PROJECT STATEMENT

FOR
LEAF AND VINE WINERY
APN 057-270-008
190 Camino Oruga, Napa County, CA 94558

PROJECT DESCRIPTION

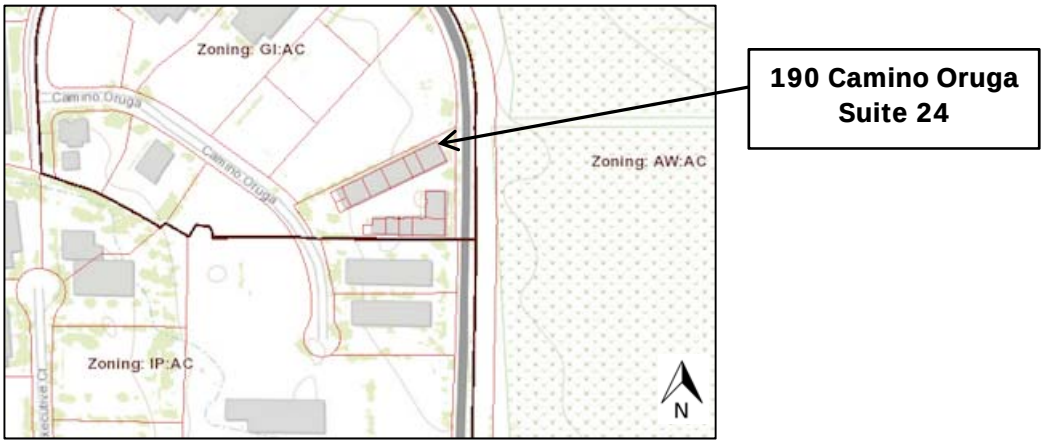
The proposed project consists of interior modifications to Suite 24 and the installation of a hold and haul tank on the shared common area of the existing industrial warehouse located at 190 Camino Oruga, Napa County.

Project Location

The proposed project is located in south Napa County, east of State Route 29, north of State Route 12 (Jameson Canyon Road) and west of North Kelly Road. The site has a land use designation of "Industrial," pursuant to the Napa County Land Use Plan 2008-2030 (June 4, 2013) and is zoned GI (General Industrial). It is located within the Airport Compatibility area (AC). To the south and west of the site the designated zoning is Industrial Park (IP). To the east of the site zoning is AW:AC. See Figure 1 below.

The project site is located within a developed parcel that contains an existing industrial building, shared parking lot, landscaping and ancillary improvements. The proposed winery would occupy Suite 24, which is the easternmost unit of the existing rectilinear building. This unit is on APN 057-270-008 and is 0.08± acres. The shared common area, APN 057-270-001, occupies 1.01± acres.

Figure 1: Napa County Zoning Map



Source: Napa County Public Browser, November 2014

Site Access

The project site is accessed from Camino Oruga via Camino Dorado off of North Kelly Road. The shared driveway off of Camino Oruga provides access into the site.

Existing Condition

The existing rectilinear building was constructed in 1990 and has been partitioned into several distinct uses. Suite 24, the location of the proposed Leaf and Vine Winery is currently vacant. Existing uses within the other occupied suites of the building include winery production and tasting rooms. A separate L-Shaped building (constructed in 2004) occupies the southern portion of the site. The parcel contains a shared common area (APN 057-270-001) consisting of approximately 45 parking spaces, the driveway, fencing and landscaped area. There are no assigned parking stalls dedicated for individual users. Rather, the shared parking is provided on a first come first serve basis.

All of the units within the buildings are condominium warehouses and/or offices. The site is managed by a condominium association that collects monthly association dues for maintenance of the buildings, landscaping, fencing and parking lot.

Proposed Use

The project would result in an 18,500 gallon per year wine production facility, tasting room and associated uses. Winery production includes receiving fruit, crushing of grapes, processing grape juice through fermentation into wine, storage of wine in bulk, mobile bottling onsite, bottled case good storage and shipping. An exterior above ground storage tank would hold process wastewater generated by the proposed winery use. Process wastewater would be off hauled for treatment and disposal (also see Proposed Improvements description below).

Based on the proposed floor plan (Sheet 5 of 7), the unit would include a tank room and crush pad area (829 square feet), a barrel storage room (2,333 square feet) and a tasting room/office (338 square feet). The winery production area would consist of the barrel storage area, tank room and restroom, which combined occupies 3,223 square feet (77.4%) of the total developed area. A 338 square foot office would occupy the loft, limited to the area above the tasting room. Additional interior areas include a mezzanine and stair well.

The tasting room will operate “by appointment only”. Due to the winery location, no walk-in or drive-by visitors are anticipated. The maximum number of guests per day is expected to be 30, with up to 135 visitors per week.

Leaf and Vine, LLC does not own any vineyard land. Grapes will be brought to the winery for processing and sourced from grape growers within Napa Valley and outside of the region. Given the site zoning, GI:AC, the proposed winery is not subject to Section 18.104.250 of the Napa County Municipal Code, which establishes the source rule requiring that 75% of the grapes used in production be sourced from within Napa County. As described therein, the 75% rule applies only to wineries located within zones AP and AW.

Proposed Improvements

Improvements include interior modifications to Suite 24 (APN 057-270-008) and exterior modifications to the common area (APN 057-270-001).

As proposed the subject project would convert the existing warehouse space (Suite 24) into a wine production facility. Improvements would include a floor drain system within the primary production room and an indoor crush pad that would connect to an exterior hold and haul process wastewater collection tank.

The "Hold and Haul" tank is proposed to be sited within the common area immediately contiguous to the easternmost wall of the rectilinear building. The storage tank would have a capacity of 10,000 gallons and would be located on an approximately 267± square foot concrete pad. The proposed Hold and Haul system has been designed in accordance with the Napa County Environmental Health Division's "Hold and Haul for Winery Process Wastewater Management Guidelines".

Based on the proposed production capacity, Leaf and Vine Winery is expected to generate an annual average of 305 gallons per day (gpd) of process wastewater. During harvest, production would result in a peak daily average of 925 gallons and during non-harvest, 250 gpd of process wastewater would be generated. Also see the Hold & Haul Design Calculations worksheet prepared by Bartelt Engineering (November 2014).

Process wastewater generated from production will be stored within the exterior holding tank. Process wastewater will drain from the indoor production area (crush pad and barrel wash area) to a floor drain. A filter screen will preclude large organic debris from entering the floor drain. Process wastewater will gravity flow to a pump, which will discharge to the holding tank. Process wastewater will be hauled offsite for treatment and disposal.

Signage

Leaf and Vine LLC is proposing to install a wall-mounted sign on the exterior of the building façade at Suite 24. The sign will contain lettering depicting the Leaf and Vine Winery title and logo. The concept for the sign is currently in the design stage and will be submitted for review in accordance with Chapter 18.116 of the County's Municipal Code.

Landscaping

As noted, the condominium association maintains landscaping onsite, which includes shrubs, ornamental trees and planters at the access driveway, within the parking area islands, adjacent to disposal enclosures and around the periphery of the site. Existing mature trees and shrubs along the eastern site boundary provide substantial screening from North Kelly Road, which effectively obstruct views onto the site from the roadway.

Domestic Water and Wastewater

Water and wastewater services are currently provided to the existing uses onsite. Potable water is supplied by the American Canyon domestic water system and sanitary wastewater services are provided by Napa Sanitation District.

The Camino Oruga Condominium Association (within which the subject new winery is located) has received a Will Serve letter from the City of American Canyon to meet the onsite domestic water needs associated with potable water demand generated by onsite uses including domestic, irrigation and industrial uses onsite. Pursuant to the Will Serve letter issued July 22, 2014 the requested water demand totals 745 gallons per day and the maximum daily water demand totals 1,264 gallons per day. This water demand is for the entire Camino Oruga Condominium Association, including Suite 24.

Sanitary wastewater will be discharged to the existing Napa Sanitation District sewer system. Leaf and Vine, LLC has received a Will Serve letter (NSD Will Serve # 000034, issued April 8, 2013) from the Napa Sanitation District for the discharge of a maximum of 210 gallons of domestic wastewater per day.

As described above, process wastewater will be disposed of through a separate hold and haul system.

file № _____

A Tradition of Stewardship
A Commitment to Service

Napa County
Conservation, Development, and Planning Department
1195 Third Street, Suite 210, Napa, California, 94559 *phone* (707) 253-4417
web www.countyofnapa.org/cdp/ *email* cdp@countyofnapa.org

Use Permit Application

To be completed by Planning staff…

Application Type: _____

Date Submitted: _____ Resubmittal(s): _____ Date Complete: _____

Request: _____

_____

_____

_____

_____

*Application Fee Deposit: $_____ Receipt No. _____ Received by: _____ Date: _____

**Total Fees will be based on actual time and materials*

To be completed by applicant…

Project Name: Leaf and Vine Winery

Assessor's Parcel №: 057-270-008 & Common Area 057-270-001 Existing Parcel Size: 0.08 & 1.01 ac.

Site Address/Location: 190 Camino Oruga, Suite 24, Napa County, CA 94558
No. Street City State Zip

Primary Contact: ☐ Owner ☐ Applicant ☑ Representative (attorney, engineer, consulting planner, etc.)

Property Owner: Leaf and Vine, LLC c/o Richard B. Keith

Mailing Address: P.O. Box 750592, Petaluma, CA 94975
No. Street City State Zip

Telephone №(707) 225 - 1895 E-Mail: rick@leafandvine.com

Applicant (if other than property owner): _____

Mailing Address: _____
No. Street City State Zip

Telephone №(____) _____-_____ E-Mail: _____

Representative (if applicable): Bartelt Engineering c/o Paul Bartelt

Mailing Address: 1303 Jefferson Street #200 B, Napa, CA 94559
No. Street City State Zip

Telephone №(707) 258 - 1301 E-Mail: paulb@barteltengineering.com

Use Permit Information Sheet

Use

Narrative description of the proposed use (please attach additional sheets as necessary):

The project would result in the operation of a wine production facility, tasting room and associated uses. The winery production will include receiving fruit, crushing of grapes, processing grape juice through fermentation into wine, storage of wine in bulk, bottled case good storage and shipping. The production capacity would be 18,500 gallons of wine per year. An exterior above ground storage tank would hold process wastewater generated by the proposed winery use. Process wastewater would be off hauled for treatment and disposal.

Please see attached Project Statement for additional detail.

What, if any, additional licenses or approvals will be required to allow the use?

District_____ Regional _____

State Dept. of Alcohol, Beverage Control Federal Dept. of Treasury (TTB) Bonded Winery

Improvements

Narrative description of the proposed on-site and off-site improvements (please attach additional sheets as necessary):

Improvements include interior modifications to Suite 24 (APN 057-270-008) and exterior modifications to the common area (APN 057-270-001).

As proposed the subject project would convert the existing warehouse space of Unit M into a wine production facility. Improvements would include a floor drain system within the primary production room and an indoor crush pad that would connect to an exterior hold and haul process wastewater collection tank with a storage capacity of 10,000 gallons.

Please see attached Project Statement for additional details.

Improvements, cont.

Total on-site parking spaces: 45 shared existing None proposed

Loading areas: None existing None proposed

Fire Resistivity (check one; if not checked, Fire Marshal will assume Type V – non rated):

☐ Type I FR ☐ Type II 1 Hr ☐ Type II N (non-rated) ☐ Type III 1 Hr ☐ Type III N

☐ Type IV H.T. (Heavy Timber) ☐ Type V 1 Hr. ☑ Type V (non-rated)

(*for reference, please see the latest version of the California Building Code*)

Is the project located in an Urban/Wildland Interface area? ☐ Yes ☑ No

Total land area to be disturbed by project (include structures, roads, septic areas, landscaping, etc): 300 square feet acres

Employment and Hours of Operation

Days of operation:	N/A existing	Sun-Mon (7 days) proposed
Hours of operation:	N/A existing	6am-10pm proposed
Anticipated number of employee shifts:	N/A existing	2 proposed
Anticipated shift hours:	N/A existing	8 hr proposed

Maximum Number of on-site employees:

☑ 10 or fewer ☐ 11-24 ☐ 25 or greater (specify number) _____

Alternately, you may identify a specific number of on-site employees:

☐ other (specify number) _____

Certification and Indemnification

Applicant certifies that all the information contained in this application, including all information required in the Checklist of Required Application Materials and any supplemental submitted information including, but not limited to, the information sheet, water supply/waste disposal information sheet, site plan, floor plan, building elevations, water supply/waste disposal system site plan and toxic materials list, is complete and accurate to the best of his/her knowledge. Applicant and property owner hereby authorize such investigations including access to County Assessor's Records as are deemed necessary by the County Planning Division for preparation of reports related to this application, *including the right of access to the property involved.*

Pursuant to Chapter 1.30 of the Napa County Code, as part of the application for a discretionary land use project approval for the project identified below, Applicant agrees to defend, indemnify, release and hold harmless Napa County, its agents, officers, attorneys, employees, departments, boards and commissions (hereafter collectively "County") from any claim, action or proceeding (hereafter collectively "proceeding") brought against County, the purpose of which is to attack, set aside, void or annul the discretionary project approval of the County, or an action relating to this project required by any such proceeding to be taken to comply with the California Environmental Quality Act by County, or both. This indemnification shall include, but not be limited to damages awarded against the County, if any, and cost of suit, attorneys' fees, and other liabilities and expenses incurred in connection with such proceeding that relate to this discretionary approval or an action related to this project taken to comply with CEQA whether incurred by the Applicant, the County, and/or the parties initiating or bringing such proceeding. Applicant further agrees to indemnify the County for all of County's costs, attorneys' fees, and damages, which the County incurs in enforcing this indemnification agreement.

Applicant further agrees, as a condition of project approval, to defend, indemnify and hold harmless the County for all costs incurred in additional investigation of or study of, or for supplementing, redrafting, revising, or amending any document (such as an EIR, negative declaration, specific plan, or general plan amendment) if made necessary by said proceeding and if the Applicant desires to pursue securing approvals which are conditioned on the approval of such documents.

In the event any such proceeding is brought, County shall promptly notify the Applicant of the proceeding, and County shall cooperate fully in the defense. If County fails to promptly notify the Applicant of the proceeding, or if County fails to cooperate fully in the defense, the Applicant shall not thereafter be responsible to defend, indemnify, or hold harmless the County. The County shall retain the right to participate in the defense of the proceeding if it bears its own attorneys' fees and costs, and defends the action in good faith. The Applicant shall not be required to pay or perform any settlement unless the settlement is approved by the Applicant.

Richard B. Keith		R. Dan B Keith	11/21/14
Print Name of Property Owner		Print Name Signature of Applicant (if different)	
Signature of Property Owner	Date	Signature of Applicant	Date

Operations

Please indicate whether the activity or uses below are already legally **EXISTING**, whether they exist and are proposed to be **EXPANDED** as part of this application, whether they are **NEWLY PROPOSED** as part of this application, or whether they are neither existing nor proposed (**NONE**).

Retail Wine Sales	☐ Existing	☐ Expanded	☑ Newly Proposed	☐ None
Tours and Tasting- Open to the Public	☐ Existing			
Tours and Tasting- By Appointment	☐ Existing	☐ Expanded	☑ Newly Proposed	☐ None
Food at Tours and Tastings	☐ Existing	☐ Expanded	☑ Newly Proposed	☐ None
Marketing Events*	☐ Existing	☐ Expanded	☑ Newly Proposed	☐ None
Food at Marketing Events	☐ Existing	☐ Expanded	☑ Newly Proposed	☐ None
Will food be prepared…	☐ On-Site?	☑ Catered?		
Public display of art or wine-related items	☐ Existing	☐ Expanded	☐ Newly Proposed	☑ None

** For reference please see definition of "Marketing," at Napa County Code §18.08.370 -* http://library.municode.com/index.aspx?clientId=16513

Production Capacity *

Please identify the winery's…

Existing production capacity: None gal/y Per permit №: N/A Permit date: N/A

Current maximum actual production: N/A gal/y For what year? N/A

Proposed production capacity: 18,500 gal/y

** For this section, please see "Winery Production Process," at page 11.*

Visitation and Hours of Operation

Please identify the winery's…

Maximum daily tours and tastings visitation:	N/A existing	30 visitors/day proposed
Average daily tours and tastings visitation[1]:	N/A existing	12 visitors/day proposed
Visitation hours (e.g. M-Sa, 10am-4pm):	N/A existing	M-Sun 10am-6pm proposed
Non-harvest Production hours[2]:	N/A existing	7am-7pm proposed

[1] Average daily visitation is requested primarily for purposes of environmental review and will not, as a general rule, provide a basis for any condition of approval limiting allowed winery visitation.
[2] It is assumed that wineries will operate up to 24 hours per day during crush.

Grape Origin

All new wineries and any existing (pre-WDO) winery expanding beyond its winery development area must comply with the 75% rule and complete the attached "Initial Statement of Grape Source". See Napa County Code §18.104.250 (B) & (C).

The site is zoned, GI:AC, and therefore in accordance with Napa County Code Section 18.104.205 (A) is not subject to the 75% rule.

Marketing Program

Please describe the winery's proposed marketing program. Include event type, maximum attendance, food service details, etc. Differentiate between existing and proposed activities. (Attach additional sheets as necessary.)

The proposed marketing program consists of a maximum of six (6) events per year at the subject site. Five (5) of the events would host up to 30 visitors with one (1) event hosting up to 50 visitors. In addition to the visitors, additional event staffing and would be served by a catering company. For larger marketing events bus transportation will be provided.

Food Service

Please describe the nature of any proposed food service including type of food, frequency of service, whether prepared on site or not, kitchen equipment, eating facilities, etc. Please differentiate between existing and proposed food service. (Attach additional sheets as necessary.)

The proposed winery does not include a kitchen, food preparation area or food service. Any food served at the tasting room would consist of pre-packaged goods and would be stored and refrigerated as needed within the tasting room.

Definitions

The below are paraphrased from County Code, please see referenced code sections for full text.

a. **Winery Development Area** – All aggregate paved or impervious or semi-permeable ground surface areas of the production facility which includes all storage areas (except caves), offices, laboratories, kitchens, tasting rooms and paved parking areas for the exclusive use of winery employees. *See Napa County Code §18.104.210*

b. **Winery Coverage** – The total square foot area of all winery building footprints, all aggregate paved or impervious ground surface areas of the production facility which includes all outside work, tank and storage areas (except caves); all paved areas including parking and loading areas, walkways, and access driveways to public or private roads or rights-of-way; and all above-ground wastewater and run-off treatment systems. *See Napa County Code §18.104.220*

c. **Production Facility** – (For the purpose to calculate the maximum allowable accessory use) The total square footage of all winery crushing, fermenting, bottling, bulk and bottle storage, shipping, receiving, laboratory, equipment storage and maintenance facilities, and employee-designated restrooms but does not include wastewater treatment or disposal areas which cannot be used for agricultural purposes. *See Napa County Code §18.104.200*

d. **Accessory Use** - The total square footage of area within winery structures used for accessory uses related to a winery that are not defined as "production facility" which would include offices, lobbies/waiting rooms, conference/meeting rooms, non-production access hallways, kitchens, tasting rooms (private and public areas), retail space areas, libraries, non-employee designated restrooms, art display areas, or any area within winery structures not directly related to wine production. *See Napa County Code §18.104.200*

Conservation Development and Planning

Winery Production Process

A Tradition of Stewardship
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The Napa County Code contains various references to winery production and refers to production capacity as "the wine bottled or received" at a winery and refers to "bottling and storage of bottled wine and shipping and receiving of bulk and bottled wine "(Code Section 18.16.030(G)(4)).[1]

This handout was developed by the County planning staff with the assistance of a number of local industry representatives to assist property owners and other interested parties in interpreting Napa County Code references to winery production. It does not create a new definition or regulation.

A winery's total annual production equals either (1) the sum of all wine created through fermentation in a given year, plus the net total of all fermented bulk wine received and shipped in the same year, including all bottled wine received on the premises during the same year; or (2) the amount of wine bottled on the premises in the same given year, *whichever is greater*.

Using the diagram on the right, this means the greater of A+(B-C), or D. If B-C is a negative number, total production is equal to either A or D, whichever is greater

This interpretation holds true for all physical winery facilities regardless of the number of business entities (e.g. Alternating Proprietors/Custom Crush) they accommodate or the date that their production capacity was established or recognized. However, wineries occupying multiple facilities are governed by the specific terms of their use permit or Certificate of Legal Non-conformity (CLN), which may vary.

Quantities represented by items A through D on the diagram can be determined by reviewing a winery's annual submittals to the federal Bureau of Alcohol, Tobacco and Firearms (ATF). The County may periodically request a copy of these submittal (s) as a way to monitor compliance with previously adopted conditions/requirements. The County recognizes that annual variations can occur due to the grape harvest and the timing of finishing/bottling, and will generally review and average three to five consecutive years of data.

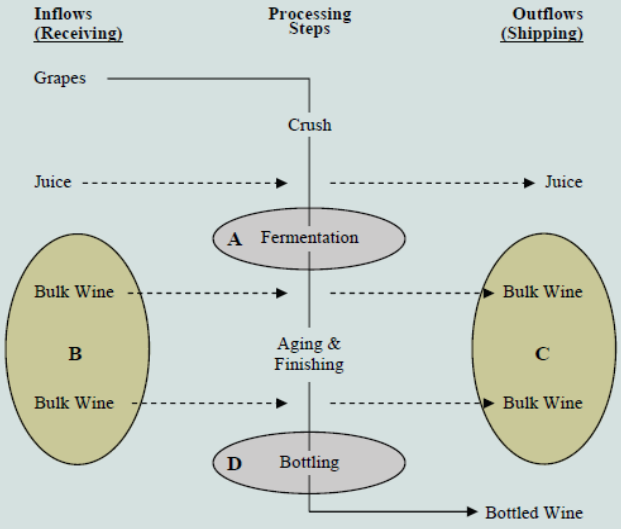

Figure 1. Winery Production Process

[1] The complexity of these statements can be attributed to the authors' desire to avoid "double counting" bulk wine that is both received and bottled at a winery, and the fact that multiple vintages are present within a winery at any given time.

July 2008

Winery Coverage and Accessory/Production Ratio

Winery Development Area. Consistent with the definition at "a.," at page 11 and with the marked-up site plans included in your submittal, please indicate your proposed winery development area. If the facility already exists, please differentiate between existing and proposed.

Existing N/A sq. ft. N/A acres

Proposed 3,838 sq. ft. 0.08 + acres

Winery Coverage. Consistent with the definition at "b.," at page 11 and with the marked-up site plans included in your submittal, please indicate your proposed winery coverage (maximum 25% of parcel or 15 acres, whichever is less).

4,105 sq. ft. 0.08 + acres _____% of parcel

Production Facility. Consistent with the definition at "c.," at page 11 and the marked-up floor plans included in your submittal, please indicate your proposed *production* square footage. If the facility already exists, please differentiate between existing and proposed.

Existing N/A sq. ft. Proposed 3,223 sq. ft.

Accessory Use. Consistent with the definition at "d.," at page 11 and the marked-up floor plans included in your submittal, please indicate your proposed *accessory* square footage. If the facility already exists, please differentiate between existing and proposed. (maximum = 40% of the production facility)

Existing N/A sq. ft. N/A % of production facility

Proposed 1,004 sq. ft. 31.8% % of production facility

Caves and Crushpads

If new or expanded caves are proposed please indicate which of the following best describes the public accessibility of the cave space:

☑ None – no visitors/tours/events (**Class I**) ☐ Guided Tours Only (**Class II**) ☐ Public Access (**Class III**)

☐ Marketing Events and/or Temporary Events (**Class III**)

Please identify the winery's…

Cave area Existing: None sq. ft. Proposed: None sq. ft.

Covered crush pad area Existing: None sq. ft. Proposed: Indoors sq. ft.

Uncovered crush pad area Existing: None sq. ft. Proposed: None sq. ft.

Initial Statement of Grape Source

Pursuant to Napa County Zoning Ordinance Sections 12419(b) and (c), I hereby certify that the current application for establishment or expansion of a winery pursuant to the Napa County Winery Definition Ordinance will employ sources of grapes in accordance with the requirements of Section 12419(b) and/or (c) of that Ordinance.

Leaf and Vine, LLC does not own any vineyard land. Grapes will be sourced from grape growers within Napa County and outside of the region and brought to the winery for processing. Given the site zoning, GI:AC, the proposed winery is not subject to Section 18.104.250 of the Napa County Municipal Code, which establishes the source rule requiring that 75% of the grapes used in production be sourced from within Napa County. As described therein, the 75% rule applies only to wineries located within zones AP and AW.

_____

Owner's Signature **Date**

Letters of commitment from grape suppliers and supporting documents may be required prior to issuance of any building permits for the project. Recertification of compliance will be required on a periodic basis. Recertification after initiation of the requested wine production may require the submittal of additional information regarding individual grape sources. Proprietary information will not be disclosed to the public.

Water Supply/ Waste Disposal Information Sheet

Water Supply

Please attach completed Phase I Analysis sheet.

	Domestic	Emergency
Proposed source of water (e.g., spring, well, mutual water company, city, district, etc.):	City Water	City Water
Name of proposed water supplier (if water company, city, district):	Am Can	Am Can
Is annexation needed?	☐ Yes ☑ No	☐ Yes ☑ No
Current water use:	None gallons per day (gal/d)	
Current water source:	Am Can	Am Can
Anticipated future water demand:	See Will Serve gal/d	See Will Serve gal/d
Water availability (in gallons/minute):	See Will Serve gal/m	See Will Serve gal/m
Capacity of water storage system:	N/A gal	N/A gal
Type of emergency water storage facility if applicable (e.g., tank, reservoir, swimming pool, etc.):	City of American Canyon Fire Hydrants	

Liquid Waste

Please attach Septic Feasibility Report

	Domestic	Other
Type of waste:	sewage	winery
Disposal method (e.g., on-site septic system, on-site ponds, community system, district, etc.):	Municipal	Hold and Haul
Name of disposal agency (if sewage district, city, community system):	Napa San Dist	East Bay MUD
Is annexation needed?	☐ Yes ☑ No	☐ Yes ☑ No
Current waste flows (peak flow):	See Will Serve gal/d	None gal/d
Anticipated future waste flows (peak flow):	See Will Serve gal/d	925 gal/d
Future waste disposal design capacity:	See Will Serve gal/d	925 gal/d

Solid Waste and Recycling Storage and Disposal

Please include location and size of solid waste and recycling storage area on site plans in accordance with the guidelines available at www.countyofnapa.org/dem.

Hazardous and/or Toxic Materials

If your facility generates hazardous waste or stores hazardous materials above threshold planning quantities (55 gallons liquid, 500 pounds solid or 200 cubic feet of compressed gas) then a hazardous materials business plan and/or a hazardous waste generator permit will be required.

Grading Spoils Disposal

Where will grading spoils be disposed of?
(e.g. on-site, landfill, etc. If off-site, please indicate where off-site): N/A no grading is proposed.

Winery Traffic Information / Trip Generation Sheet

Traffic during a Typical Weekday

Number of FT employees: 4 x 3.05 one-way trips per employee = 12.2 daily trips.

Number of PT employees: 2 x 1.90 one-way trips per employee = 3.8 daily trips.

Average number of weekday visitors: 12 / 2.6 visitors per vehicle x 2 one-way trips = 9.2 daily trips.

Gallons of production: 18,500 / 1,000 x .009 truck trips daily[3] x 2 one-way trips = 0.3 daily trips.

4 + 2/2 + (9.2+0.3) x 0.38 **Total** = 25.5 **daily trips.**

(№ of FT employees) + (№ of PT employees/2) + (sum of visitor and truck trips x .38) = 8.6 **PM peak trips.**

Traffic during a Typical Saturday

Number of FT employees (on Saturdays): 4 x 3.05 one-way trips per employee = 12.2 daily trips.

Number of PT employees (on Saturdays): 2 x 1.90 one-way trips per employee = 3.8 daily trips.

Average number of Saturday visitors: 30 / 2. 8 visitors per vehicle x 2 one-way trips = 21.4 daily trips.

Total = 37.4 **daily trips.**

4 + 2/2 + 21.4 x 0.57

(№ of FT employees) + (№ of PT employees/2) + (visitor trips x .57) = 17.2 **PM peak trips.**

Traffic during a Crush Saturday

Number of FT employees (during crush): 4 x 3.05 one-way trips per employee = 12.2 daily trips.

Number of PT employees (during crush): 2 x 1.90 one-way trips per employee = 3.8 daily trips.

Average number of Saturday visitors: 30 / 2. 8 visitors per vehicle x 2 one-way trips = 21.4 daily trips.

Gallons of production: 18,500 / 1,000 x .009 truck trips daily x 2 one-way trips = 0.3 daily trips.

Avg. annual tons of grape on-haul: 130 / 144 truck trips daily[4] x 2 one-way trips = 1.8 daily trips.

Total = 39.5 **daily trips.**

Largest Marketing Event- Additional Traffic

Number of event staff (largest event): 6 x 2 one-way trips per staff person = 12 trips.

Number of visitors (largest event): 50 / 2.8 visitors per vehicle x 2 one-way trips = 35.7 trips.

Number of special event truck trips (largest event): 2 x 2 one-way trips = 4 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).

Information for Caltrans Review

Application should include:

Project Location

- Site Plan showing all driveway location(s)
- Show detail of Caltrans right-of-way
- Aerial photo at a readable scale

Trip Generation Estimate

- Please provide separate **Winery Traffic Information / Trip Generation Sheets** for existing and proposed operations.

Napa County Winery Traffic Generation Characteristics

Employees

Half-hour lunch: All - 2 trips/day (1 during weekday PM peak)
Hour lunch: Permanent Full-Time – 3.2 trips/day (1 during weekday PM peak)
Permanent Part-Time – 2 trips/day (1 during weekday PM peak)
Seasonal: 2 trips/day (0 during weekday PM peak)—crush
see full time above—bottling
Auto Occupancy: 1.05 employees/auto

Visitors

Auto occupancy:
Weekday = 2.6 visitors/auto
Weekend = 2.8 visitors/auto

Peaking Factors:

Peak Month:	1.65 x average month
Average Weekend:	0.22 x average month
Average Saturday:	0.53 x average weekend
Peak Saturday:	1.65 x average Saturday
Average Sunday:	0.8 x average Saturday
Peak Sunday:	2.0 x average Sunday

Peak Weekend Hour: Winery (3-4 PM) - 0.57 x total for weekend day involved

Average 5-Day Week (Monday-Friday) - 1.3 x average weekend

Average Weekday: 0.2 x average 5-day week

Peak Weekday Hour: Winery (3-4 PM) - 0.57 x total for weekday involved
Roadway PM Peak(4-5 PM?) - 0.38 x total for weekday involved

Service Vehicles

Grapes (36 days (6weeks)/season): 1.52 trips/1000 gals/season (4 ton loads assumed)
Materials/Supplies (250 days/yr): 1.47 trips/1000 gals/yr
Case Goods (250 days/yr): 0.8 trips/1000 gal/yr

Checklist of Voluntary Greenhouse Gas Emission Reduction Measures

A Tradition of Stewardship
A Commitment to Service

An addendum to the Entitlement Application and a supplement for Initial Studies as required by CEQA

PROJECT NAME	Please see attached BMP Checklist
PROJECT ADDRESS	Practices with Measurable GHG
APPLICANT	Reduction Potential
CONTACT INFO	
email	phone

		yes	no	I don't know
1	Have you designed to U.S.G.B.C.™ LEED™ or Build It Green™ standards? If yes, please include a copy of their required spreadsheets.			
2	Do you have an integrated design team? if yes, please list:			
3	**SITE DESIGN**			
3.1	Does your design encourage community gathering and is it pedestrian friendly?			
3.2	Are you building on existing disturbed areas?			
3.3	Landscape Design			
3.31	native plants?			
3.32	drought tolerant plants?			
3.33	Pierce Disease resistant planting?			
3.34	Fire resistant planting?			
3.35	Are you restoring open space and/or habitat?			
3.36	Are you harvesting rain water on site?			
3.37	planting large trees to act as carbon sinks?			
3.38	using permeable paving materials for drive access and walking surfaces?			
3.4	Does your parking lot include bicycle parking?			
3.5	Do you have on-site waste water disposal?			
3.6	Do have post-construction stormwater on site detention/filration methods designed?			
3.7	Have you designed in harmony with existing natural features, such as preserving existing trees or rock outcroppings?			
3.8	Does the project minimize the amount of site disturbance, such as minimizing grading and/or using the existing topography in the overall site design (such as cave design)?			
3.9	Is the structure designed to take advantage of natural cooling and passive solar aspects?			
4	**ENERGY PRODUCTION & EFFICIENCY**			
4.1	Does your facility use energy produced on site? If yes, please explain the size, location, and percentage of off-set:			
4.2	Does the design include thermal mass within the walls and/or floors?			
4.3	Do you intend to commission the performance of the building after it is built to ensure it performs as designed?			
4.4	Will your plans for construction include:			
4.41	High density insulation above Title 24 standards?			
4.42	Zones for heating and cooling to provide for maximum efficiency?			
4.43	Energy Star™ or ultra energy efficient appliances?			
4.44	A "cool" (lightly colored or reflective) or a permeable/living roof?			
4.45	Timers/time-outs installed on lights (such as the bathrooms)?			
	If yes, please explain:			
5	**WATER CONSERVATION**			
5.1	Does your landscape include high-efficiency irrigation?			
5.2	Does your landscape use zero potable water irrigation?			
5.3	Is your project in the vicinity to connect to the Napa Sanitation reclaimed water?			
5.4	Will your facility use recycled water?			
5.41	If no, will you prepare for it by pre-installing dual pipes and/or purple lines?			
5.5	Will your plans for construction include:			
5.51	a meter to track your water usage?			
5.52	ultra water efficient fixtures and appliances?			
5.53	a continuous hot water distribution method, such as an on-demand pump?			
5.54	a timer to insure that the systems are run only at night/early morning?			

	yes	no	I don't know
6 MATERIAL RECYCLING			
6.1 Are you using reclaimed materials?			
If yes, what and where: _____			
6.2 Are you using recycled construction materials-			
6.21 finish materials?			
6.22 aggregate/concrete road surfaces?			
6.23 fly ash/slag in foundation?			
6.3 Will your contractor be required to recycle and reuse construction materials as part of your contract?			
6.4 Does your facility provide access to recycle-			
6.41 Kitchen recycling center?			
6.42 Recycling options at all trash cans?			
6.43 Do you compost green waste?			
6.44 Provide recycling options at special events?			
7 NATURAL RESOURCES			
7.1 Will you be using certified wood that is sustainably harvested in construction?			
7.2 Will you be using regional (within 500 miles) building materials?			
7.3 Will you be using rapidly renewable materials, such as bamboo?			
7.4 Will you apply optimal value engineering (studs & rafters at 24" on center framing)?			
7.5 Have you considered the life-cycle of the materials you chose?			
8 INDOOR AIR QUALITY			
8.1 Will you be using low or no emitting finish and construction materials indoors-			
8.11 Paint?			
8.12 Adhesives and Sealants?			
8.13 Flooring?			
8.14 Framing systems?			
8.15 Insulation?			
8.2 Does the design allow for maximum ventilation?			
8.3 Do you plan for a wood burning fireplace (US EPA Phase II certified)?			
8.4 Does your design include dayling, such as skylights?			
9 TRANSPORTATION DEMAND MANAGMENTMENT			
9.1 After your project is complete, will you offer your employees incentives to carpool, bike, or use transit?			
9.2 After your project is complete, will you allow your employees to telecommute or have alternative work schedules?			
9.3 Does your project include design features that encourage alternatives modes of transportation, such as			
preferred parking for carpooling, ridesharing, electric vehicles?			
secured bicycle parking, safe bicycle access?			
loading zones for buses/large taxi services?			

9.4 How close is your facility to public transportation?

_____

10 Are there any superior environmental/sustainable features of your project that should be noted?

_____

_____

11 What other studies or reports have you done as part of preparing this application?

1 _____

2 _____

3 _____

4 _____

12 If your project involves an addition or modification to an existing building, are you planning to improve energy conservation of existing space (such as insulation, new windows, HVAC, etc.)?

If yes, please describe:_____

13 Once your facility is in operation, will you:

13.1 calculate your greenhouse gas emissions?			
13.2 implement a GHG reduction plan?			
13.3 have a written plan to reduce your vehicle miles traveled of your operations and employee's commute?			

14 Does your project provide for education of green/sustainable practices?

If yes, please describe: _____

15 Any comments, suggestions, or questions in regards to the County's efforts to reduce greenhouse gases?

_____

_____

_____

Form filed out by: _____

Please feel free to include additional sheets of paper as necessary.

NAPA COUNTY UNIFIED PROGRAM CONSOLIDATED FORM
FACILITY INFORMATION

BUSINESS ACTIVITIES

I. FACILITY IDENTIFICATION

FACILITY ID # (Agency Use Only)														1	EPA ID # (Hazardous Waste Only) 2

BUSINESS NAME (Same as Facility Name of DBA-Doing Business As) Leaf and Vine Winery 3

BUSINESS SITE ADDRESS 190 Camino Oruga, Suite 24 103

BUSINESS SITE CITY Napa 104 | CA | ZIP CODE 94559 105

CONTACT NAME Richard Keith 106 | PHONE (707) 225-1895 107

II. ACTIVITIES DECLARATION

NOTE: If you check YES to any part of this list, please submit the Business Owner/Operator Identification page.

Does your facility…	If Yes, please complete these pages of the UPCF….	
A. HAZARDOUS MATERIALS Have on site (for any purpose) at any one time, hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?	☐ YES ☒ NO 4	HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION
B. REGULATED SUBSTANCES Have Regulated Substances stored onsite in quantities greater than the threshold quantities established by the California Accidental Release prevention Program (CalARP)?	○ YES ● NO 4a	Coordinate with your local agency responsible for CalARP.
C. UNDERGROUND STORAGE TANKS (USTs) Own or operate underground storage tanks?	○ YES ● NO 5	UST FACILITY (Formerly SWRCB Form A) UST TANK (one page per tank) (Formerly Form B)
D. ABOVE GROUND PETROLEUM STORAGE Own or operate ASTs above these thresholds: Store greater than 1,320 gallons of petroleum products (new or used) in aboveground tanks or containers.	○ YES ● NO 8	NO FORM REQUIRED TO CUPAs
E. HAZARDOUS WASTE Generate hazardous waste?	○ YES ● NO 9	EPA ID NUMBER – provide at the top of this page
Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?	○ YES ● NO 10	RECYCLABLE MATERIALS REPORT (one per recycler)
Treat hazardous waste on-site?	○ YES ● NO 11	ON-SITE HAZARDOUS WASTE TREATMENT – FACILITY ON-SITE HAZARDOUS WASTE TREATMENT – UNIT (one page per unit)
Treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?	○ YES ● NO 12	CERTIFICATION OF FINANCIAL ASSURANCE
Consolidate hazardous waste generated at a remote site?	○ YES ● NO 13	REMOTE WASTE / CONSOLIDATION SITE ANNUAL NOTIFICATION
Need to report the closure/removal of a tank that was classified as hazardous waste and cleaned on-site?	○ YES ● NO 14	HAZARDOUS WASTE TANK CLOSURE CERTIFICATION
Generate in any single calendar month 1,000 kilograms (kg) (2,200 pounds) or more of federal RCRA hazardous waste, or generate in any single calendar month, or accumulate at any time, 1 kg (2.2 pounds) of RCRA acute hazardous waste; or generate or accumulate at any time more than 100 kg (220 pounds) of spill cleanup materials contaminated with RCRA acute hazardous waste.	○ YES ● NO 14a	Obtain federal EPA ID Number, file Biennial Report (EPA Form 8700-13A/B), and satisfy requirements for RCRA Large Quantity Generator.
Household Hazardous Waste (HHW) Collection site?	○ YES ● NO 14b	See CUPA for required forms.

F. LOCAL REQUIREMENTS 15

(You may also be required to provide additional information by your CUPA or local agency.)

UPCF Rev. (12/2007)

Business Activities

Please submit the Business Activities page, the Business Owner/Operator Identification page, and Hazardous Materials Inventory - Chemical Description pages for all submissions. (Note: the numbering of the instructions follows the data element numbers that are on the Unified Program Consolidated Form (UPCF) pages. These data element numbers are used for electronic submission and are the same as the numbering used in Division 3, Electronic Submittal of Information). Please number all pages of your submittal. This helps your CUPA or AA identify whether the submittal is complete and if any pages are separated.

1. FACILITY ID NUMBER - Leave this blank. This number is assigned by the Certified Unified Program Agency (CUPA) or Administering Agency (AA). This is the unique number which identifies your facility.
2. EPA ID NUMBER - If you generate, recycle, or treat hazardous waste, enter your facility's 12-character U.S. Environmental Protection Agency (U.S. EPA) or California Identification number. For facilities in California, the number usually starts with the letters "CA". If you do not have a number, contact the Department of Toxic Substances Control (DTSC) Telephone Information Center at (916) 324-1781, (800) - 61-TOXIC or (800) 61-86942, to obtain one.
3. BUSINESS NAME - Enter the full legal name of the business. This is the same as the terms "Facility Name" or "DBA - Doing Business As" that might have been used in the past.

103. BUSINESS SITE ADDRESS - Enter the street address where the facility is located. No post office box numbers are allowed. This information must provide a means to geographically locate the facility.

104. BUSINESS SITE CITY - Enter the city or unincorporated area in which business site is located.

105. ZIP CODE - Enter the zip code of business site. The extra 4 digit zip may also be added.

106. CONTACT- Enter a contact person's name.

107. PHONE- Enter a contact phone number

4. HAZARDOUS MATERIALS –

Check the box to indicate whether you have a hazardous material onsite. You have a hazardous material onsite if:

- It is handled in quantities equal to or greater than 500 pounds, 55 gallons, or 200 cubic feet of compressed gas (calculated at standard temperature and pressure),
- It is handled in quantities equal to or greater than the applicable federal threshold planning quantity for an extremely hazardous substance listed in 40 CFR Part 355, Appendix A,
- Radioactive materials are handled in quantities for which an emergency plan is required to be adopted pursuant to Part 30, Part 40, or Part 70 of Chapter 10 of 10 CFR, or pursuant to any regulations adopted by the state in accordance with these regulations.

If you have a hazardous material onsite, then you must complete the Business Owner/Operator Identification page and the Hazardous Materials Inventory - Chemical Description page, as well as an Emergency Response Plan and Training Plan.

Do not answer "YES" to this question if you exceed only a local threshold, but do not exceed the state threshold.

4a. REGULATED SUBSTANCES – Refer to 19 CCR 2770.5 for regulated substances. Check the box to indicate whether your facility has CalARP regulated substances stored onsite.

5. OWN OR OPERATE UNDERGROUND STORAGE TANK (UST) - Check the appropriate box to indicate whether you own or operate USTs containing hazardous substances as defined in Health and Safety Code (HSC), 25316. If "YES", then you must complete one UST Facility page and UST Tank pages for each tank. You must also submit a plot plan and a monitoring program plan.
8. OWN OR OPERATE ABOVEGROUND PETROLEUM STORAGE TANK OR CONTAINER - Check the appropriate box to indicate whether there are ASTs onsite which exceed the regulatory thresholds. (There is no UPCF page for ASTs.) This program applies to all facilities storing petroleum in aboveground tanks. Petroleum means crude oil, or any fraction thereof, which is liquid at 60 degrees Fahrenheit temperature and 14.7 pounds per square inch absolute pressure (HSC, 25270.2 (g)). The facility must have a cumulative storage capacity greater than 1,320 gallons for all ASTs. NOT Subject to the Act (exemptions):

   An aboveground petroleum storage tank (AST) facility with one or more of the following (see HSC, 25270.2 (k)) is not subject to this act and is exempt:
   - A pressure vessel or boiler which is subject to Division 5 of the Labor Code,
   - A storage tank containing hazardous waste if a hazardous waste facility permit has been issued for the storage tank by DTSC,
   - An aboveground oil production tank which is regulated by the Division of Oil and Gas,
   - Certain oil-filled electrical equipment including but not limited to transformers, circuit breakers, or capacitors.
9. HAZARDOUS WASTE GENERATOR - Check the appropriate box to indicate whether your facility generates hazardous waste. A generator is the person or business whose acts or processes produce a hazardous waste or who causes a hazardous substance or waste to become subject to State hazardous waste law. If your facility generates hazardous waste, you must obtain and use an EPA Identification number (ID) in order to properly transport and dispose of it. Report your EPA ID number in #2. Hazardous waste means a waste that meets any of the criteria for the identification of a hazardous waste adopted by DTSC pursuant to HSC, 25141. "Hazardous waste" includes, but is not limited to, federally regulated hazardous waste. Federal hazardous waste law is known as the Resource Conservation and Recovery Act (RCRA). Unless explicitly stated otherwise, the term "hazardous waste" also includes extremely hazardous waste and acutely hazardous waste.
10. RECYCLE - Check the appropriate box to indicate whether you recycle more than 100 kilograms per month of recyclable material under a claim that the material is excluded or exempt per HSC, 25143.2. Check "YES" and complete the Recyclable Materials Report pages, if you either recycled onsite or recycled excluded recyclable materials which were generated offsite. Check "NO" if you only send recyclable materials to an offsite recycler. You do not need to report.
11. ONSITE HAZARDOUS WASTE TREATMENT - Check the appropriate box to indicate whether your facility engages in onsite treatment of hazardous waste. "Treatment" means any method, technique, or process which is designed to change the physical, chemical, or biological character or composition of any hazardous waste or any material contained therein, or removes or reduces its harmful properties or characteristics for any purpose. "Treatment" does not include the removal of residues from manufacturing process equipment for the purposes of cleaning that equipment. Amendments (effective 1/1/99) add exemptions from the definition of "treatment" for certain processes under specific, limited conditions. Refer to HSC, 25123.5 (b) for these specific exemptions. Treatment of certain laboratory hazardous wastes do not require authorization. Refer to HSC, 25200.3.1 for specific information. Please contact your CUPA to determine if any exemptions apply to your facility. If your facility engages in onsite treatment of hazardous waste then complete the Onsite Hazardous Waste Treatment Notification - Facility page and one set of Onsite Hazardous Waste Treatment Notification - Unit pages with waste and treatment process information for each unit.
12. FINANCIAL ASSURANCE - Check the appropriate box to indicate whether your facility is subject to financial assurance requirements for closure of an onsite treatment unit. Unless they are exempt, Permit by Rule (PBR) and Conditionally Authorized (CA) operations are required to provide financial assurance for closure costs (per 22 CCR, 67450.13 (b) and HSC, 25245.4). If your facility is subject to financial assurance requirements or claiming an exemption, then complete the Certification of Financial Assurance page.
13. REMOTE WASTE CONSOLIDATION SITE - Check the appropriate box to indicate whether your facility consolidates hazardous waste generated at a remote site. Answer "YES" if you are a hazardous waste generator that collects hazardous waste initially at remote sites and subsequently transports the hazardous waste to a consolidation site you also operate. You must be eligible pursuant to the conditions in HSC, 25110.10. If your facility consolidates hazardous waste generated at a remote site, then complete the Remote Waste Consolidation Site Annual Notification page.
14. HAZARDOUS WASTE TANK CLOSURE - Check the appropriate box to indicate whether the tank being closed would be classified as hazardous waste after its contents are removed. Classification could be based on:
   - Your knowledge of the tank and its contents
   - Testing of the tank
   - Inability to remove hazardous materials stored in the tank.
   - The mixture rule
   - The listed wastes in 40 CFR 261.31 or 40 CFR 261.32.

   If the tank being closed would be classified as hazardous waste after its contents are removed, then you must complete the Hazardous Waste Tank Closure Certification page.

14a. RCRA LQG - Check the appropriate box to indicate whether your facility is a Large Quantity Generator. If YES, you must have or obtain a US EPA ID Number.

14b. HOUSEHOLD HAZARDOUS WASTE COLLECTION - Check the appropriate box to indicate whether your facility is a HHW Collection site.

15. LOCAL REQUIREMENTS - Some CUPAs or AAs may require additional information. Check with your CUPA before submitting the UPCF to determine if any supplemental information is required.

UPCF Rev. (12/2007)

Planning, Building & Environmental Services - Hillary Gitelman, Director
1195 Third Street, Napa, CA 94559 - (707) 253-4417 - www.countyofnapa.org

A Tradition of Stewardship
A Commitment to Service

Project name & APN: Leaf and Vine Winery (APN 057-270-008)
Project number if known:
Contact person: Richard Keith
Contact email & phone number: rick@leafandvine.com (707) 225-1895
Today's date: November 19, 2014

Voluntary Best Management Practices Checklist for Development Projects

Napa County General Plan Policy CON-65 (e) and Policy CON-67 (d) requires the consideration of Greenhouse Gas (GHG) emissions in the review of discretionary projects and to promote and encourage "green building" design. The below Best Management Practices (BMPs) reduce GHG emissions through energy and water conservation, waste reduction, efficient transportation, and land conservation. The voluntary checklist included here should be consulted early in the project and be considered for inclusion in new development. It is not intended, and likely not possible for all projects to adhere to all of the BMPs. Rather, these BMPs provide a portfolio of options from which a project could choose, taking into consideration cost, co-benefits, schedule, and project specific requirements. Please check the box for all BMPs that your project proposes to include and include a separate narrative if your project has special circumstances.

Practices with Measurable GHG Reduction Potential

The following measures reduce GHG emissions and if needed can be calculated. They are placed in descending order based on the amount of emission reduction potential.

Already Doing	Plan To Do	ID #	BMP Name
☐	☒	BMP-1	**Generation of on-site renewable energy**

If a project team designs with alternative energy in mind at the conceptual stage it can be integrated into the design. For instance, the roof can be oriented, sized, and engineered to accommodate photovoltaic (PV) panels. If you intend to do this BMP, please indicate the location of the proposed PV panels on the building elevations or the location of the ground mounted PV array on the site plan. Please indicate the total annual energy demand and the total annual kilowatt hours produced or purchased and the potential percentage reduction of electrical consumption. Please contact staff or refer to the handout to calcuate how much electrical energy your project may need.

☐	☐	BMP-2	**Preservation of developable open space in a conservation easement**

Please indicate the amount and location of developable land (i.e.: under 30% slope and not in creek setbacks or environmentally sensitive areas for vineyards) conserved in a permanent easement to prohibit future development.

N/A

Already Doing	Plan To Do		
☐	☐	BMP-3	**Habitat restoration or new vegetation (e.g. planting of additional trees over 1/2 acre)**

Napa County is famous for its land stewardship and preservation. Restoring areas within the creek setback reduces erosion potential while planting areas that are currently hardscape (such as doing a bio-retention swale rather than underground storm drains) reduces storm water and helps the groundwater recharge. Planting trees can also increase the annual uptake of CO2e and add the County's carbon stock.

N/A

☒	☐	BMP-4	**Alternative fuel and electrical vehicles in fleet**

The magnitude of GHG reductions achieved through implementation of this measure varies depending on the analysis year, equipment, and fuel type replaced.

Number of total vehicles One (1)

Typical annual fuel consumption or VMT

Number of alternative fuel vehicles One (1)

Type of fuel/vehicle(s) Ethanol (E85) Flex-Fuel

Potential annual fuel or VMT savings

☐	☐	BMP-5	**Exceed Title 24 energy efficiency standards: Build to CALGREEN Tier 2**

The California Building Code update effective January 1, 2011 has new mandatory green building measures for all new construction and has been labeled CALGREEN. CALGREEN provides two voluntary higher levels labeled CALGREEN Tier I and CALGREEN Tier II. Each tier adds a further set of green building measures that go above and beyond the mandatory measures of the Code. In both tiers, buildings will use less energy than the current Title 24 California Energy Code. Tier I buildings achieve at least a 15% improvement and Tier 2 buildings are to achieve a 30% improvement. Both tiers require additional non-energy prerequisites, as well as a certain number of elective measures in each green building category (energy efficiency, water efficiency, resource conservation, indoor air quality and community).

☐	☐	BMP-6	**Vehicle Miles Traveled (VMT) reduction plan**

Selecting this BMP states that the business operations intend to implement a VMT reduction plan reducing annual VMTs by at least 15%.

Tick box(es) for what your Transportation Demand Management Plan will/does include:

- ☐ employee incentives
- ☐ employee carpool or vanpool
- ☐ priority parking for efficient transporation (hybrid vehicles, carpools, etc.)
- ☐ bike riding incentives
- ☐ bus transportation for large marketing events
- ☐ Other:

Estimated annual VMT

Potential annual VMT saved

% Change

Already Doing	Plan To Do		
☐	☒	**BMP-7**	**Exceed Title 24 energy efficiency standards: Build to CALGREEN Tier 1**

See description below under BMP-5.

☐	☐	**BMP-8**	**Solar hot water heating**

Solar water heating systems include storage tanks and solar collectors. There are two types of solar water heating systems: active, which have circulating pumps and controls, and passive, which don't. Both of them would still require additional heating to bring them to the temperature necessary for domestic purposes. They are commonly used to heat swimming pools.

☐	☒	**BMP-9**	**Energy conserving lighting**

Lighting is approximately 25% of typical electrical consumption. This BMP recommends installing or replacing existing light bulbs with energy-efficient compact fluorescent (CF) bulbs or Light Emitting Diode (LED) for your most-used lights. Although they cost more initially, they save money in the long run by using only 1/4 the energy of an ordinary incandescent bulb and lasting 8-12 times longer. Typical payback from the initial purchase is about 18 months.

☐	☒	**BMP-10**	**Energy Star Roof/Living Roof/Cool Roof**

Most roofs are dark-colored. In the heat of the full sun, the surface of a black roof can reach temperatures of 158 to 194 °F. Cool roofs, on the other hand, offer both immediate and long-term benefits including reduced building heat-gain and savings of up to 15% the annual air-conditioning energy use of a single-story building. A cool roof and a green roof are different in that the green roof provides living material to act as a both heat sink and thermal mass on the roof which provides both winter warming and summer cooling. A green (living) roof also reduces storm water runoff.

Existing cool roof on building

☐	☐	**BMP-11**	**Bicycle Incentives**

Napa County Zoning Ordinance requires 1 bicycle rack per 20 parking spaces (§18.110.040). Incentives that go beyond this requirement can include on-site lockers for employees, showers, and for visitor's items such as directional signs and information on biking in Napa. Be creative!

☐	☐	**BMP-12**	**Bicycle route improvements**

Refer to the Napa County Bicycle Plan (NCPTA, December 2011) and note on the site plan the nearest bike routes. Please note proximity, access, and connection to existing and proposed bike lanes (Class I: Completely separated right-of-way; Class II: Striped bike lane; Class III: Signed Bike Routes). Indicate bike accessibility to project and any proposed improvements as part of the project on the site plan or describe below.

Already Doing	Plan To Do		
☐	☐	**BMP-13**	**Connection to recycled water**

Recycled water has been further treated and disinfected to provide a non-potable (non-drinking water) water supply. Using recycled water for irrigation in place of potable or groundwater helps conserve water resources.

N/A

☐	☒	**BMP-14**	**Install Water Efficient fixtures**

WaterSense, a partnership program by the U.S. Environmental Protection Agency administers the review of products and services that have earned the WaterSense label. Products have been certified to be at least 20 percent more efficient without sacrificing performance. By checking this box you intend to install water efficient fixtures or fixtures that conserve water by 20%.

☐	☐	**BMP-15**	**Low-impact development (LID)**

LID is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed. Please indicate on the site or landscape plan how your project is designed in this way.

☒	☐	**BMP-16**	**Water efficient landscape**

If your project is a residential development proposing in excess of 5,000 sq. ft. or a commercial development proposing in excess of 2,500 sq. ft. The project will be required to comply with the Water Efficient Landscape Ordinance (WELO).

Please check the box if you will be complying with WELO or If your project is smaller than the minimum requirement and you are still proposing drought tolerant, zeroscape, native plantings, zoned irrigation or other water efficient landscape.

☐	☒	**BMP-17**	**Recycle 75% of all waste**

Did you know that the County of Napa will provide recycling collectors for the interior of your business at no additional charge? With single stream recycling it is really easy and convenient to meet this goal. To qualify for this BMP, your business will have to be aggressive, proactive and purchase with this goal in mind.

Already Doing	Plan To Do		
☐	☐	**BMP-18**	**Compost 75% food and garden material**

The Napa County food composting program is for any business large or small that generates food scraps and compostable, including restaurants, hotels, wineries, assisted living facilities, grocery stores, schools, manufacturers, cafeterias, coffee shops, etc. All food scraps (including meat & dairy) as well as soiled paper and other compostable - see http://www.naparecycling.com/foodcomposting for more details.

☐ ☐ **BMP-19 Implement a sustainable purchasing and shipping programs**

Environmentally Preferable Purchasing (EPP) or Sustainable Purchasing refers to the procurement of products and services that have a reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. By selecting this BMP, you agree to have an EPP on file for your employees to abide by.

☐ ☐ **BMP-20 Planting of shade trees within 40 feet of the south side of the building elevation**

Well-placed trees can help keep your building cool in summer. If you choose a deciduous tree after the leaves drop in autumn, sunlight will warm your building through south and west-facing windows during the colder months. Well-designed landscaping can reduce cooling costs by 20%. Trees deliver more than energy and cost savings; they are important carbon sinks. Select varieties that require minimal care and water, and can withstand local weather extremes. Fruit or nut trees that produce in your area are great choices, providing you with local food as well as shade. Please use the site or landscape plan to indicate where trees are proposed and which species you are using.

☐ ☐ **BMP-21 Electrical Vehicle Charging Station(s)**

As plug-in hybrid electric vehicles (EV) and battery electric vehicle ownership is expanding, there is a growing need for widely distributed accessible charging stations. Please indicate on the site plan where the station will be.

☐ ☐ **BMP-22 Public Transit Accessibility**

Refer to http://www.ridethevine.com/vine and indicate on the site plan the closest bus stop/route. Please indicate if the site is accessed by transit or by a local shuttle. Provide an explanation of any incentives for visitors and employees to use public transit. Incentives can include bus passes, informational hand outs, construction of a bus shelter, transportation from bus stop, etc.

N/A, no bus routes

Already Doing	Plan To Do		
☐	☐	**BMP-23**	**Site Design that is oriented and designed to optimize conditions for natural heating, cooling, and day lighting of interior spaces, and to maximize winter sun exposure; such as a cave.** *The amount of energy a cave saves is dependent on the type of soil, the microclimate, and the user's request for temperature control. Inherently a cave or a building burned into the ground saves energy because the ground is a consistent temperature and it reduces the amount of heating and cooling required. On the same concept, a building that is oriented to have southern exposure for winter warmth and shading for summer cooling with an east-west cross breeze will naturally heat, cool, and ventilate the structure without using energy. Please check this box if your design includes a cave or exceptional site design that takes into consideration the natural topography and sitting. Be prepared to explain your approach and estimated energy savings.* N/A, existing building
☐	☒	**BMP-24**	**Limit the amount of grading and tree removal** *Limiting the amount of earth disturbance reduces the amount of CO2 released from the soil and mechanical equipment. This BMP is for a project design that either proposes a project within an already disturbed area proposing development that follows the natural contours of the land, and that doesn't require substantial grading or tree removal.* No trees will be removed
☐	☐	**BMP-25**	**Will this project be designed and built so that it could qualify for LEED?**

BMP-25 (a)	☐	**LEED™ Silver** (check box BMP-25 and this one)
BMP-25 (b)	☐	**LEED™ Gold** (check box BMP-25, BMP-25 (a), and this box)
BMP-25 (c)	☐	**LEED™ Platinum** (check all 4 boxes)

Practices with Un-Measured GHG Reduction Potential

☐	☐	**BMP-26**	**Are you, or do you intend to become a Certified Green Business or certified as a "Napa Green Winery"?** *As part of the Bay Area Green Business Program, the Napa County Green Business Program is a free, voluntary program that allows businesses to demonstrate the care for the environment by going above and beyond business as usual and implementing environmentally friendly business practices. For more information check out the Napa County Green Business and Winery Program at www.countyofnapa.org.*
☐	☐	**BMP-27**	**Are you, or do you intend to become a Certified "Napa Green Land"?** *Napa Green Land, fish friendly farming, is a voluntary, comprehensive, "best practices" program for vineyards. Napa Valley vintners and growers develop farm-specific plans tailored to protect and enhance the ecological quality of the region, or create production facility programs that reduce energy and water use, waste and pollution. By selecting this measure either you are certified or you are in the process of certification.*

Already Doing	Plan To Do		
☐	☒	BMP-28	**Use of recycled materials** *There are a lot of materials in the market that are made from recycled content. By ticking this box, you are committing to use post-consumer products in your construction and your ongoing operations.*
☐	☐	BMP-29	**Local food production** *There are many intrinsic benefits of locally grown food, for instance reducing the transportation emissions, employing full time farm workers, and improving local access to fresh fruits and vegetables.*
☐	☒	BMP-30	**Education to staff and visitors on sustainable practices** *This BMP can be performed in many ways. One way is to simply put up signs reminding employees to do simple things such as keeping the thermostat at a consistent temperature or turning the lights off after you leave a room. If the project proposes alternative energy or sustainable winegrowing, this BMP could include explaining those business practices to staff and visitors.*
☐	☐	BMP-31	**Use 70-80% cover crop** *Cover crops reduce erosion and the amount of tilling which is required, which releases carbon into the environment.*
☐	☐	BMP-32	**Retain biomass removed via pruning and thinning by chipping the material and reusing it rather than burning on-site** *By selecting this BMP, you agree not to burn the material pruned on site.*
☐	☐	BMP-33	**Are you participating in any of the above BMPS at a 'Parent' or outside location?**
☐	☐	BMP-34	**Are you doing anything that deserves acknowledgement that isn't listed above?**

Comments and Suggestions on this form?

Sources:

1. Napa County Bicycle Plan, NCTPA, December 2011

2. California Air Pollution Control Officers Associate (CAPCOA). January 2008. CEQA and Climate Change

3. Napa County General Plan, June 2008.

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5. U.S. Green Building Council (2009). LEED 2009 for New Construction and Major Renovations Rating System. Washington, DC: United States Green Building Council, Inc.

6. California Energy Commission (2008). Title 24, Part 6, of the California Code of Regulations: California's Energy Efficiency Standards for Residential and Nonresidential Buildings. Sacramento, CA: California Energy Commission.

7. U.S. Department of Energy (2010). Cool roof fact sheet.

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9. Compact Fluorescent Light Bulbs". Energy Star. Retrieved 2013-05-01.

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12. http://www.bchydro.com/powersmart/residential/guides_tips/green-your-home/cooling_guide/shade_trees.html

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15. http://www.napasan.com/Pages/ContentMenu.aspx?id=109

16. http://water.epa.gov/polwaste/green/index.cfm

November 2014
#14-24

BARTELT ENGINEERING

HOLD & HAUL DESIGN CALCULATIONS FOR THE LEAF AND VINE WINERY PRODUCTION FACILITY 190 CAMINO ORUGA, SUITE 24 NAPA COUNTY, CA 94558 APN 057-270-008

PROJECT DESCRIPTION

At the request of Richard Keith, Bartelt Engineering has evaluated the feasibility of providing a hold and haul process wastewater disposal system for the proposed Leaf and Vine Winery production facility located at 190 Camino Oruga, Suite 24, Napa County, California.

The project proposes a winery production facility with the capacity to produce 18,500 gallons of wine per year. The proposed winery staff will consist of four (4) full-time employees and two (2) part-time (harvest season) employees.

As part of our work, we have reviewed the planned operational methods for the winery production facility with our Client and performed a reconnaissance of the site to view existing conditions.

This report and the attached plans prepared by Bartelt Engineering will demonstrate that a hold and haul type system can feasibly be utilized to hold process wastewater onsite prior to being hauled offsite for treatment and disposal. Sanitary sewer wastewater generated at the winery will be disposed of through an existing sanitary sewer connection to the Napa Sanitation District sewer system.

SUPPORTING CALCULATIONS

Winery Process Wastewater Flow

Harvest Peak Winery Process Wastewater Flow =

$$\left(\frac{18{,}500\ \text{gallons of wine}}{1\ \text{year}}\right)\times\left(\frac{1.5\ \text{gallons of water}}{1\ \text{gallon of wine}}\right)\times\left(\frac{1\ \text{year}}{30\ \text{days of crush}}\right)$$

Harvest Peak Winery Process Wastewater Flow = 925 gallons per day (gpd)

Non-Harvest Peak Winery Process Wastewater Flow =

$$\left(\frac{18{,}500\ \text{gallons of wine}}{1\ \text{year}}\right)\times\left(\frac{4.5\ \text{gallons of water}}{1\ \text{gallon of wine}}\right)\times\left(\frac{1\ \text{year}}{335\ \text{days}}\right)$$

Non-Harvest Winery Process Wastewater Flow = 248.5 gpd, use 250 gpd

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Average Annual Winery Process Wastewater Flow =

$$\left(\frac{18{,}500\,\text{gallons of wine}}{1\,\text{year}}\right)\times\left(\frac{6.0\ \text{gallons of water}}{1\,\text{gallon of wine}}\right)\times\left(\frac{1\text{year}}{365\,\text{days}}\right)$$

Average Annual Winery Process Wastewater Flow = 304.1 gpd, use 305 gpd

TABLE 1: PEAK WASTEWATER SUMMARY

Wastewater Source	Harvest (gpd)	Non-Harvest (gpd)	Average Annual (gpd)
Process Wastewater	925	250	305

Winery Sanitary Wastewater Flow

All toilet(s) and sink(s) will be connected to the Napa Sanitation District Sewer System. Only the floor drain will be connected to the process wastewater Hold & Haul tank.

Proposed Winery Process Wastewater Disposal System

The proposed winery process wastewater hold and haul system will consist of several steps. The proposed crush pad and barrel wash area will be sloped so that all process wastewater is collected in a floor drain. The winery process wastewater collected in the floor drain will be initially screened to remove large organic matter before the wastewater gravity flows to a sump where it is then pumped into a 10,000 gallon holding tank. The process wastewater will then be hauled away for treatment and disposal offsite.

Hold and Haul Tank Sizing

Napa County requires that "the tank shall be a minimum size to store seven (7) days of peak wastewater flow".

Minimum Tank Size = (925 gpd) x (7 days) = 6,475 gallons

Bartelt Engineering recommends a 10,000 gallon tank.

An Orenco alarm and control panel box or approved equal will be installed as shown on the attached Tank Detail (Sheet 7). The high water alarm will sound when the level of the process wastewater in the storage tank has reached 75% of the total volume of the tank or approximately 7,500 gallons. The 10,000 gallon process wastewater storage tank allows for eight (8) days of storage for peak process wastewater flows until the high water alarm is triggered. When the alarm sounds, the tank has enough storage for two (2) additional days of peak process wastewater flow until it reaches the tank capacity.

REFERENCES

"Regulations for Design, Construction and Installation of Alternative Sewage Treatment Systems" by Napa County Environmental Health Department, November 2013.

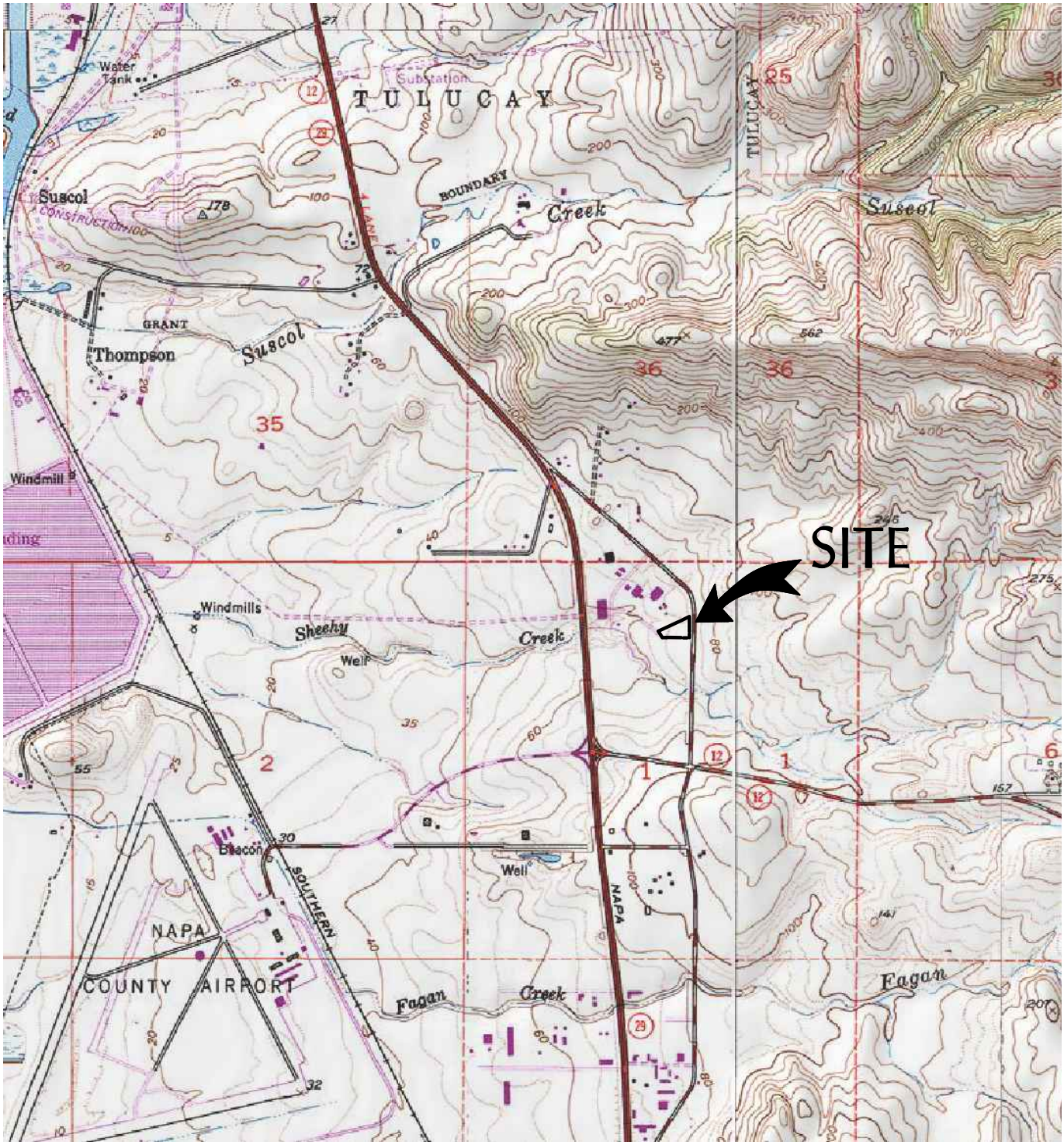
"Onsite Wastewater Treatment Systems Manual" by U.S. Environmental Protection Agency, February 2002.

"Manual of Septic-Tank Practice" by U.S. Department of Health, Education and Welfare, Public Health Service Publication, 1967.

TOPOGRAPHIC SITE LOCATION INFORMATION

USGS 7.5 MINUTE QUADRANGLE "CUTTINGS WHARF"

Scale: 1" = 2000'



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Job No. 14-24 November 2014