** Nicholas Kite 1213 Foothill Boulevard Calistoga, CA 94515	Designate Property Downtown Commercial	Pending	Erik Lundquist
2412 Foothill Boulevard	**Rancho de Calistoga Clubhouse Design Review DR 2015-1 and Variance VR 2015-1** HCA Management c/o Dean Moser 7250 Redwood Blvd., #350 Novato, CA 94945 415.892.4795 x217	New Clubhouse	Pending	Erik Lundquist

EXHIBIT 4

SHUTE, MIHALY
& WEINBERGER LLP

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ROBERT "PERL" PERLMUTTER
Attorney
perlmutter@smwlaw.com

June 8, 2015

Via U.S. Mail

County of Napa
Board of Supervisors
1195 Third Street, Suite 310
Napa, California 94559

Re: Enforcement Action Against Clos Pegase Winery, Inc.

Dear Chair of the Board:

This firm represents the Tofanelli family on matters related to the unpermitted use of the Clos Pegase Winery. These uses include weddings and similar social events, such as anniversaries, rehearsal dinners, birthdays, holiday parties, and private parties unrelated to the education and development of customers and potential customers. We are writing to support Napa County's enforcement action against Clos Pegase and to detail why there is no legal basis under which Clos Pegase can pursue such a practice.

In 1990, the Board of Supervisors adopted the Winery Definition Ordinance (WDO), which limits commercial activities on wineries approved in agricultural zoning districts to ensure that winery management remains focused on the production of world-class wines. The WDO was amended in 2010 to allow for "[c]ultural and social events directly related to the education and development of customers and potential customers" under a use permit for the "marketing of wine," as long as "such events are clearly incidental, related and subordinate to the primary use of the winery." Napa County Code § 18.08.370 (as amended by Ord. No. 1340, § 1, May 11, 2010). The WDO also states that these marketing events "must be conducted at no charge except to the extent of recovery of variable costs, and any business content unrelated to wine must be limited." *Id.*

The County's Planning, Building and Environmental Services Department has interpreted the WDO, even after the 2010 amendments, as prohibiting wineries from holding weddings, parties, and other similar cultural and social events. *See* Memo From

Hillary Gitelman to Napa County Planning Commission, October 26, 2009 ("Gitelman Memo," attached); *see also* Email from David Morrison to Norma Tofanelli, January 20, 2015 (attached). Thus, under the WDO, Clos Pegase cannot legally use its winery as a wedding venue or special event center. Nonetheless, Clos Pegase continues to advertise "anniversaries, rehearsal dinners, birthdays, holiday parties, private parties and more" on its website. *See http://www.clospegase.com/eventhosting*.

There are two limited exceptions to the WDO's restriction on the use of wineries for weddings and other social and cultural events, but neither apply to Clos Pegase. The ordinance first makes an exception for existing wineries that commenced operations prior to 1974, "and whose activities were lawful when established and have not been abandoned." Ord. No. 947, § 2. Under this provision, wineries that held weddings or similar social events on their premises prior to 1974 and have continued to do so since that time may operate as legally nonconforming wedding venues or special event centers, as long as the nonconforming use is not expanded beyond the pre-1974 levels and is recognized via a county-approved certificate of conformity. *Id.*; *see* Gitelman Memo. Clos Pegase commenced operations in 1984 and, thus, cannot make an argument under this exception. *See* Clos Pegase Use Permit, October 3, 1984 ("1984 Use Permit," attached)("request to establish a winery…").

The second exception concerns wineries that commenced operations after 1974 and secured the required use permit to make their social event-hosting activities lawful. Ord. No. 947, § 3. This exception allows wineries the continued "right to operate within the conditions of their approved use permits," if those use permits explicitly allowed for social and cultural event hosting. *Id.* Any activity beyond the winery's use permit could only be allowed "upon securing a modification of said use permit in accordance with [the Winery Definition Ordinance]." *Id.* Clos Pegase also has no argument under this exception. Its use permit, dated October 3, 1984, provides only for "public tours and tastings" and contains no language authorizing the use of the winery for weddings or other similar social and cultural events. *See* 1984 Use Permit. Clos Pegase sought and received a second use permit in 1987, which also makes no mention of using the winery for weddings or social events. *See* Clos Pegase Use Permit, May 28, 1987 ("1987 Use Permit," attached); *see also* Letter from Jeffrey Redding to Michael Wilson, April 6, 1990 (indicating that the 1987 use permit for public tours and tastings does not extend to general social events) (attached). Thus, Clos Pegase's right to operate within the conditions of its pre-1990 use permits does not in any way allow it to function as a wedding venue or a special event center.

Clos Pegase may argue that its winery had been continuously used for weddings and similar social events before the adoption of the WDO, but any such prior

practices are irrelevant. Since 1974, the County required all winery owners to obtain use permits for myriad uses, including marketing of wine and tours and tastings. Napa County Code § 18.16.030. In the absence of a pre-1990 permit expressly authorizing use of Clos Pegase Winery for weddings and similar social and cultural events, such actions, even if proven, were illegal. Those illegal actions cannot now be leveraged to create a legal, permitted use. *See, e.g., Edmonds v. Cnty. of Los Angeles* (1953) 40 Cal.2d 642, 651 (a vested right is the right to continue a legal activity that existed prior to the enactment of a regulatory program); *Hansen Bros. v. Bd. of Supervisors of Nevada Cnty.* (1996) 12 Cal.4th 533, 540 fn. 1, 541 (Nonconforming uses do not require permits because they "*existed lawfully* before a zoning restriction became effective," even though they are "not in conformity with the ordinance when it continues thereafter." [emphasis added]). Because Clos Pegase did not have a legal right to use its winery for weddings or other social and cultural events between 1984 and 1990, it does not have a vested right to do so after the enactment of the WDO in 1990. This nonconforming use must cease.

Should Clos Pegase seek to modify its use permit or claim a vested right, neighboring property owners "are entitled to reasonable notice and an opportunity to be heard in an evidentiary public adjudicatory hearing before that vested rights claim is determined." *Calvert v. Cnty. of Yuba* (2006) 145 Cal.App.4th 613, 627 ("approvals . . . which 'substantially affect' the property rights of adjacent landowners may constitute property 'deprivation[s]' within the context of procedural due process, requiring reasonable notice and an opportunity to be heard for those landowners before the land use decision is made" [citations omitted]). For the reasons outlined above, there are no means by which Clos Pegase's use of its winery as a wedding and special events venue can be considered a legal nonconforming use under Napa County law; nevertheless, should the County entertain the possibility of granting Clos Pegase a certificate of conformity, we request the County provide notice and an opportunity to be heard to our firm and to the Tofanelli family prior to making that decision.

In closing, we commend the County for bringing an enforcement action to prevent Clos Pegase's illegal operation as a wedding venue and special event center, but express our dismay and disappointment regarding the County's five-month delay in preventing unauthorized activities at this winery. Though Clos Pegase's website no longer promotes use of the winery as a wedding venue, Clos Pegase continues to advertise use of its premises for various social events, including "anniversaries, rehearsal dinners, birthdays, holiday parties, private parties and more." *See* http://www.clospegase.com/eventhosting. Despite the County's ongoing investigation, Cos Pegase's event calendar web page is currently riddled with activities unrelated to the primary use of the winery. *See* http://www.clospegase.com/upcomingevents (advertising

"Yoga in the Vineyards," "Floral Arranging with EV Floral Design," "Puppies and Pinot," etc.). In order to introduce some much-needed transparency into the enforcement process, we request that the County advise us in writing as to exactly what is allowed under Clos Pegase's use permit: how many events, the nature and size of those events, and how frequently they may occur.

We request the County to enforce its laws and stop the unauthorized use of Clos Pegase Winery to ensure protection of the public and avoid unnecessary litigation over what is a clear violation of Clos Pegase's use permit.

Thank you for your attention to this matter.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Robert "Perl" Perlmutter

Attachments

663883.5

1. Memo From Hillary Gitelman to Napa County Planning Commission, October 26, 2009.

2. Email from David Morrison to Norma Tofanelli, January 20, 2015.

3. Clos Pegase Use Permit, October 3, 1984.

4. Clos Pegase Use Permit, May 28, 1987.

5. Letter from Jeffrey Redding to Michael Wilson, April 6, 1990.

683109.1

Conservation, Development and Planning

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Hillary Gitelman
Director

A Tradition of Stewardship
A Commitment to Service

MEMORANDUM

To:	Napa County Planning Commission and Interested Stakeholders	From:	Hillary Gitelman
Date:	October 26, 2009	Re:	WDO & Temporary Events

At the October 6, 2009 joint meeting of the Planning Commission and the Board of Supervisors, planning staff was directed to:

1. quickly review any options that might exist for using our temporary events ordinance as a way to permit social and cultural events at wineries;
2. offer support to industry group discussions about potential changes to the Winery Definition Ordinance (WDO) of 1990; and
3. assemble some data regarding regional economic conditions and characteristics of Napa County wineries.

The first of these subjects is addressed in this memo via a series of five questions and answers which reference relevant sections of the Napa County General Plan and Napa County Code. The staff interpretations and suggestions inherent in these questions and answers are simply initial thoughts, and are provided to frame discussion by the Commission at their November 18, 2009 meeting. Based on input from the Commission and interested stakeholders at that time and in the weeks that follow, staff will formulate a recommendation for consideration by the Commission and the Board around the end of January, when the Board of Supervisors has requested a report on industry group discussions and staff's data gathering efforts.

Question 1: Are wineries currently allowed to hold weddings, parties and similar cultural and social events?

Answer: Generally no, but it depends on when the winery was established and on what conditions were placed on the winery at the time of its approval. Some wineries were established prior to 1974, before there was a requirement for a use permit. These wineries may continue to host cultural and social events if it was part of their operations prior to 1974 (and if they are recognized via a county-approved certificate of conformity). Wineries approved between 1974 and when the WDO was adopted in 1990 may only host cultural and social events

if they were permitted as part of the winery's use permit. Wineries approved after adoption of the WDO in 1990 may not host cultural and social events because of language included in the definition of "marketing" adopted at that time unless the event qualifies as a "temporary event" and has required permits. Generally, "temporary events" are events protected under the First Amendment of the US Constitution, and are open to the public. (See Question 4 & the definitions provided.)

It should be noted that the prohibition on cultural and social events at post-WDO wineries does not mean that marketing events cannot have a cultural or social component. For example, wine club members may be invited to an event featuring the winery's wine, which also involves music, art, etc. However, the code has been consistently interpreted to prohibit these wineries from hosting weddings, birthday parties, wedding anniversary celebrations, and other purely social events because they have been deemed "unrelated to... education and development" of the persons/groups specified in the definition of "marketing."

Question 2: Are wineries currently allowed to hold business meetings, conferences, and similar events?

Answer: Only if the business meetings are non-commercial and primarily focused on wine education and development. As noted above, wineries established prior to 1974 -- before there was a requirement for a use permit -- may continue to host business meetings, conferences, etc. if these activities were part of their operations prior to 1974 (and if they are recognized via a county-approved certificate of conformity). Wineries approved between 1974 and when the WDO was adopted in 1990 may hold such events if they were permitted as part of the winery's use permit.

Since adoption of the WDO, it has not always been clear whether business meetings and similar events qualify as marketing events. A strict reading of the ordinance would suggest that wineries may *not* host business meetings and the like unless they are "limited to activities for the education and development" of the persons or group involved and are singularly focused on "wine which can be sold at the winery on a retail basis." Under this interpretation, only a business meeting solely focused on the production and sale of wine would be acceptable. However, business meetings that have a marketing objective (e.g. a wine tasting or education event scheduled for a group of bankers as part of a corporate retreat), have often been considered marketing events, as long as a prevalence of such events does not constitute commercial activity or turn the winery into a conference center. Clearly this is one area of the code and the WDO that would benefit from clarification via a code amendment, or the kind of "administrative interpretation" discussed in response to Question 3.

Question 3: Could the County use an "administrative interpretation," rather than a code amendment to allow wineries to hold weddings, parties, business meetings, etc?

Answer: The County could use an interpretation to clarify when business meetings are acceptable. However the County could not use an administrative interpretation to allow weddings, parties, and similar social events. Also, administrative interpretations in general have significant disadvantages over formal code amendments.

By law, "administrative interpretations" or other policies that are adopted by staff or decision-makers may not conflict with regulations or policies formally adopted as part of the County's zoning ordinance or General Plan. Also, because such interpretations may be reversed or re-interpreted with little public notice any time there is a change in staff or a change in the composition of the Commission and/or the Board, they can be considered arbitrary and are not generally viewed as good public policy. Use of an interpretation may also be at odds with General Plan Policy AG/LU-107 which states that "The County shall provide a clear, consistent, timely, *and predictable* review process..." [emphasis added].

With that said, planning staff understands that the prohibition on cultural and social events and the issues surrounding business meetings described in response to Question 1 & 2 are themselves based on interpretations of code language. In the case of cultural and social events, County staff and policy makers have routinely interpreted birthday parties, weddings, etc. to be cultural and social events that are "unrelated to ... education and development" of the persons and groups called out in the definition of "marketing." This interpretation is supported by the last statement in the definition of marketing: "...but shall not include cultural and social events unrelated to such education and development..."

In the case of business meetings, County staff and policy makers have interpreted some business meetings as falling within the definition of "marketing," while acknowledging that the practice of hosting other business meetings can be considered a commercial activity outside the definition of "marketing." Careful consideration should be given to legal issues and potentially preferable alternatives before using an administrative interpretation to clarify when business meetings are acceptable. While there is no phrase in the code expressly describing these meetings as <u>not</u> falling within the definition of marketing (as there is for social and cultural events), there is still the disadvantage that an administrative interpretation can be reversed with little public notice (i.e. only by posting an agenda 72 hours in advance of the meeting) whenever the composition of the Commission or the Board changes.

Question 4: Could the County use the existing temporary events ordinance to allow weddings, parties, business meetings, etc. at wineries?

Answer: Not without amending the ordinance. Temporary events are by definition (see below) related to "expressive activities" protected by the First Amendment of the US Constitution and are open to the public. Common examples include concerts, lectures, and benefit dinners held by non-profit organizations. Wineries may hold social, cultural, and business-related events using the temporary event ordinance (and independent of their approved marketing programs), but only if the events are open to the public (with or without

payment of an admission charge), and are permitted via the procedures outlined in Chapter 5.36 of Napa County Code. Generally, any temporary event with more than 50 attendees requires a permit, which must be applied for at least 60 days in advance of the event. Obviously, weddings, birthday parties and other events that are *by invitation only* do not fall within the definition of temporary events, so the ordinance would have to be amended to provide another category of temporary event that is by invitation, presuming the Commission and the Board can make the case that such events are expressive activities protected under the First Amendment. This idea is discussed in response to Question 5, below.

Question 5: How could the existing temporary events ordinance be amended to permit weddings, parties and similar cultural or social events at wineries?

Answer: While it would be possible to amend the rules governing temporary events to permit "by invitation only" cultural and social events if these events were considered a form of public expression related to First Amendment rights, there may be unintended consequences of such a change and alternative code amendments would be preferable. Four options are evaluated here.

If the temporary events ordinance was simply amended to allow events that are by invitation only (events like weddings, birthday parties, etc.) by making the argument that these events provide for public expression, then these types of events could be permitted at homes, barns, warehouses, and at other properties throughout the County as well as at wineries. As a result, there could be an excessive number of events, and properties that hold regular events could become commercial enterprises in violation of General Plan policies and zoning restrictions.

This unintended consequence (i.e. the potential over-proliferation of events) could be addressed by enacting a new special events ordinance that is unrelated to the First Amendment and that limits the number of events allowed by invitation only (e.g. up to 100 weddings per year on a first come first served basis, and no more than one such event per property per year). The new special events ordinance would not be specific to wineries, and would allow events at a wide variety of locations via an administrative permit, similar to permit required for hot air balloon launching facilities. Strict limitations would have to be included in the new ordinance to avoid conflicting with General Plan policies and zoning restrictions prohibiting commercial activities in agricultural areas.

Another variation on this theme would be to create a new special events ordinance allowing social and cultural events, but only at wineries and only when such events are held in lieu of permitted marketing events. This approach could make use of the same kind of administrative permit process described above, but also would necessitate changing the definition of "marketing" to avoid internal inconsistencies within Napa County Code. Specifically, the definition of "marketing" would need to be amended along the following lines (proposed new text is underlined):

"*Marketing of wine*" means any activity of a winery identified in this paragraph which is conducted at the winery and is limited to members of the wine trade, persons who have pre-established business or personal relationships with the winery or its owners, or members of a particular group for which the activity is being conducted on a prearranged basis. Marketing of wine is limited to activities for the education and development of the persons or groups listed above with respect to wine which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20, and may include food service without charge except to the extent of cost recovery when provided in association with such education and development, but shall not include cultural and social events unrelated to such education and development *except as provided in Section [insert section number]*.

The most efficient way to provide wineries with greater flexibility regarding events would be to avoid establishment of a new administrative permit process and simply adjust the definition of "marketing" further. For example, the following amendment was proposed in 2005 (proposed new text is underlined):

"*Marketing of wine*" means any activity of a winery identified in this paragraph which is conducted at the winery and is limited to members of the wine trade, persons who have pre-established business or personal relationships with the winery or its owners, or members of a particular group for which the activity is being conducted on a prearranged basis. Marketing of wine is limited to activities for the education and development of the persons or groups listed above with respect to wine which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20, and may include food service without charge except to the extent of cost recovery when provided in association with such education and development, but shall not include cultural and social events unrelated to such education and development.

Notwithstanding the preceding paragraph, "marketing of wine" may include a cultural, social or business event if such event occurs during the period commencing on the effective date of Ordinance No. 1267 and ending two years from the effective date of Ordinance No. 1267 and if the event conforms to all of the following requirements:

A. *the winery has a valid use permit which specifically allows marketing events to be held at the winery;*
B. *the event is limited to members of the wine trade or persons who have pre-established relationships with the winery or its owners, or is being conducted for a particular group on a prearranged basis;*
C. *the event involves the education and development of customers for the winery;*
D. *the only alcoholic beverages served at the event are wines which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20 of this Code;*
E. *the only food service provided in association with the event is without charge, except to the extent of cost recovery;*
F. *the event is not scheduled to begin or end during "peak" travel times of 4:00 to 6:00 p.m. on weekdays and 1:00 to 4:00 p.m. on weekends;*

G. *the event may not include the use of outdoor amplified music unless it is specifically authorized by a use permit modification approved by the zoning administrator pursuant to section 18.10.020 of this Code and is based on an analysis outlining feasible methods for complying with the County's noise ordinance and those methods are included as conditions of approval on the use permit modification;*

H. *events within one-quarter mile of residential uses must end (including clean-up) by 10:00 p.m. unless a different time is authorized by a use permit modification approved by the zoning administrator and is based on an analysis outlining feasible methods for complying with the County's noise ordinance and such methods are included as conditions of approval on the use permit modification pursuant to section 18.12.020 of this Code;*

I. *the event will not exceed the number of attendees specified in the winery's use permit for visitors to a particular marketing event; and*

J. *the event will be counted towards the total number of marketing events per year authorized by a winery's use permit.*

Pre-WDO wineries which have not established specific marketing plans may continue to do marketing activities consistent with the visitation allowed in their existing use permits. Where it is unclear what marketing activities were previously authorized, a use permit modification request or a certificate of extent of legal non-conformity shall be submitted by the permittee to clarify the intensity of marketing activities allowed.

Definitions from Napa County Code

- *"Agriculture"* means the raising of crops or livestock and includes the following:
  A. Growing and raising trees, vines, shrubs, berries, vegetables, nursery stock, hay, grain and similar food crops and fiber crops;
  B. Grazing of livestock and feeding incidental thereto;
  C. Animal husbandry, including, without limitation, the breeding and raising of cattle, sheep, horses, goats, pigs, rabbits and poultry and egg production;
  D. Sale of agricultural products grown, raised or produced on the premises;
  E. Farm management uses meeting all of the standards in subsections (E)(1) through (E)(6) of this section.... (excerpt from Napa County Code Section 18.08.040)

- "*Marketing of wine*" means any activity of a winery identified in this paragraph which is conducted at the winery and is limited to members of the wine trade, persons who have pre-established business or personal relationships with the winery or its owners, or members of a particular group for which the activity is being conducted on a prearranged basis. Marketing of wine is limited to activities for the education and development of the persons or groups listed above with respect to wine which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20, and may include food service without charge except to the extent of cost recovery when provided in association with such education and development, but shall not include cultural and social events unrelated to such education and development. (Napa County Code Section 18.08.370)

- "*Commercial use*" means a use that involves the exchange of cash, goods or services, barter, forgiveness of indebtedness, or any other remuneration in exchange for goods, services, lodging, meals, entertainment in any form, or the right to occupy space over a period of time. It does not include the growing and subsequent sale of crops or livestock, the manufacturing, assembly, or processing and subsequent sale at wholesale of a product, or the operation of a telecommunication facility. (Napa County Code Section 18.08.170)

- *"Temporary event"* or *"event"* means any festival, fair, show, showcase, house or garden design tour, concert, dance, rally, parade, demonstration or competition of creative athletic form, or any other gathering or assemblage of individuals for the purpose of observing or engaging in expressive activities within the ambit of the First Amendment of the United States Constitution and Sections 2, 3 and 4 of Article 1 of the California Constitution, including, but not limited to, music, dance, theater, speech, athletics, or any other visual, audio, or tactile arts or combination thereof, including incidental retail sales of the products of such activities, as long as such sales are not advertised off-site; which is held at any place other than a highway as defined in Section 10.24.010 of this code, a permanent building or installation constructed and primarily used for the

purpose of conducting such activity or one similar thereto, property owned or leased by the state of California, or property owned or leased by a public school district for use as a public school site, and to which the public is invited or admitted with or without the payment of an admission charge. (excerpt from Napa Count Code Section 5.36.101)

Relevant Policies from the Napa County General Plan

Goal AG/LU-1: Preserve existing agricultural land uses and plan for agriculture and related activities as the primary land uses in Napa County.

Policy AG/LU-1: Agriculture and related activities are the primary land uses in Napa County.

Policy AG/LU-2: "Agriculture" is defined as the raising of crops, trees, and livestock; the production and processing of agricultural products; and related marketing, sales and other accessory uses. Agriculture also includes farm management businesses and farm worker housing.

Action Item AG/LU-2.1: Amend County Code to reflect the definition of agriculture" as set forth within this plan, ensuring that wineries and other production facilities remain as conditional uses except as provided for in Policy AG/LU-16, and that marketing activities and other accessory uses remain incidental and subordinate to the main use.

Policy AG/LU-13: The 1990 Winery Definition Ordinance, recognized certain pre-existing wineries and winery uses as well as new wineries. For wineries approved after the effective date of that ordinance, agricultural processing includes tours and tastings by appointment only, retail sales of wine produced by or for the winery partially or totally from Napa County grapes, retail sale of wine-related items, activities for the education and development of consumers and members of the wine trade with respect to wine produced by or at the winery, and limited non-commercial food service. The later activity may include wine-food parings. All tours and tastings, retail sales, marketing activities, and non-commercial food service must be accessory to the principal use of the facility as an agricultural processing facility. Nothing in this policy shall alter the definition of "agriculture" set forth in Policy AG/LU-2.

Policy AG/LU-16: In recognition of their limited impacts, the County will consider affording small wineries a streamlined permitting process. For purposes of this policy, small wineries are those that produce a small quantity of wine

using grapes mostly grown on site and host a limited number of small marketing events per year.

Action Item AG/LU-16.1: Consider amendments to the Zoning Ordinance defining "small wineries," a "small quantity of wine," "small marketing events," and "mostly grown on site," and establishing a streamlined permitting process for small wineries which retains the requirement for a use permit when the winery is in proximity to urban areas.

NAPA COUNTY
CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT

USE PERMITS

DEPARTMENT REPORT AND RECOMMENDATION

Meeting of October 3, 1984

Agenda Item: 2A

APPLICATION DATA:

APPLICANT: Clos Pegase, Inc (#U-698384, filed 6-21-84)

REQUEST FOR: To establish a 55,000 gallons/year Winery with public tours and tasting on a 21.92 acre parcel.

LOCATION: on the west side of Dunaweal Lane, 600 feet south of its intersection with the Silverado Trail within an AP District (AP #20-150-12)

FINDINGS: [All checked (X) Items Apply to This Application]

SPECIAL INFORMATION:

☒ 1. Details of the proposal are contained in the attached supplemental information sheet.

☒ 2. Comments and recommendations from various County departments and other agencies are attached.

[ ] 3. _____

ENVIRONMENTAL ANALYSIS:

[ ] 4. General Rule (Not Subject to CEQA).

[ ] 5. Categorically Exempt pursuant to the California Enviornmental Quality Act (Class # _____).

[ ] 6. Final Environmental Impact Report # _____ prepared by:

_____

(See Agenda Item # _____).

☒ 7. The project is not anticipated to result in significant environmental effects, either individually or cumulatively. There are no unique or rare biological or physical resources that will be adversely effected. A Negative Declaration is recommended. See attached copy.

[ ] 8. Denial Not Subject to CEQA.

Agenda Item: 2-4

Report and Recommendation

Meeting Date: October 3, 1984

Use Permit #U-698384

PLANNING AND ZONING ANALYSIS:

☒ 9. The procedural requirements for Use Permit outlined in the Zoning Ordinance have been satisfied in regard to this application.

☒ 10. The submitted proposal is in general compliance with Ordinance requirements.

☒ 11. Approval of this proposal would not result in detrimental effects to the public health, safety or general welfare.

☒ 12. The proposal is in conformance with the General Plan designation of Agricultural Resource specified for the property.

☐ 13. The property is within the district boundary and/or the Sphere of Influence of the following districts:

American Canyon County Water District (See attached map).	☐ Within district	☐ Within Sphere
American Canyon Fire Protection District (See attached map).	☐ Within district	☐ Within Sphere
_____	☐ _____	☐ _____
_____		

☐ 14. This proposal should be denied pursuant to findings contained in the attached Exhibit _____.

☐ 15. _____

_____

_____

_____

RECOMMENDATION:

☐ Continue to meeting of _____.

☒ Action

ENVIRONMENTAL:

☐ None Required.

☒ Adopt a Negative Declaration.

☒ Find that the Commission has read and considered the environmental documents relative to #U-698384.

☐ Certify Final EIR as adequate.

PLANNING:

☐ DENIAL based on Finding #_____.

☒ APPROVAL with Findings and subject to the attached Conditions of Approval.

CONDITIONS OF APPROVAL

Agenda Item: 2A

Meeting Date: October 3, 1984

Use Permit: #U-698384

1) ☒ The permit be limited to: Construction of a 55,000 gallons/year winery with public tours and tasting.

Any expansion or changes in use to be by separate Use Permit submitted for Commission consideration.

2) ☒ Submission of a detailed landscaping, fencing and parking plan to the Department for review and approval indicating names and locations of plant materials, method of maintenance and location of off-street parking spaces. Said plan to be submitted prior to issuance of the Building Permit. Landscaping, fencing and parking to be completed prior to finalization of Building Permit.

3) ☒ Provisions for a minimum of 20 off-street parking spaces on a dust free, all weather surface approved by Public Works.

4) ☒ Plans for any outdoor signs be submitted to the Department for review and approval with regard to design, area, height and placement.

☐ The applicant enter into an agreement with the County not to oppose annexation to an appropriate service district when deemed necessary by the County. The agreement to be reviewed by Environmental Health and approved by County Counsel.

☐ Annexation of the property to the following districts:

- ☐ American Canyon County Water District
- ☐ American Canyon Fire Protection District
- ☐ _____

☐ All open storage of _____ be screened from view of _____ and adjacent properties by a visual barrier. No open storage to exceed height of screening.

☐ The permit be limited to a ____ year period.

5) ☒ Compliance with all applicable building codes, zoning standards and requirements of various County departments and agencies.

6) ☒ Mitigation Measures contained in the attached Negative Declaration

CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT
SUPPLEMENTAL INFORMATION SHEET
USE PERMIT APPLICATION

1. DESCRIPTION OF PROPOSED USE:

USE: Winery and Vineyard Operation

PRODUCT OR SERVICE PROVIDED: Table wines

FLOOR AREA: EXISTING STRUCTURES none SQ. FT. NEW CONSTRUCTION 25,000 SQ. FT.±

INDICATE SQUARE FOOTAGE ON EACH FLOOR DEVOTED TO EACH SEPARATE USE WITHIN ~~AN EXISTING~~ AND/OR PROPOSED BUILDING: See attached letter.

SEATING CAPACITY: RESTAURANT N/A BAR N/A OTHER

EXISTING STRUCTURES OR IMPROVEMENTS TO BE REMOVED: 1100 sq. ft. residence

RELATED NECESSARY CONCURRENT OR SUBSEQUENT PROJECTS ON THE SITE OR IN SURROUNDING AREAS: None

2. NEW CONSTRUCTION:

PROJECT PHASING: 1) 8,000 cases (tours & tasting) 2) 25,000 cases 3) 50,000 cas

CONSTRUCTION TIME REQUIRED (EACH PHASE): 1) 1 year 2) 3 years 3) 5 years

TYPE OF CONSTRUCTION: Conc. slab/ Wd. frame/ Stucco/ Tunnels

MAX. HEIGHT (FT.): EXISTING STRUCTURES N/A PROPOSED STRUCTURES 35'

DESCRIPTION OF PROPOSED EXTERIOR NIGHT LIGHTING: Security and crushing pad. H.I.D. fixtures

3. AVERAGE OPERATION:

HOURS OF OPERATION 8 A.M. TO 5 P.M. DAYS OF OPERATION 5 days/wk.

NUMBER OF SHIFTS: N/A (CURRENTLY) EMPLOYEES PER SHIFT: N/A (CURRENTLY) FULL TIME N/A PART TIME N/A

NUMBER OF SHIFTS PROPOSED: 1 TOTAL EMPLOYEES PER SHIFT PROPOSED: 3 (initially) FULL TIME 3 PART TIME 0

NUMBER OF DELIVERIES OR PICK-UPS: PER DAY 3 PER WEEK 15

NO. VISITORS ANTICIPATED: PER DAY 100 PER WEEK

ARE THERE SPECIAL OPERATIONS? PLEASE DESCRIBE ON SEPARATE PAGE

4. LANDSCAPING AND PARKING:

EXISTING LANDSCAPING PLAN SUBMITTED: YES X NO Existing vineyard and oak forest (See aerial photo)

PROPOSED LANDSCAPING PLAN SUBMITTED: YES NO X To be designed.

PARKING SPACES: EXISTING SPACES 0 EMPLOYEE CUSTOMER

PROPOSED SPACES 20 EMPLOYEE 3 CUSTOMER 17

5. UTILITIES:

WATER SUPPLY SOURCE: Existing well, storage tank & reservoir METHOD OF SEWAGE DISPOSAL: Underground septic system

IS ANNEXATION TO A SPECIAL SERVICE DISTRICT PROPOSED?: YES _____ NO X

NAME OF DISTRICT: _____

6. LICENSES OR APPROVALS REQUIRED:

DISTRICT N/A REGIONAL N/A

STATE A.B.C. FEDERAL B.A.T.F. (Bond)

7. WINERY OPERATION:

Yes CRUSHING Yes FERMENTATION Yes STORAGE/AGING Yes BOTTLING/PACKING

Yes SHIPPING: VIA: Truck; Yes ADMINISTRATIVE: Yes TOURS/PUBLIC TASTING

No OTHER: _____

GALLONS OF WINE TO BE PRODUCED:

INITIAL OR CURRENT PRODUCTION 20K GALLONS/YEAR

ULTIMATE ESTIMATED PRODUCTION ~~120K~~ 55,000 GALLONS/YEAR

REQUESTED PRODUCTION CAPACITY ~~120K~~ 55,000 GALLONS/YEAR

METHOD OF DOMESTIC WASTE DISPOSAL: Underground septic & leach lines

METHOD OF INDUSTRIAL WASTE DISPOSAL: " " " "

GALLONS OF DOMESTIC WASTE PRODUCED: 300 gal. PER day (100 visitors)

GALLONS OF INDUSTRIAL WASTE PRODUCED: 30,000 gal. PER year (Phase I)

METHOD OF SOLID WASTE DISPOSAL: Returned to and plowed into vineyard.

CAPACITY OF WATER SUPPLY: Well ~~GALLONS~~ GALLONS.

WATER AVAILABILITY: _____ GALLONS PER MINUTE.

ON-SITE FIRE PROTECTION: Yes

EMERGENCY WATER STORAGE; 6,000 GALLONS. and 14 acre-ft. reservoir

TYPE OF STORAGE FACILITY: 6,000 gallon tank and reservoir

8. SPECIFIC INFORMATION FOR REST HOMES/DAY CARE CENTERS: N/A

TYPE OF CARE: _____

TOTAL NUMBER OF GUESTS: EXISTING: _____ PROPOSED: _____

NUMBER OF BEDROOMS: EXISTING: _____ PROPOSED: _____

SPECIAL CARE HOME WITHIN 300 FEET OF PROPERTY?: _____

NUMBER OF EMPLOYEES: FULL TIME: _____ PART TIME: _____

NAPA COUNTY

CONSERVATION — DEVELOPMENT
AND PLANNING DEPARTMENT

JAMES H. HICKEY
Director

1195 THIRD STREET, ROOM 210 • NAPA, CALIFORNIA 94559-3092
AREA CODE 707/253-4416

May 28, 1987

Assessor's Parcel # 20-150-12

Clos Pegase Winery
P.O. Box 305
Calistoga, Ca. 94515

Please be advised that Use Permit Application Number U-458687 to expand the winery with the increase in annual production, roof an existing work area, add 19,000 sq. ft. in caves on the winery site and to construct wastewater treatment ponds on the adjacent parcel across Dunaweal Lane located along Dunaweal Lane approximately 500 feet south of Silverado Trail within an AP (AGricultural Preserve) District. has been approved by the Napa County Conservation, Development and Planning Commission based upon the following conditions:

(SEE ATTACHED LIST OF CONDITIONS OF APPROVAL)

APPROVAL DATE: May 27, 1987

The use permit becomes effective ten (10) working days from the approval date unless an appeal is filed with the Napa County Board of Supervisors pursuant to Title XIII of the Napa County Code. In the event an appeal is made to the Board, you will be notified.

Pursuant to Section 12806 of the Napa County Code, the use permit must be activated within one (1) year and ten (10) calendar days from the approval date or the use permit shall automatically expire and become void. A one-year extension of time in which to activate the use permit may be granted by the County provided that such extension request is made thirty (30) days prior to the expiration date. A request for an extension of time is subject to payment of a $190.00 filing fee.

Very truly yours,

JAMES H. HICKEY
Secretary/Director

JHH:ml:1

NOTE: Approved with modification of condition #3:

Director authorized to increase minimum parking spaces to 70 if circumstances require.

Approved with additional Mitigation Measures (see Attachment A)

cc: Bill L. Hall, Building Codes Administrator
Assessor's Office

EXHIBIT 15

Rev. 4/87

-23-

PAGE 1 OF 2

ATTACHMENT A

Additional Mitigation Measures
imposed by the Conservation, Development and
Planning Commission

Meeting: May 27, 1987
File #: U-450687

AESTHETICS

- Screen visibile portions of the waste water treatment ponds from residences along the Silverado Trail south easterly of Dunaweal Lane with strategically placed native vegetation.

AIR QUALITY

- Use gravel and chemical suppressants as often as necessary for on-site roads used by heavy equipment, to mitigate particulate emission impacts.

- Use watering of working areas, storage pile surfaces and traffic areas, to mitigate particulate emission impacts.

- Cover cave tailings storage pile surfaces with topsoil and revegetate prior to the start of the wet season (October 15), to prevent erosion and minimize particulate emission impacts.

EXHIBIT 15

PAGE 2 OF 2

CONDITIONS OF APPROVAL

Agenda Item: 10

Meeting Date: May 20, 1987
Use Permit: #U-458687

1. The permit be limited to an increase in annual production capacity not to exceed 200,000 gallons.

2. Winery expansion shall be in accordance with project description and drawings submitted on January 23, 1987, made as part of this application, including 1) project phasing, 2) location and 3) design (as maybe modified by the Commission).

   Any expansion or changes in use to be by separate Use Permit submitted for Commission consideration.

3. Provisions for a minimum of 35 off-street parking spaces on a dust free, all weather surface approved by Public Works Department the

4. Excavated material related to 19,000 square feet of addition tunnels, shall not be sold for commercial purposes, but shall be disposed of in a manner approved by the Director.

5. Compliance with all applicable building codes, zoning standards and requirements of various County departments and agencies.

6. Mitigation measures contained in the attached Negative Declaration.

:3f

ATTACHMENT 1

Mitigation Measures for
Clos Pegase - Kiriko Ltd.
Use Permit (#U-458687)

HYDROLOGY, WATER QUALITY

1. Plans for the proposed private sewage disposal system shall be designed by a licensed Civil Engineer and be accompanied by complete design criteria based upon local conditions and shall be subject to approval by the Department of Environmental Health prior to issuance of any permits.

2. That the use of the drainfield area be restricted to activities which will not contribute to compaction of the soil with consequent reduction in soil aeration. This includes equipment storage, traffic, livestock, etc., over the system.

3. The applicant shall maintain regular monitoring of the waste water system required by the Department of Environmental Health and submit quarterly reports. An annual permit is required.

4. Since the proposed ponds are to be installed on a separate parcel from the facility they are to serve, an agreement to grant a sewage easement must be filed with the Department of Environmental Health prior to issuance of sewage permits.

5. That the water supply system comply with the California Safe Drinking Water Act. This will require an annual permit from the Department of Environmental Health. A plan review of the water system will also be required.

6. That all solid waste be stored and disposed of in a manner to prevent nuisances or health threats from insects, vectors and odors.

7. Restriction of all ground disturbing activities (i.e., grading) to the dry season between April 15 and October 15.

8. Replanting of all areas disturbed by grading and construction activities prior to the beginning of the rainy season (by mid-October) to the satisfaction of the Resource Conservation District. It is recommended that topsoil be stockpiled to be redistributed on cut and fill slopes for more successful revegetation efforts.

9. Erosion control be provided to dispose of any concentrated runoff from all buildings constructed on parcel, including a storm drain plan indicating energy dissipation structures to be installed.

10. Water shall not be allowed to flow over cut and fill slopes. Drainage shall be intercepted and diverted away from cut and fill slopes by use of up slope berms or interceptor ditches and energy dissipation structures shall be installed when necessary.

11. Sediment catch basins shall be installed to contain the sediment runoff and keep it from moving into water channels beyond the property boundaries.

NOISE

12. Limitation of all construction activities on the proposed facilities to weekdays between Monday and Friday when they will cause the least amount of annoyance (i.e., between 7:30 AM and 4:30 PM).

13. All construction equipment shall be property and adequately mufflered at all times.

14. Place noisy stationary equipment such as compressors and pumps away from developed areas off-site and/or the provision of acoustical shielding around such equipment.

AESTHETICS

15. All exterior lighting shall be shielded and directed away from residences and roadways off-site.

CULTURAL

16. Placement in the specifications covering this project of a stipulation binding the applicant, his employees, and/or contractor(s) to stop all work within 35 feet if buried archaeological or historic materials are discovered during future development. A qualified archaeologist shall be retained to evaluate the find(s) and to recommend mitigation procedures, if necessary. Prehistoric archaeological materials include, but are not limited to, obsidian, chert, and basalt flakes and artifacts, groundstone (such as portars and pestles), shell beads and pendants, midden (locally darkened soil), and human graves. Historic archaeological materials include, but are not limited to, glass bottles, privys, and ceramics. All such recommendations, with the concurrence of the County Planning Director, be implemented.

TRAFFIC

17. Right of way widening to 30 feet from the centerline of Dunaweal Lane be granted to the County for roadway and utility purposes.

18. The access road serving the winery be a minimum width of 20 feet and consist of a minimum structural section equivalent to 5 inches of Class II Aggregate Base plus 2 inches of Asphalt Concrete.

19. Visitor parking areas shown on the site plan and any additional visitor parking required by the Commission have a minimum structural section equivalent to the same as the above access road.

20. Employee parking areas shown on the site plan and any additional areas required by the Commission have a minimum structural section equivalent to 5 inches of Class II Aggregate Base plus a double seal coat.

21. Any necessary storm drainage improvements be constructed.

22. All the above improvements be constructed according to plans prepared by a registered civil engineer and reviewed and approved by this department. A plan check and inspection fee in an amount equal to 3% of the estimated cost of construction of the above improvements be paid this department.

23. All construction within the County road right of way be in accordance with an encroachment permit issued by the Department of Public Works.

PUBLIC HEALTH

24. Compliance with Napa County Mosquito Abatement District Guidelines including:

    A. Access to ponds for maintaining mosquito control, weed control, and aquatic midge (gnats) control.

    B. Good access road to ponds.

    C. All levees, cross levees, and dikes wide enough for vehicular traffic (minimum 12 feet).

    D. Keys to locks or a place for Mosquito Abatement District lock on any gate to ponds.

    E. Fences on outside of levees enough to facilitate vehicular traffic.

    F. All levees, cross levees, and dikes clear of obstructions (pipes, pumps, electrical boxes, fuel tanks, etc.) to permit vehicular traffic.

25. Weed Control

    A. Property owners shall furnish soil sterilant (Aetrex, Krovar, Karmex, etc.).

    B. Mosquito Abatement District will apply on yearly basis.

26. Aquatic Midge Control

    A. Be able to launch boat in ponds (or lakes) for midge control.

NOTE: Any pond, lake, or reservoir, is a good potential midge source.

I understand and explicitly agree that with regards to all CEQA and Permit Streamlining Act (i.e., GCS 63920-63962) processing deadlines, this revised application will be treated as a new project. The new date on which said application will be considered complete is the date this project revision statement is received by the Napa County Conservation, Development and Planning Department.

I AGREE TO INCLUDE THE ABOVE MITIGATION MEASURES IN THE PROJECT.

_____ 4/21/87
Date

_____
Date

CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT
SUPPLEMENTAL INFORMATION SHEET
USE PERMIT APPLICATION

DESCRIPTION OF PROPOSED USE:

USE: operation of vineyard and bonded winery

PRODUCT OR SERVICE PROVIDED: Table wine

FLOOR AREA: EXISTING STRUCTURES 25,000 SQ. FT. NEW CONSTRUCTION 1,600 SQ. FT. of for existing work area and 19,000 sq.ft. additional tunnels.
INDICATE SQUARE FOOTAGE ON EACH FLOOR DEVOTED TO EACH SEPARATE USE WITHIN AN EXISTING ground floor: 1,600 sq.ft. roof for existing work area;
AND/OR PROPOSED BUILDING: 19.000 sq.ft. caves for barrel and bottle aging of (underground)

SEATING CAPACITY: RESTAURANT N/A BAR N/A OTHER N/A

EXISTING STRUCTURES OR IMPROVEMENTS TO BE REMOVED: N/A

RELATED NECESSARY CONCURRENT OR SUBSEQUENT PROJECTS ON THE SITE OR IN SURROUNDING
Install process wastewater system of approx. 1.5 million gallons capacit
AREAS: on approx. 2 acres of AP# 20-150-17 with pipelines

2. NEW CONSTRUCTION: PHASE I: pave drive, install process wastewater system an 1,600 sq.ft. roof. PHASE II: install aging caves.
PROJECT PHASING:

CONSTRUCTION TIME REQUIRED (EACH PHASE): PHASE I: 1987-1988. PHASE II: 1988-

TYPE OF CONSTRUCTION: Wood Frame Roof and Supports; Earth-fill Ponds; Excava Caves

MAX. HEIGHT (FT.): EXISTING STRUCTURES 35' PROPOSED STRUCTURES 10'±(Pc 25'±/Ba

DESCRIPTION OF PROPOSED EXTERIOR NIGHT LIGHTING: No change

3. AVERAGE OPERATION: N-Normal Season H-Harvest Season

HOURS OF OPERATION 0700 N / 0500 H A.M. TO 1800 N / 2400 H P.M. DAYS OF OPERATION M-F N / 7 Days

NUMBER OF SHIFTS: 1 N / 2 H (CURRENTLY) EMPLOYEES PER SHIFT: 5 N / 10 H (CURRENTLY) FULL TIME X PART TIME ___

NUMBER OF SHIFTS PROPOSED: 1 N / 2 H TOTAL EMPLOYEES PER SHIFT PROPOSED: 10 N / 15 H FULL TIME Y PART TIME ___

NUMBER OF DELIVERIES OR PICK-UPS: PER DAY 2N / 6 H PER WEEK 10 N / 30 H

NO. VISITORS ANTICIPATED: PER DAY 75 Average (est.) / 200 Peak (est.) PER WEEK 725 week (e

ARE THERE SPECIAL OPERATIONS? PLEASE DESCRIBE ON SEPARATE PAGE No Change.

4. LANDSCAPING AND PARKING:

EXISTING LANDSCAPING PLAN SUBMITTED: YES X NO ___

PROPOSED LANDSCAPING PLAN SUBMITTED: YES No Chang NO ___

PARKING SPACES: EXISTING SPACES 35 EMPLOYEE 15 CUSTOMER 20

PROPOSED SPACES No Change EMPLOYEE CUSTOMER

5. UTILITIES: Domestic-septic tank and leach field Process-aerated lagoons w/spray dispos on vineyard and landscaping, existing t

WATER SUPPLY SOURCE: Two wells METHOD OF SEWAGE DISPOSAL: _____

IS ANNEXATION TO A SPECIAL SERVICE DISTRICT PROPOSED? YES _____ NO X

NAME OF DISTRICT: N/A

6. LICENSES OR APPROVALS REQUIRED:

DISTRICT N/A REGIONAL N/A

STATE No Change FEDERAL No Change

7. WINERY OPERATION:

X CRUSHING Y FERMENTATION X STORAGE/AGING X BOTTLING/PACKING

X SHIPPING: VIA: truck; X ADMINISTRATIVE: Y TOURS/PUBLIC TASTING

X OTHER: Process wastewater treatment and disposal.

GALLONS OF WINE TO BE PRODUCED: INITIAL OR CURRENT PRODUCTION 55,000 GALLONS/YR

REQUESTED PRODUCTION CAPACITY 200,000 GALLONS/YR

METHOD OF DOMESTIC WASTE DISPOSAL: Septic tank and leachfield.

METHOD OF INDUSTRIAL WASTE DISPOSAL: Septic tank and mound (existing) Aerated lagoons and spray disposal (prop

GALLONS OF DOMESTIC WASTE PRODUCED: 450 Average 800 Peak PER Day

GALLONS OF INDUSTRIAL WASTE PRODUCED: 4,000 Normal 8,000 Harvest PER Day

METHOD OF SOLID WASTE DISPOSAL: Removal by contract garbage service and/or application of pomace and stems to vineyards

CAPACITY OF WATER SUPPLY: 37 GPM GALLONS.

WATER AVAILABILITY: 200 GPM GALLONS PER MINUTE. (To winery)

ON-SITE FIRE PROTECTION: Hydrant/1,000GPM @ 50 PSI

EMERGENCY WATER STORAGE: 70,000 GALLONS. Tank and reservoir

TYPE OF STORAGE FACILITY: Concrete tank and frost control pond

8. SPECIFIC INFORMATION FOR RESIDENTIAL CARE FACILITY/DAY CARE CENTERS:

TYPE OF CARE: N/A

TOTAL NUMBER OF GUESTS/CHILDREN: EXISTING: N/A PROPOSED: N/A

NUMBER OF BEDROOMS: EXISTING: N/A PROPOSED: N/A

IS FACILITY LOCATED WITHIN 300 FEET OF ANOTHER FACILITY?: N/A

NUMBER OF EMPLOYEES: FULL TIME: N/A PART TIME: N/A

20-150-12
17

NAPA COUNTY

CONSERVATION — DEVELOPMENT
AND PLANNING DEPARTMENT

JEFFREY R. REDDING
Director

1195 THIRD STREET, ROOM 210 • NAPA, CALIFORNIA 94559-3092
AREA CODE 707/253-4416

April 6, 1990

Michael Wilson
Clos Pegase
P.O. Box 305
Calistoga, California 94515

Re: Request for Approval of Fund-Raiser for Calistoga Educational Foundation--May 20, 1990

Dear Mr. Wilson:

This letter is in response to your March 8, 1990 request for approval to hold a fund raiser to benefit the Calistoga Educational Foundation on May 20, 1990 from 4-8:00 p.m. at the Clos Pegase Winery, 1060 Dunaweal Lane, Calistoga, under the Board of Supervisors One-Time Only Special Events policy Reference is also made to the March 6, 1990 letter from Steven W. Spadarotto, Controller, Clos Pegase Winery relating to the approved uses at the Clos Pegase facility, approved as part of use permit #U-458687.

As I indicated in a previous letter (dated February 23, 1990), one-time only special events of a charitable nature are approvable administratively only if similar events have taken place in the preceding year. To date, evidence that only one such event took place at Clos Pegase Winery during 1989 has been provided to the Department. The approval of this event in 1989 (held to benefit the Calistoga Educational Foundation--May 21, 1989) was used as the basis for approving the fund-raising event for the Napa Valley Opera House at the Clos Pegase Winery on March 31, 1990. Therefore, unless evidence can be provided to the Department that additional events of a similar nature were held at the Winery in 1989 and specifically authorized by the Director, the May 20th event cannot be approved administratively.

Mr. Spadarotto indicated by letter of March 6, 1990 that he felt the fund-raising event on May 20th and indeed any such event was authorized by use permit #U-458687 as part of the approved public tours and tasting permit, currently held by the Winery. After consultation with the County Counsel, it is our judgement that the public tours and tasting authorization does not authorize events such as you describe in your March letter.

Therefore, in order for the May 20th event to be approved by the County, you must demonstrate that more than one similar event was specifically authorized by the County in 1989. Alternately, the May 20th event may be approvable by the Board of Supervisors under the procedure and authority granted by section 8020 of the Napa

County Code. Should you decide to pursue a permit under section 8020, please contact Agnes Del Zompo, Clerk of the Board of Supervisors.

If I can provide any additional clarification or answer any questions please contact me.

Sincerely,

Jeffrey Redding

Jeffrey Redding
Director

cc: Board of Supervisors
Jay Hull, County Administrator
Agnes Del Zompo, Clerk of the Board
Robert Westmeyer, County Counsel
Michael Miller, Supervising Planner

JR/jr
HmeDsc
ClsPgse1

INTER-OFFICE MEMO

TO: Agnes Del Zompo,
Clerk of the Board of Supervisors

FROM: Jeffrey R. Redding, Director
Conservation, Development and Planning Department

SUBJECT: Request for Approval of an Outdoor Festival Permit--Sharpsteen Museum Association, Inc. to be held at the Clos Pegase Winery on October 12, 13, and 14, 1990. Assessor's Parcel No. 20-150-12.

DATE: July 19, 1990

The Department has reviewed the June 27, 1990 request from Marlys Gilmore, President, Sharpsteen Museum Association, Inc., to hold a fundraising event at the Clos Pegase Winery on Friday and Saturday, October 12 and 13 from 6:00 p.m. to 10:00 p.m. and Sunday, October 14, 1990 from 10:00 a.m. to 4:00 p.m..

Staff has reviewed this request in light of the recently adopted Winery Definition Ordinance (WDO), the provisions of the use permit which governs the operation of the Clos Pegase Winery and the previous activities authorized at the Winery under the Board of Supervisors One-Time Only Special Events Policy. In reviewing the permit history for the Clos Pegase Winery, only one (1) permit for a one-time only charitable event was issued to the Winery in 1989. Since these events now represent legal, non-conforming uses, future events under the Board's One-Time Special Events Policy may be authorized by the Director only at previously approved levels. The Clos Pegase Winery received approval for a one-time only event, benefitting the Napa Valley Opera House, on March 16, 1990 for an event held March 31, 1990. Therefore, no further approvals may be given by the Director in 1990 for activities authorized by this Board policy.

The Department has reviewed the provisions of use permit #U-458687 issued to the Clos Pegase Winery and in consultation with the County Counsel, has determined that the approved use permit does not authorize activities such as the event described in materials furnished by the applicant as part of the application for an Outdoor Festival Permit.

The Outdoor Festival Ordinance appears to be applicable to the event requested by the Sharpsteen Museum Association, Inc. since the event involves both outdoor music and events. Therefore, the following conditions are recommended, should the Board of Supervisors approve the requested Outdoor Festival Permit:

1. Provisions be made for all guest and employee parking to be on-site. However, if this is not possible and there is off-site parking beyond walking distance of the site, the applicant shall provide shuttle service to and from the events.

2. Any temporary signs of a limited size and number identifying each event be located on the site area. Such signs shall not be placed earlier than the day of the event. All such signs shall be removed no later than 5:00 p.m. the day following the event.

3. Adequate on-site refuse disposal facilities be provided.

4. The California Highway Patrol be alerted at least three days in advance of each event.

5. Provisions be made for adequate on-site and off-site traffic control to ensure maximum protection and safety of all persons using Dunaweal Lane as well as persons attending the event.

6. Maintain all normal access clear of obstructions so that fire equipment and other emergency vehicles will not be impeded.

7. The applicant shall submit letters to the Clerk of the Board of Supervisors obtained from the Napa County Public Works Department, Division of Environmental Management and the Sheriff's Department, as well as the State Division of Forestry and California Highway Patrol as evidence of said agencies' and Departments' review of the proposed events, including a listing of such conditions as said agencies and departments feel are appropriate for the proposed event.

8. Provide security and medical needs as necessary to ensure public health, safety and welfare.

cc: Robert Westmeyer, County Counsel
Marlys Gilmore, President, Sharpsteen Museum Ass'n. Inc.

JRR:jcact2/sharpmus.fes

NAPA COUNTY

CONSERVATION -- DEVELOPMENT
AND PLANNING DEPARTMENT

JEFFREY REDDING
Director

1195 THIRD STREET, ROOM 210 • NAPA, CALIFORNIA 94559-3092
AREA CODE 707/253-4416

December 9, 1991

Patrick R. Connelly, Events Coordinator
Clos Pegase
P. O. Box 305
Calistoga, California 94515

Dear Mr. Connelly:

This letter is in response to your request to sponsor the Spring Benefit Auction, a benefit for the Calistoga Educational Foundation on May 17, 1992 at Clos Pegase Winery, 1060 Dunaweal Lane, Calistoga. All proceeds from the proposed event will be used directly to enhance the educational opportunities for students in Calistoga's public schools. You have also indicated that the Calistoga Educational Foundation is a non-profit organization that will receive the proceeds from the event to be held at the Winery.

As your letter indicates, one-time only social events under the Board of Supervisors' Limited Social Events Policy may only be granted by the Director if such events were previously authorized by the Director under this policy prior to 1990. A review of County files indicated that one (1) such event was authorized by the Director for the Close Pegase Winery prior to 1990. As a consequence, one event of the type that your described in your letter was authorized both in 1990 and 1991. Thus, you will be permitted to sponsor/conduct one event per year authorized under the March 1988 Limited Social Events Policy. You have proposed that the May 17, 1992 be that event for 1992. Therefore, the May 17, 1992 event for the Calistoga Educational Foundation is approved and will constitute the sole event that may be authorized by the Director in calendar year 1992 under the Board of Supervisors' Limited Social Events Policy, adopted in August 1983 and revised in March, 1988.

The following conditions are applicable to this approval:

1. Provisions shall be made for all guest and employee parking to be on-site.

2. Any temporary signs of a limited size and number identifying each event be located on the site area. Such signs shall not be placed earlier than the day of the event. All such signs shall be removed no later than 5:00 P.M. the day following the event.

3. The applicant shall provide adequate on-site refuse disposal facilities.

4. The California Highway Patrol shall be alerted at least three days in advance of the event.

5. Provisions shall be made for adequate on-site and off-site traffic control to ensure maximum protection and safety of all persons using Dunaweal Lane as well as persons attending the event.

6. The applicant shall maintain all normal access clear of obstructions so that fire equipment and other emergency vehicles will not be impeded.

7. The applicant shall submit letters to the Director obtained from the Napa County Public Works Department, Division of Environmental Management and the Sheriff's Department, as well as the State Division of Forestry and California Highway Patrol as evidence of said agencies' and Departments' review of the proposed events, including a listing of such conditions as said agencies and departments feel are appropriate for the proposed event.

8. The applicant shall provide security and medical needs as necessary to ensure public health, safety and welfare.

Please call me if you have any questions.

Very truly yours,

Jeffrey R. Redding

JEFFREY R. REDDING
Director

cc: Board of Supervisors
Robert Westmeyer, County Counsel
Michael Miller, Deputy Planning Director
Bill Bickell, Director of Public Works
Trent Cave, Director of Environmental Management
Byron Carniglia, State Division of Forestry
Gary Simpson, Napa County Sheriff
Captain Charles Weaver, California Highway Patrol
Joan Rubadeau, Calistoga Educational Foundation

JRR:rl:4a:ClisPeg.Evt

NAPA COUNTY

CONSERVATION -- DEVELOPMENT
AND PLANNING DEPARTMENT

1195 THIRD STREET, ROOM 210 • NAPA, CALIFORNIA 94559-3092
AREA CODE 707/253-4416

JEFFREY REDDING
Director

January 18, 1995

Patrick R. Connelly
Clos Pegas Winery
P.O. Box 305
Calistoga, CA 94515

RE: Limited Social Event/Temporary Events License
APN: 20-150-12

Dear Connelly:

We have received your letter of January 3, 1995, wherein you have requested approval of a Limited Social Event at your winery facility for the Spring Benefit Auction, to be held by the Calistoga Education Foundation on May 13, 1995.

The County adopted a new ordinance in March, 1994, which now regulates any festival, fair, show, showcase, house or garden design tour, concert, dance, public fireworks display, rally, parade, demonstration or competition of creative athletic form, or any other gathering or assemblage of individuals, including, but not limited to music, dance, theater, speech, athletics or any other visual, audio or tactile arts or combination thereof to which the public is invited or admitted with or without payment of an admission charge. A **Temporary Event License** from the County is required prior to holding such events.

This ordinance replaced the Outdoor Festival License and the Limited Social Events Policy.

It would appear that the non-marketing public event you propose would be subject to the temporary events ordinance. Enclosed is an application package for a Temporary Events License. Please contact me or Barbara Abate in our office weekdays, between 12:00 and 5:00 PM, if you should have any questions.

Please note that the adopted ordinance requires that applications for **Temporary Event Licenses** must be submitted to this office, at least **90 days** prior to the proposed events.

Sincerely,

Wyntress Chatman Balcher
Planner III

cc: Mel Varrelman, Supervisor, District 3
Jeffrey Redding, Director
Sylvia Toth, Supervising Planner
Gail Feldman, Administrative Analyst

EXHIBIT 5



EVENTS
Event Hosting
Upcoming Events
WINE
All Wines
Hommage
White & Rosé Wines
Red Wine
Dessert Wine
Library

EVENT HOSTING



Dazzling maypole lights illuminate the night sky

Plan an Event:

To speak with our Event Team, call:

707.921.2631

EMAIL US »

AT CLOS PEGASE WINERY WE HELP YOU CREATE the most unique and memorable experiences. From anniversaries, rehearsal dinners, birthdays, holiday parties, private parties and more, we will transform our winery into your unique vision for the event. Along with the stunning setting, dramatic architecture, and world-class wines, we will provide you with best in class hospitality and get all of the details just right, including food, décor, and live entertainment. No matter the occasion, events at Clos Pegase reflect a welcoming blend of elegance and magic for you to create memories you will never forget.

Clos Pegase provides several distinct spaces for your event, each delivering a unique experience depending on your needs. Whether you are looking for an indoor or outdoor location, a large area for hundreds of guests or an intimate space, Clos Pegase has several different options from which to choose.

A few locations for our events:

- Portico entrance
- Courtyard
- Cave Theater
- Visitor Center
- Cask Room
- Harvest Dining Room
- Vineyard Picnic Area

Contact our Event Team at 707.921.2631 to work with you on all of the details to have the perfect event at Clos Pegase Winery.

Balcher, Wyntress

From: Amy M. Zehring <zehring@smwlaw.com>
Sent: Wednesday, August 19, 2015 9:32 AM
To: Balcher, Wyntress
Subject: Exhibit 4 on Letter on Revised IS/NegDec for Proposed Girard Winery Permit
Attachments: EXHIBIT 4A.pdf

Dear Ms. Balcher,

It has come to my attention that an email and its corresponding attachment were supposed to be part of Exhibit 4 to the letter I emailed yesterday on behalf of the Tofanelli family. I have labeled this addition Exhibit 4A. I would be most grateful if you could add Exhibit 4A to the letter submitted yesterday. My sincere apologies for the omission and any inconvenience this may cause.

Please contact me if you have any questions.

Kind regards,

Amy

Amy Zehring
Shute, Mihaly & Weinberger LLP
396 Hayes Street
San Francisco, CA 94102-4421
v: 415/552-7272
f: 415/552-5816
www.smwlaw.com

SAN FRANCISCO GREEN BUSINESS Please consider the environment before printing this e-mail or attachments.

EXHIBIT 4A

From: "Morrison, David" <David.Morrison@countyofnapa.org>
Subject: RE: WDO, weddings and wineries
Date: January 20, 2015 1:48:05 PM PST
To: "'Norma Tofanelli'" <keepnvap@sonic.net>
Cc: "Tran, Minh" <Minh.Tran@countyofnapa.org>, "McDowell, John" <John.McDowell@countyofnapa.org>

Norma,

PBES continues to rely on the interpretation and analysis contained in Ms. Gitelman's memo dated October 26, 2009. No policy changes with regards to weddings have occurred since it was written.

Your summary of the memo (provided below) is correct.

David

From: Norma Tofanelli [mailto:keepnvap@sonic.net]
Sent: Friday, January 16, 2015 9:12 AM
To: Morrison, David
Cc: Tran, Minh
Subject: Fwd: WDO, weddings and wineries

Hi, David -
I am still waiting confirmation of Napa County's "weddings at wineries" policy.

thank you - Norma

Begin forwarded message:

From: Norma Tofanelli <keepnvap@sonic.net>
Subject: WDO, weddings and wineries
Date: June 24, 2014 1:53:47 PM PDT
To: David Morrison <david.morrison@countyofnapa.org>
Cc: Minh Tran <Minh.Tran@countyofnapa.org>

Hi, David -

As usual, conversation about the WDO inevitably leads to conversation about "weddings at wineries".

It is my understanding that they were not approved during the 2010 WDO expansion of marketing while a pretty thorough review was provided in an October 26, 2009 Memorandum from Hillary Gittelman to the Planning Commission, titled "WDO & Temporary Events" and attached.

Can you confirm the following?

Status of weddings, wedding receptions, birthday parties, anniversary celebrations *et al* at Napa County wineries.

1) Winery permit issued after 1990: not permitted

2) Winery permit issued 1974 - 1990
Only if specifically permitted as part of the use permit

3) Pre-1974 winery
Only if they can prove they were doing before 1974 and request a county-approved certificate of conformity

Thank you for your assistance,

Norma Tofanelli

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Conservation, Development and Planning

1195 Third Street, Suite 210
Napa, CA 94559
www.co.napa.ca.us

Main: (707) 253-4417
Fax: (707) 253-4336

Hillary Gitelman
Director

MEMORANDUM

To:	Napa County Planning Commission and Interested Stakeholders	From:	Hillary Gitelman
Date:	October 26, 2009	Re:	WDO & Temporary Events

At the October 6, 2009 joint meeting of the Planning Commission and the Board of Supervisors, planning staff was directed to:

1. quickly review any options that might exist for using our temporary events ordinance as a way to permit social and cultural events at wineries;
2. offer support to industry group discussions about potential changes to the Winery Definition Ordinance (WDO) of 1990; and
3. assemble some data regarding regional economic conditions and characteristics of Napa County wineries.

The first of these subjects is addressed in this memo via a series of five questions and answers which reference relevant sections of the Napa County General Plan and Napa County Code. The staff interpretations and suggestions inherent in these questions and answers are simply initial thoughts, and are provided to frame discussion by the Commission at their November 18, 2009 meeting. Based on input from the Commission and interested stakeholders at that time and in the weeks that follow, staff will formulate a recommendation for consideration by the Commission and the Board around the end of January, when the Board of Supervisors has requested a report on industry group discussions and staff's data gathering efforts.

Question 1: Are wineries currently allowed to hold weddings, parties and similar cultural and social events?

Answer: Generally no, but it depends on when the winery was established and on what conditions were placed on the winery at the time of its approval. Some wineries were established prior to 1974, before there was a requirement for a use permit. These wineries may continue to host cultural and social events if it was part of their operations prior to 1974 (and if they are recognized via a county-approved certificate of conformity). Wineries approved between 1974 and when the WDO was adopted in 1990 may only host cultural and social events

if they were permitted as part of the winery's use permit. Wineries approved after adoption of the WDO in 1990 may not host cultural and social events because of language included in the definition of "marketing" adopted at that time unless the event qualifies as a "temporary event" and has required permits. Generally, "temporary events" are events protected under the First Amendment of the US Constitution, and are open to the public. (See Question 4 & the definitions provided.)

It should be noted that the prohibition on cultural and social events at post-WDO wineries does not mean that marketing events cannot have a cultural or social component. For example, wine club members may be invited to an event featuring the winery's wine, which also involves music, art, etc. However, the code has been consistently interpreted to prohibit these wineries from hosting weddings, birthday parties, wedding anniversary celebrations, and other purely social events because they have been deemed "unrelated to... education and development" of the persons/groups specified in the definition of "marketing."

Question 2: Are wineries currently allowed to hold business meetings, conferences, and similar events?

Answer: Only if the business meetings are non-commercial and primarily focused on wine education and development. As noted above, wineries established prior to 1974 -- before there was a requirement for a use permit -- may continue to host business meetings, conferences, etc. if these activities were part of their operations prior to 1974 (and if they are recognized via a county-approved certificate of conformity). Wineries approved between 1974 and when the WDO was adopted in 1990 may hold such events if they were permitted as part of the winery's use permit.

Since adoption of the WDO, it has not always been clear whether business meetings and similar events qualify as marketing events. A strict reading of the ordinance would suggest that wineries may *not* host business meetings and the like unless they are "limited to activities for the education and development" of the persons or group involved and are singularly focused on "wine which can be sold at the winery on a retail basis." Under this interpretation, only a business meeting solely focused on the production and sale of wine would be acceptable. However, business meetings that have a marketing objective (e.g. a wine tasting or education event scheduled for a group of bankers as part of a corporate retreat), have often been considered marketing events, as long as a prevalence of such events does not constitute commercial activity or turn the winery into a conference center. Clearly this is one area of the code and the WDO that would benefit from clarification via a code amendment, or the kind of "administrative interpretation" discussed in response to Question 3.

Question 3: Could the County use an "administrative interpretation," rather than a code amendment to allow wineries to hold weddings, parties, business meetings, etc?

Answer: The County could use an interpretation to clarify when business meetings are acceptable. However the County could not use an administrative interpretation to allow weddings, parties, and similar social events. Also, administrative interpretations in general have significant disadvantages over formal code amendments.

By law, "administrative interpretations" or other policies that are adopted by staff or decision-makers may not conflict with regulations or policies formally adopted as part of the County's zoning ordinance or General Plan. Also, because such interpretations may be reversed or re-interpreted with little public notice any time there is a change in staff or a change in the composition of the Commission and/or the Board, they can be considered arbitrary and are not generally viewed as good public policy. Use of an interpretation may also be at odds with General Plan Policy AG/LU-107 which states that "The County shall provide a clear, consistent, timely, *and predictable* review process..." [emphasis added].

With that said, planning staff understands that the prohibition on cultural and social events and the issues surrounding business meetings described in response to Question 1 & 2 are themselves based on interpretations of code language. In the case of cultural and social events, County staff and policy makers have routinely interpreted birthday parties, weddings, etc. to be cultural and social events that are "unrelated to ... education and development" of the persons and groups called out in the definition of "marketing." This interpretation is supported by the last statement in the definition of marketing: "...but shall not include cultural and social events unrelated to such education and development..."

In the case of business meetings, County staff and policy makers have interpreted some business meetings as falling within the definition of "marketing," while acknowledging that the practice of hosting other business meetings can be considered a commercial activity outside the definition of "marketing." Careful consideration should be given to legal issues and potentially preferable alternatives before using an administrative interpretation to clarify when business meetings are acceptable. While there is no phrase in the code expressly describing these meetings as <u>not</u> falling within the definition of marketing (as there is for social and cultural events), there is still the disadvantage that an administrative interpretation can be reversed with little public notice (i.e. only by posting an agenda 72 hours in advance of the meeting) whenever the composition of the Commission or the Board changes.

Question 4: Could the County use the existing temporary events ordinance to allow weddings, parties, business meetings, etc. at wineries?

Answer: Not without amending the ordinance. Temporary events are by definition (see below) related to "expressive activities" protected by the First Amendment of the US Constitution and are open to the public. Common examples include concerts, lectures, and benefit dinners held by non-profit organizations. Wineries may hold social, cultural, and business-related events using the temporary event ordinance (and independent of their approved marketing programs), but only if the events are open to the public (with or without

payment of an admission charge), and are permitted via the procedures outlined in Chapter 5.36 of Napa County Code. Generally, any temporary event with more than 50 attendees requires a permit, which must be applied for at least 60 days in advance of the event. Obviously, weddings, birthday parties and other events that are *by invitation only* do not fall within the definition of temporary events, so the ordinance would have to be amended to provide another category of temporary event that is by invitation, presuming the Commission and the Board can make the case that such events are expressive activities protected under the First Amendment. This idea is discussed in response to Question 5, below.

Question 5: How could the existing temporary events ordinance be amended to permit weddings, parties and similar cultural or social events at wineries?

Answer: While it would be possible to amend the rules governing temporary events to permit "by invitation only" cultural and social events if these events were considered a form of public expression related to First Amendment rights, there may be unintended consequences of such a change and alternative code amendments would be preferable. Four options are evaluated here.

If the temporary events ordinance was simply amended to allow events that are by invitation only (events like weddings, birthday parties, etc.) by making the argument that these events provide for public expression, then these types of events could be permitted at homes, barns, warehouses, and at other properties throughout the County as well as at wineries. As a result, there could be an excessive number of events, and properties that hold regular events could become commercial enterprises in violation of General Plan policies and zoning restrictions.

This unintended consequence (i.e. the potential over-proliferation of events) could be addressed by enacting a new special events ordinance that is unrelated to the First Amendment and that limits the number of events allowed by invitation only (e.g. up to 100 weddings per year on a first come first served basis, and no more than one such event per property per year). The new special events ordinance would not be specific to wineries, and would allow events at a wide variety of locations via an administrative permit, similar to permit required for hot air balloon launching facilities. Strict limitations would have to be included in the new ordinance to avoid conflicting with General Plan policies and zoning restrictions prohibiting commercial activities in agricultural areas.

Another variation on this theme would be to create a new special events ordinance allowing social and cultural events, but only at wineries and only when such events are held in lieu of permitted marketing events. This approach could make use of the same kind of administrative permit process described above, but also would necessitate changing the definition of "marketing" to avoid internal inconsistencies within Napa County Code. Specifically, the definition of "marketing" would need to be amended along the following lines (proposed new text is underlined):

"*Marketing of wine*" means any activity of a winery identified in this paragraph which is conducted at the winery and is limited to members of the wine trade, persons who have pre-established business or personal relationships with the winery or its owners, or members of a particular group for which the activity is being conducted on a prearranged basis. Marketing of wine is limited to activities for the education and development of the persons or groups listed above with respect to wine which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20, and may include food service without charge except to the extent of cost recovery when provided in association with such education and development, but shall not include cultural and social events unrelated to such education and development *except as provided in Section [insert section number]*.

The most efficient way to provide wineries with greater flexibility regarding events would be to avoid establishment of a new administrative permit process and simply adjust the definition of "marketing" further. For example, the following amendment was proposed in 2005 (proposed new text is underlined):

"*Marketing of wine*" means any activity of a winery identified in this paragraph which is conducted at the winery and is limited to members of the wine trade, persons who have pre-established business or personal relationships with the winery or its owners, or members of a particular group for which the activity is being conducted on a prearranged basis. Marketing of wine is limited to activities for the education and development of the persons or groups listed above with respect to wine which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20, and may include food service without charge except to the extent of cost recovery when provided in association with such education and development, but shall not include cultural and social events unrelated to such education and development.

Notwithstanding the preceding paragraph, "marketing of wine" may include a cultural, social or business event if such event occurs during the period commencing on the effective date of Ordinance No. 1267 and ending two years from the effective date of Ordinance No. 1267 and if the event conforms to all of the following requirements:

A. *the winery has a valid use permit which specifically allows marketing events to be held at the winery;*
B. *the event is limited to members of the wine trade or persons who have pre-established relationships with the winery or its owners, or is being conducted for a particular group on a prearranged basis;*
C. *the event involves the education and development of customers for the winery;*
D. *the only alcoholic beverages served at the event are wines which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20 of this Code;*
E. *the only food service provided in association with the event is without charge, except to the extent of cost recovery;*
F. *the event is not scheduled to begin or end during "peak" travel times of 4:00 to 6:00 p.m. on weekdays and 1:00 to 4:00 p.m. on weekends;*

G. *the event may not include the use of outdoor amplified music unless it is specifically authorized by a use permit modification approved by the zoning administrator pursuant to section 18.10.020 of this Code and is based on an analysis outlining feasible methods for complying with the County's noise ordinance and those methods are included as conditions of approval on the use permit modification;*

H. *events within one-quarter mile of residential uses must end (including clean-up) by 10:00 p.m. unless a different time is authorized by a use permit modification approved by the zoning administrator and is based on an analysis outlining feasible methods for complying with the County's noise ordinance and such methods are included as conditions of approval on the use permit modification pursuant to section 18.12.020 of this Code;*

I. *the event will not exceed the number of attendees specified in the winery's use permit for visitors to a particular marketing event; and*

J. *the event will be counted towards the total number of marketing events per year authorized by a winery's use permit.*

Pre-WDO wineries which have not established specific marketing plans may continue to do marketing activities consistent with the visitation allowed in their existing use permits. Where it is unclear what marketing activities were previously authorized, a use permit modification request or a certificate of extent of legal non-conformity shall be submitted by the permittee to clarify the intensity of marketing activities allowed.

Definitions from Napa County Code

- *"Agriculture"* means the raising of crops or livestock and includes the following:
  A. Growing and raising trees, vines, shrubs, berries, vegetables, nursery stock, hay, grain and similar food crops and fiber crops;
  B. Grazing of livestock and feeding incidental thereto;
  C. Animal husbandry, including, without limitation, the breeding and raising of cattle, sheep, horses, goats, pigs, rabbits and poultry and egg production;
  D. Sale of agricultural products grown, raised or produced on the premises;
  E. Farm management uses meeting all of the standards in subsections (E)(1) through (E)(6) of this section.... (excerpt from Napa County Code Section 18.08.040)

- "*Marketing of wine*" means any activity of a winery identified in this paragraph which is conducted at the winery and is limited to members of the wine trade, persons who have pre-established business or personal relationships with the winery or its owners, or members of a particular group for which the activity is being conducted on a prearranged basis. Marketing of wine is limited to activities for the education and development of the persons or groups listed above with respect to wine which can be sold at the winery on a retail basis pursuant to Chapters 18.16 and 18.20, and may include food service without charge except to the extent of cost recovery when provided in association with such education and development, but shall not include cultural and social events unrelated to such education and development. (Napa County Code Section 18.08.370)

- "*Commercial use*" means a use that involves the exchange of cash, goods or services, barter, forgiveness of indebtedness, or any other remuneration in exchange for goods, services, lodging, meals, entertainment in any form, or the right to occupy space over a period of time. It does not include the growing and subsequent sale of crops or livestock, the manufacturing, assembly, or processing and subsequent sale at wholesale of a product, or the operation of a telecommunication facility. (Napa County Code Section 18.08.170)

- *"Temporary event"* or *"event"* means any festival, fair, show, showcase, house or garden design tour, concert, dance, rally, parade, demonstration or competition of creative athletic form, or any other gathering or assemblage of individuals for the purpose of observing or engaging in expressive activities within the ambit of the First Amendment of the United States Constitution and Sections 2, 3 and 4 of Article 1 of the California Constitution, including, but not limited to, music, dance, theater, speech, athletics, or any other visual, audio, or tactile arts or combination thereof, including incidental retail sales of the products of such activities, as long as such sales are not advertised off-site; which is held at any place other than a highway as defined in Section 10.24.010 of this code, a permanent building or installation constructed and primarily used for the

purpose of conducting such activity or one similar thereto, property owned or leased by the state of California, or property owned or leased by a public school district for use as a public school site, and to which the public is invited or admitted with or without the payment of an admission charge. (excerpt from Napa Count Code Section 5.36.101)

Relevant Policies from the Napa County General Plan

Goal AG/LU-1: Preserve existing agricultural land uses and plan for agriculture and related activities as the primary land uses in Napa County.

Policy AG/LU-1: Agriculture and related activities are the primary land uses in Napa County.

Policy AG/LU-2: "Agriculture" is defined as the raising of crops, trees, and livestock; the production and processing of agricultural products; and related marketing, sales and other accessory uses. Agriculture also includes farm management businesses and farm worker housing.

Action Item AG/LU-2.1: Amend County Code to reflect the definition of agriculture" as set forth within this plan, ensuring that wineries and other production facilities remain as conditional uses except as provided for in Policy AG/LU-16, and that marketing activities and other accessory uses remain incidental and subordinate to the main use.

Policy AG/LU-13: The 1990 Winery Definition Ordinance, recognized certain pre-existing wineries and winery uses as well as new wineries. For wineries approved after the effective date of that ordinance, agricultural processing includes tours and tastings by appointment only, retail sales of wine produced by or for the winery partially or totally from Napa County grapes, retail sale of wine-related items, activities for the education and development of consumers and members of the wine trade with respect to wine produced by or at the winery, and limited non-commercial food service. The later activity may include wine-food parings. All tours and tastings, retail sales, marketing activities, and non-commercial food service must be accessory to the principal use of the facility as an agricultural processing facility. Nothing in this policy shall alter the definition of "agriculture" set forth in Policy AG/LU-2.

Policy AG/LU-16: In recognition of their limited impacts, the County will consider affording small wineries a streamlined permitting process. For purposes of this policy, small wineries are those that produce a small quantity of wine

using grapes mostly grown on site and host a limited number of small marketing events per year.

Action Item AG/LU-16.1: Consider amendments to the Zoning Ordinance defining "small wineries," a "small quantity of wine," "small marketing events," and "mostly grown on site," and establishing a streamlined permitting process for small wineries which retains the requirement for a use permit when the winery is in proximity to urban areas.

Frost, Melissa

To: Gallina, Charlene
Subject: RE: Girard Winery Use Permit #P14-00053-UP

Planning Commission Mtg.
AUG 19 2015
Agenda Item # 9B

From: Morrison, David
Sent: Tuesday, August 18, 2015 4:41 PM
To: Balcher, Wyntress; Gallina, Charlene; McDowell, John
Subject: FW: Girard Winery Use Permit #P14-00053-UP

From: L & L Carr [mailto:carr4x4@gmail.com]
Sent: Tuesday, August 18, 2015 4:40 PM
To: Cottrell Anne; Scott Terry; Pope Matt; Morrison, David; Phillips Heather; Basayne Mike; planning@countyofnapa.com
Subject: Girard Winery Use Permit #P14-00053-UP

Dear Planning Commission and Planning Department,

We are requesting a continuance at tomorrow's meeting of the above permit due to the late posting of the documents. The County did not have the agenda plus documentation online until about 4:30 Friday (8/14) afternoon. Such late posting of documentation does not give adequate time for public review. These studies are complex and it is not fair to expect the public to review and make intelligent comments by the time of the Planning Commission meeting (basically two business days) tomorrow morning. The Planning Commission Staff does not have the time either to review any comments that are submitted before the meeting.

It seems that changes need to be considered because the Staff doesn't appear to have time to post the documentation with adequate time for public review. At least a full week, possibly more, from the time of posting data online to the actual hearing needs to be given to the public for comment. We understand that documents are suppose to be posted by Thursdays at noon and then the hearing should be a week and a half later on a Wednesday, not the following Wednesday.

Once again, please continue the Girard Winery Use Permit to a later date so that there can be a full public review and the Planning Commission Staff can also have time to review the public comments.

Thank you,

Lisa Hirayama
Larry Carr
16 Dogwood Court
Napa, CA 94558
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Gallina, Charlene

From: Morrison, David
Sent: Tuesday, August 18, 2015 3:04 PM
To: Balcher, Wyntress; Gallina, Charlene; McDowell, John
Subject: FW: Girard Winery

From: Ginna Beharry [mailto:ginna.beharry@sbcglobal.net]
Sent: Tuesday, August 18, 2015 3:00 PM
To: Anne Cottrell; Heather Phillips; Matt Pope; Michael Basayne; Terry Scott; Morrison, David
Subject: Girard Winery

Dear Planning Commissioners and Director Morrison,

I would like to respectfully request that the Girard Winery agenda item be continued from tomorrow's Planning commission hearing until the next one, give the late posting of the staff report on Friday afternoon. Like many other in the community, I am quite concerned about the code violations by Clos Pegase as noted in the letter to you from Shute Mihaley and Weinberger and I believe we all need more time to study the facts, arguments and counterarguments.

I understand that the Planning staff is very busy and undoubtedly did the very best they could under the circumstances. But these are complex documents that require ample time for review by the Commissioners, the applicant, the public and any attorneys involved. As such, it would seem to make more sense to allow time until the next regularly scheduled meeting of the Commission for a proper review by all.

Thank you for your time and consideration of this request.

Sincerely,
Ginna Beharry

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Frost, Melissa

Subject: FW: Requesting a continuance on the Girard Winery project

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From: Planning
Sent: Tuesday, August 18, 2015 12:25 PM
To: Balcher, Wyntress
Subject: FW: Requesting a continuance on the Girard Winery project

This came on the POD line

Terri Abraham
Planner
Napa County Planning, Building, and Environmental Services
1195 Third St., Suite 210
Napa CA 94559
707.299.1331
707.299.4075 direct fax

terri.abraham@countyofnapa.org
New County Web site www.countyofnapa.org

The happiest people don't have the best of everything. They just make the best of everything they have. Live simply, love generously care deeply, and speak kindly.

From: MHVerdeille [mailto:lamische@gmail.com]
Sent: Tuesday, August 18, 2015 9:16 AM
To: Planning
Subject: Requesting a continuance on the Girard Winery project

Commissioners voiced "no major objections" about Girard's proposed 32,771-square-foot, 200,000 gallons winery in an area of the valley that can not reasonably sustain it. The studies of the impact of this proposed project were released late, without adequate time to fully and intelligently review them - either by the public *or the Planning Commission.* For a project of this size and scope, we ask for a continuance so that we all can move forward together to make an informed and mutual decision.

Thank you.

M H Verdeille
Rosedale Road, Calistoga, CA
lamische@gmail.com

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Balcher, Wyntress

From: Morrison, David
Sent: Monday, August 17, 2015 5:17 PM
To: Balcher, Wyntress; Gallina, Charlene; McDowell, John
Subject: FW: Request for continuance: Girard hearing

From: Carl Bunch [mailto:carl_bunch@msn.com]
Sent: Monday, August 17, 2015 5:13 PM
To: heather@vinehillranch.com; napacommissioner@yahoo.com; anne.cotrell@lucerne.com; tkscott@aol.com; mattpope384@gmail.com; planning@countyofnapa.com; Morrison, David
Subject: Request for continuance: Girard hearing

Members of the Planning Commission, it is requested that the hearing in the captioned matter, scheduled for Wednesday, August 19, be postponed for a period of at least two weeks in order to enable interested members of the Napa County general pubic to review any and all documents and other correspondence pertinent to the Girard application and hearing. It is appropriate that such docments, which are, as usual, late filed for review by the public be available for sufficient public scrutiny.

The scheduled hearing will not permit such review and consideration.

Thank you for your anticipated decision to postpone the August 19 hearing in favor of full public review.

Carl Bunch
351 Wall Road
Napa, CA 94558
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Balcher, Wyntress

From: McDowell, John
Sent: Monday, August 17, 2015 5:13 PM
To: 'don@napanet.net'; Balcher, Wyntress
Subject: RE: Girard Winery Application UP P14-00053.

Thank you for your comments. We will provide your comments to the Planning Commission for their consideration prior to Wednesday's hearing.

Please feel free to email or call if you have any questions.

Sincerely,

John

John McDowell
Deputy Planning Director
Napa County Planning, Building and Environmental Services Department
(707) 299-1354

From: don@napanet.net [mailto:don@napanet.net]
Sent: Monday, August 17, 2015 4:26 PM
To: Balcher, Wyntress
Cc: McDowell, John
Subject: Girard Winery Application UP P14-00053.

Dear Ms. Balcher:

Please add my name and that of my wife to the list of opponents of this project. We live at 4281 Scott Way which is near this proposed winery.

Building another winery on Dunaweal Lane will make an already overbuilt and congested situation much worse in several ways.

First, water issues. I and three of my neighbors have had wells go dry in late summer, which created extreme economic hardship to me and to the other homeowners. These wells went dry prior to the drought. In the last three years, I have seen deep wells being drilled by Sterling Winery, by Twomey Winery, by Joseph Cellars, and by the owners of the property located at the intersection of Dunaweal Lane and Hwy. 29. Three of the four well drillings indicate that the water table is already distressed, and that those with money are drilling new deeper wells in order to grab the water before there are restrictions on use of ground water. Another winery will create even more water demand, and will likely cause hardship to those who live here, some of whom lack the money to pay for a deeper well. This is assuming that there is potable water at lower and lower depths.

Second, is a dangerous traffic problem. I have seen Hwy 29 traffic backed up from Lincoln Avenue to the Calistoga city limits in the late afternoon numerous times. On several Friday afternoons, I have seen the traffic backed up all the way to Dunaweal Lane. It can be a very hazardous traffic maneuver to just get out of my driveway onto Hwy. 29, with the present amount of traffic. When the new resorts are built in Calistoga, the traffic situation will be even worse, and back-ups will be present on Hwy 29 that are longer and more frequent. Truck traffic uses Dunaweal Lane as an alternate route to and from Lake County, and another winery on Dunaweal Lane will make this an even more dangerous situation.

Third, there are residences near the proposed winery which will be very impacted by it. It will create a living situation for the residents that is already damaged by too many wineries and too much traffic.

To conclude, the area is overdeveloped already. Dunaweal Lane does not need another winery given greater demand upon infrastructure, its the impact upon public safety, and the lack of water in this area.

Sincerely,
Don Scott
Anne Scott

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Frost, Melissa

Subject: FW: Girard Winery Ue Permit #P14-00053-UP

From: Balcher, Wyntress
Sent: Monday, August 17, 2015 4:08 PM
To: Frost, Melissa; Fuller, Lashun
Subject: FW: Girard Winery Ue Permit #P14-00053-UP

Attached is more on the thread from Ms. Aranguren

From: Balcher, Wyntress
Sent: Monday, August 17, 2015 4:07 PM
To: 'California Fisheries & Water Unlimited'
Subject: RE: Girard Winery Ue Permit #P14-00053-UP

Hello,
Your request has been forwarded to the County Planning Commission for consideration.

Wyntress Balcher, Planner
Planning, Building, Environmental Services
1195 Third Street Suite 210
Napa, CA 94559
D. 707. 299.1351
F. 707. 299.4094

From: California Fisheries & Water Unlimited [mailto:calfisheriesandwaterunlimited@gmail.com]
Sent: Monday, August 17, 2015 3:43 PM
To: Balcher, Wyntress
Subject: Re: Girard Winery Ue Permit #P14-00053-UP

Ms. Balcher;

Thank you for your earlier reply. I am aware of the administrative record for the Girard Use Permit and know where to locate the related documents. My request for an extension is based upon the late entries I discovered just this morning, e.g., Staff Reports, Revised Findings, and Conditions of Approval for the upcoming public hearing. In order to allow for public review and meaningful comment, I believe an extension is warranted and would appreciate staff consideration of this request.

Sincerely,

Christina Aranguren
California Fisheries & Water Unlimited

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On Aug 17, 2015, at 9:03 AM, California Fisheries & Water Unlimited <calfisheriesandwaterunlimited@gmail.com> wrote:

Ms. Wyntress Balcher
Planner II
Napa County Planning, Building, and Environmental Sciences
Napa, California 94559

August 17, 2015

Re: Girard Winery Use Permit #P14-00053-UP

Ms. Balcher, Staff;

Due to insufficient time to prepare comments, California Fisheries & Water Unlimited is requesting an extension for Napa County Planning Commission consideration of Girard Use Permit #P14-0053-UP currently scheduled for August 19, 2015.

In addition, I would appreciate your sending the agenda posting date/time for the August 19, 2015 meeting as well as the specific policy(s) that relate to agenda postings.

Thank you,

Christina Aranguren
California Fisheries & Water Unlimited

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Balcher, Wyntress

From: McDowell, John
Sent: Monday, August 17, 2015 2:07 PM
To: Balcher, Wyntress
Subject: FW: Clos Pegase and Girard

From: David Clark [mailto:david1343@sbcglobal.net]
Sent: Monday, August 17, 2015 2:06 PM
To: McDowell, John
Subject: RE: Clos Pegase and Girard

Hi John,

Thanks for responding so quickly. Clos Pegase seems to have removed "weddings" from their "event" website, but they still list "anniversaries, rehearsal dinners, birthdays, holiday parties, private parties and more". If they advertise them on their site, it seems safe to believe they still do them. Although some of these events still have to do with weddings, I don't see what they have to do with the wine business.

As this will be a contentious issue, and isn't yet resolved, how can Planning even consider approving a permit for this applicant now? I understand there is no further information available from County Code Enforcement until the investigation is completed, yet this applicant's status as complying or non-complying is relevant to the public and the Commission in discussions of their pending use permit.

On another note, as you know, I am a neighbor of the project and my letter to County commenting on the project is part of the file... yet I received no notice of the hearing. I am just getting information now, and there's a lot of info to digest that was just released. For these reasons, I respectfully ask for a continuance of the hearing.

Thanks again for your prompt reply. I appreciate it.

Sincerely,

David Clark
4704 Silverado Trail
P.O. Box 92, St. Helena

On Mon, 8/17/15, McDowell, John <John.McDowell@countyofnapa.org> wrote:

Subject: RE: Clos Pegase and Girard
To: "'David Clark'" <david1343@sbcglobal.net>
Cc: "Balcher, Wyntress" <Wyntress.Balcher@countyofnapa.org>, "Gallina, Charlene" <Charlene.Gallina@countyofnapa.org>, "St. Claire, Linda" <LINDA.STCLAIRE@countyofnapa.org>
Date: Monday, August 17, 2015, 11:38 AM

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{color:blue;text-decoration:underline;}
#yiv1928443695 a:visited, #yiv1928443695 span.yiv1928443695MsoHyperlinkFollowed
{color:purple;text-decoration:underline;}
#yiv1928443695 span
{}
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#yiv1928443695 div.yiv1928443695WordSection1
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Hi David,

I talked with Code Enforcement who said that the weddings were discontinued several months ago. The property owner believes they are entitled to conduct marketing events, and are scheduled to submit an application to code enforcement next week with their evidence. We will need to objectively analyze their application and all other evidence before making a determination whether a marketing plan is part of their existing use permit or not.

Thanks - John

From: David Clark
[mailto:david1343@sbcglobal.net]

Sent: Saturday, August 15, 2015 2:13 PM

To: McDowell, John

Subject: Clos Pegase and Girard

John,

At the last hearing
for Girard, everyone, including myself and the
Commissioners, seemed shocked and surprised that Clos Pegase
was hosting and advertising
events at their property. I see they still offer these
events on their website. What is the status of their
compliance regarding these... what is allowed? I'd
like to know before the Girard hearing next week,
thanks.

David
Clark

AT
CLOS PEGASE WINERY WE HELP YOU CREATE the
most unique and memorable experiences. From anniversaries,
rehearsal dinners, birthdays, holiday
parties, private parties and more, we will transform our
winery into your unique vision for the event. Along with the
stunning setting, dramatic architecture, and world-class
wines, we will provide you with best in class hospitality
and get all of the details

just right, including food, décor, and live entertainment. No matter the occasion, events at Clos Pegase reflect a welcoming blend of elegance and magic for you to create memories you will never forget.

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SHUTE, MIHALY
& WEINBERGER LLP

396 HAYES STREET, SAN FRANCISCO, CA 94102
T: (415) 552-7272 F: (415) 552-5816
www.smwlaw.com

ELLISON FOLK
Attorney
folk@smwlaw.com

August 18, 2015

Via E-Mail

Napa County Planning Commission
1195 Third Street, Suite 210
Napa, California 94559
Attn: Melissa Frost, Secretary
Melissa.frost@countyofnapa.org

Re: Girard Winery Use Permit #P14-00053-UP
Request For Continuance

Dear Commissioners:

We represent the Tofanelli family on matters relating to the proposed Girard Winery Use Permit ("Project"). The purpose of this letter is to request that the Planning Commission postpone its consideration of this Project for a minimum of 30 days.

The County released the draft Findings, draft Conditions of Approval, responses to our January 20, 2015 letter, information relating to the applicant's non-compliance with County regulations, and numerous other Project-approval documents, at 4:30 p.m., on Friday, August 14th. It is likely that members of the public did not receive these important documents until today. Comments are due on the Revised Initial Study/Negative Declaration today, August 18th. County staff is recommending that the Commission approve this Project on August 19th.

This is a large, controversial Project with the potential for numerous environmental impacts. Providing two days to review this documentation is entirely insufficient for meaningful public input. Moreover this expedited schedule does not even allow the Commissioners the opportunity to consider the public comment on the Revised Initial Study/Negative Declaration.

We anticipate submitting extensive comment on the Revised Initial Study/Negative Declaration after we and our hydrologist have an opportunity to evaluate the new documentation. We believe it would be prudent for the County to extend the

public comment period for a minimum of 30 days to allow us time to provide meaningful public input.

Thank you for your attention to this request.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Ellison Folk

cc: Norma Tofanelli

646470.5

Frost, Melissa

Subject: FW: Girard Winery Use Permit P14-00053

From: McDowell, John
Sent: Monday, August 10, 2015 8:07 AM
To: Balcher, Wyntress; Frost, Melissa
Cc: Gallina, Charlene
Subject: FW: Girard Winery Use Permit P14-00053

Comments on Girard Item for distribution to the Commission.

From: Joe Bob here [mailto:jbhitchcock44@gmail.com]
Sent: Sunday, August 09, 2015 1:16 AM
To: McDowell, John
Subject: Girard Winery Use Permit P14-00053

Dear Mr. McDowell:

Last week I was driving from St. Helena to my home in Calistoga around 4:30 pm on Highway 29. Traffic came to a stop south of Dunaweal Lane, backed up from the stop sign at Lincoln Avenue in Calistoga. After 10 minutes, I was about half way to the stop sign, so I made a u-turn, went back to Dunaweal, and turned left to go to the Silverado Trail. Dunaweal was busier than I have ever seen it. There were 6 or 7 cars waiting to turn left onto the Trail which took a few more minutes to clear. Turning left was difficult and dangerous, as traffic was heavy on the Trail in both directions.

The traffic added over 15 minutes to my drive time.

Those of us who live in Calistoga have to contend with noticeable added traffic due to the expansion of Indian Springs. Parking is nearly impossible at all times of day. Two new resorts, Calistoga Hills and Silver Rose will add nearly 3000 additional vehicle trips per day, further congesting Highway 29, Dunaweal Lane, and the Silverado Trail. Like it or not, that traffic is coming.

Now Girard wants to build a huge new facility on Dunaweal Lane. Sir, this is insanity. These roads cannot handle the current traffic load much less the already approved increases. Girard could result in a massive grid lock.

I have watched as the Calistoga City Council has approved project after project, denying that there will be any significant impact on traffic. They obviously have an unstated agenda, which is not the betterment of Calistoga for its residents. Of course the projects will cause severe traffic problems.

Now, you might ask yourself, "Who is this person writing to me, and what does he know about traffic problems?" I would like to state that I have a Master of Science degree in Transportation Management from the UCLA School of Business, with a specialty in Urban Transportation. I know what I am talking about. But anybody who drives a car on Highway 29 will not need a degree to see the negative impact of the Girard project. When you are stopped for up to a half hour in gridlock just south of Calistoga, everybody is an expert.

We have reached and probably surpassed a breaking point. This new facility for Girard cannot be allowed to happen. You cannot inconvenience thousands of people per day, both residents and visitors, for the benefit of one business. You represent all the people in the Valley. It is time to protect us.

Respectfully,

Robert Hitchcock
1322 Berry Street
Calistoga, CA 94515
707-942-0619
jbhitchcock44@gmail.com

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Frost, Melissa

Subject: FW: Girard Winery Use Permit #P14-00053-UP - Request for Continuance
Attachments: LTR Requesting Continuance.PDF

From: Patricia Larkin [mailto:larkin@smwlaw.com]
Sent: Tuesday, August 18, 2015 8:53 AM
To: Frost, Melissa
Cc: keepnvap@sonic.net; Ellison Folk
Subject: Girard Winery Use Permit #P14-00053-UP - Request for Continuance

Dear Commissioners:

Please see the attached letter in connection with the above-referenced matter.

Patricia Larkin
Legal Secretary
Shute, Mihaly & Weinberger LLP
396 Hayes Street
San Francisco, CA 94102-4421
v: 415/552-7272 x235
f: 415/552-5816
www.smwlaw.com

SAN FRANCISCO GREEN BUSINESS Please consider the environment before printing this e-mail or attachments.

Balcher, Wyntress

From: Morrison, David
Sent: Monday, August 17, 2015 6:19 PM
To: Balcher, Wyntress; Gallina, Charlene; McDowell, John
Subject: FW: Girard Use Permit

From: Bill Hocker [mailto:bill@wmhocker.org]
Sent: Monday, August 17, 2015 6:00 PM
To: Heather Phillips; mattpope384@gmail.com; anne.cottrell@lucene.com; napacommissioner@yahoo.com; tkscottco@aol.com
Cc: McDowell, John; Morrison, David
Subject: Girard Use Permit

Commissioners and Directors,

I've already submitted a couple of letters on this project. My apologies for yet another.

Girard Draft Finding #10:
"The project complies with the requirements of the Winery Definition Ordinance (Ord. No. 947, 1990)"

Ord. No. 947,1990 Finding of Fact #1e:
"Napa County is one of the smallest counties in California and within the County areas suitable for quality vineyards are limited and irreplaceable. Any project that directly or indirectly results in the removal of existing or potential vineyard land from use depletes the inventory of such land forever. "

Given the surfeit of wine processing capacity in the county, and given development-driven traffic congestion that all find onerous already, and given the amount of up-valley development already in the works but not yet built, and given a history of use permit violations in which this developer has engaged (until recently?), if Napa County can't find the will and the means to protect this one pristine rectangle of arable valley land then the cause of protecting the totality of agriculture in the county is doomed. Development projects built to cater to an ever expanding tourist economy will just keep coming until the entire valley floor is a tourism business park, and the increasing clout of tourism entrepreneurs will move the WDO and the General Plan toward ever more expansion into the vineyards until they are little more than garnish around the parking lots.

This developer already has a facility to process the grapes from this parcel (one with few county impacts). This developer already has a facility to process tourists, adjacent to this parcel (one with an excess of county impacts). It is time for the planning commission to take a meaningful stand on agricultural protection and use its discretion to uphold the original intent of the agricultural preserve (and the real definition of agriculture) by denying this project.

I would also ask that you consider a moratorium on the review of all such projects to provide the time needed for the county and the municipalities to explore the long term impacts of tourism development, particularly in view of the county's intention, in the words of its General Plan, "to preserve the economic viability of agriculture and ensure that tourism and other industries do not compete with agriculture".

Thank you again for this opportunity to voice my concerns.

Bill Hocker

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Frost, Melissa

Subject: FW: Continuance of Girard hearing

From: Balcher, Wyntress
Sent: Monday, August 17, 2015 4:43 PM
To: Gallina, Charlene; Frost, Melissa; Fuller, Lashun
Subject: FW: Continuance of Girard hearing

Another Girard letter

From: Morrison, David
Sent: Monday, August 17, 2015 4:20 PM
To: Balcher, Wyntress; Gallina, Charlene; McDowell, John
Subject: FW: Continuance of Girard hearing

Another request for continuance.

From: Patricia Damery [mailto:pdamery@patriciadamery.com]
Sent: Monday, August 17, 2015 4:19 PM
To: Morrison, David
Subject: Fwd: Continuance of Girard hearing

Dear David Morrison,

I am forwarding you a copy of the message that I sent to each of the commissioners. Given the complexity of issues that we are facing with the permitting of projects, I would like there to either be a moratorium on projects so the Planning Department can get caught up, or at least a week and a half period after all documentation is posted before a hearing for citizens and commissioners alike to thoroughly study documents and staff recommendations.,

Kind regards,
Patricia Damery

Begin forwarded message:

From: Patricia Damery <pdamery@patriciadamery.com>
Subject: Continuance of Girard hearing
Date: August 17, 2015 at 4:09:35 PM PDT
To: heather@vinehillranch.com

Dear Commissioner Phillips,

The Planning did not have posted the agenda and documents for the proposed Girard project until Friday, August 14, 4:30 pm, before the hearing on Wednesday, August 19. Although some of the documents were posted two weeks before, we have not had time to thoroughly review to see if these were complete. One way or the other, the staff report was not posted until Friday.

We understand that staff is overwhelmed with projects and work. We suggest either a moratorium to catch up, or a requirement that all relevant documents be posted at least a week and a half before a hearing so they can be throughly reviewed by all concerned. Current delays

prevent full public review as well as time for the Planning Commission to give projects the proper attention needed.

Please, due to late release of documents, grant a continuance on the Girard project due to late posting of documents.

Sincerely,
Patricia Damery

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Balcher, Wyntress

From: McDowell, John
Sent: Monday, August 17, 2015 3:18 PM
To: Morrison, David; Balcher, Wyntress; Gallina, Charlene
Subject: RE: Girard Continuance

Thanks – I think someone else has suggested continuance too?

From: Morrison, David
Sent: Monday, August 17, 2015 3:17 PM
To: Balcher, Wyntress; Gallina, Charlene; McDowell, John
Subject: FW: Girard Continuance

Be prepared to address a continuance request on Wednesday.

From: Terry Scott [mailto:tkscottco@aol.com]
Sent: Monday, August 17, 2015 3:16 PM
To: Poet707
Subject: Re: Girard Continuance

Jim,

Historically, staff has recommended a continuance only if the applicant is agreeable.

I recommend you contact David Morrison or John McDowell with your request. They can approach the applicant, if they support your request.

The commission, itself, does not make such a decision until we are in session and normally with a recommendation from Staff.

Terry Scott
Planning Commissioner - District 4

Sent from my iPhone

On Aug 17, 2015, at 2:37 PM, Poet707 <poet707@aol.com> wrote:

> Hello Terry,
>
> Any way I can request a continuance? These docs are pretty voluminous and I'm struggling to get on top of them in the time available. They were made available late Friday.
>
> I appreciate if you view it differently. But personally I couldn't find the time over the weekend to start my review.
>
> Thank you,
> Jim Wilson

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