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Stormwater Control Plan

Vineyard House Winery, Use Permit P18-00448-UP, Use Permit Exception to the Conservation Regulations P21-00341-UP, and Exemptions to the Road and Street Standards
Planning Commission Hearing Date July 16, 2025

DRAFT

Stormwater Control Plan
For a Regulated Project for
The Vineyard House Winery

August 30, 2019

This plan was prepared using the instructions, criteria, and minimum requirements in the Bay Area Stormwater Management Agencies Association's (BASMAA's) *Post-Construction Manual.*

Prepared for:

The Vineyard House Winery

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Table 1. Project Data Form

Project Name/Number	The Vineyard House Winery
Application Submittal Date	August 2019
Project Location	1581 Oakville Grade Road Napa, CA 94558 APN 027-360-022
Project Phase No.	N/A
Project Type and Description	Winery Use Permit
Total Project Site Area (acres)	3+/- (total disturbed area)
Total New and Replaced Impervious Surface Area	11,765 square feet (approximate)
Total Pre-Project Impervious Surface Area	23,100 square feet (approximate)
Total Post-Project Impervious Surface Area	32,700 square feet (approximate)

I. Setting

I.A. Project Location and Description

The Vineyard House Winery applying for a Use Permit to construct a new cave and convert an existing barn and residence into a winery facility at their property located at 1581 Oakville Grade Road in Napa County, California. The subject property, known as Napa County Assessor's Parcel Number 027-360-022, is located off of a private driveway south of Oakville Cross Road.

The roughly 43 acre parcel is zoned Agricultural Watershed (AW). Topography can be described as gentle to steeply sloping with average slopes ranging from approximately <5% to in excess of 30%. The United States Department of Agriculture Soil Conservation Service Soils Map for Napa County shows several soil types mapped on the property however the entire project area is mapped as Coombs gravely loam, 2 to 5 percent slopes (Hydrologic Soil Group C).

Existing improvements on the property include a residence, a barn, gravel and dirt driveways, parking areas, vineyard, wastewater disposal systems, water systems and the associated access and utility infrastructure typical of this type of residential and agricultural development.

Runoff from the property generally flows from south to north via sheet and shallow concentrated flow and collects in onsite natural drainage channels and storm drain pipes that convey runoff away from the property and to the Napa River.

Proposed onsite improvements include modifications to the existing driveway and circulation, renovations to the existing barn and residence buildings to convert them to a winery use, construction of a new cave and covered work area and the related water and wastewater system

improvements needed to support the new winery. The planned site improvements are illustrated on The Vineyard House Winery Use Permit Conceptual Site Improvement Plans prepared by Applied Civil Engineering Incorporated.

I.B. Opportunities and Constraints for Stormwater Control

Opportunities for stormwater control include

1. Gently sloping topography allows for collection of runoff to be routed to treatment areas at lower elevations
2. Large vegetated buffer (vineyard with cover crop) between project site and receiving waters.

Constraints for stormwater control include:

1. Limited space given most of site is developed with buildings, driveways and vineyards already.
2. Slowly permeable soils (HSG C)

II. Low Impact Development Design Strategies

II.A. Optimization of Site Layout

II.A.1. Limitation of development envelope

The building site envelope was minimized by including the following measures in the project design:

- Existing buildings are being used to house most winery functions. New barrel storage space is in underground cave rather than a new building.
- The existing access driveways and parking areas are being utilized wherever possible. Improvements to the existing driveway s are limited to the minimum needed for safe ingress and egress.

II.A.2. Preservation of natural drainage features

Stream setbacks are illustrated on the plans and the project abides by all required stream setback provisions. No modifications to natural drainage features are being proposed.

II.A.3. Setbacks from creeks, wetlands, and riparian habitats

Stream setbacks are illustrated on the plans and the project abides by all required stream setback provisions. No modifications to natural drainage features are being proposed.

II.A.4. Minimization of imperviousness

The development has been designed to be located on areas that have already been improved to the greatest extent possible.

Existing buildings are being utilized to house the required functions with the minimum new foot print necessary.

A majority of the new winery production and storage space will be contained in the below ground cave expansion rather than in a new building.

II.A.5. Use of drainage as a design element

Drainage design will be coordinated with the landscape design to provide an aesthetically pleasing site layout that addresses stormwater control requirements.

II.B. Use of Permeable Pavements

Permeable pavements have not been designated at this time. If permeable pavements are incorporated into the final design they will be designed in accordance with manufacturers' recommendations and the BASMAA Post-Construction Manual requirements.

II.C. Dispersal of Runoff to Pervious Areas

The site layout and topography will allow for dispersal of runoff from impervious surfaces to pervious areas (i.e. landscape and vegetated vineyard areas).

II.D. Stormwater Control Measures

Runoff from all impervious areas at the building site, including roofs and paved areas in the immediate vicinity of the winery facility, will be routed to vegetated receiving areas as shown on the Stormwater Control Plan Exhibit. Vegetated vineyard areas will filter, disperse and infiltrate runoff before it reaches the receiving waters.

III. Documentation of Drainage Design

III.A. Descriptions of Each Drainage Management Area

III.A.1. Table of Drainage Management Areas

DMA Name	Surface Type	Area (square feet)
DMA #1	Roofs, driveways	24,500 +/-

III.A.2. Drainage Management Area Descriptions

DMA #1, totaling 24,500 square feet, drains building roofs and driveways. DMA #1 drains to Vegetated Receiving Area #1.

III.A.3. Tabulation and Sizing Calculations

III.A.4. Information Summary for Bioretention Facility Design

Total Project Area (Square Feet)	
N/A	

III.A.5. Self-Treating Areas

DMA Name	Area (square feet)
None	

III.A.6. Self-Retaining Areas

DMA Name	Area (square feet)
None	

III.A.7. Vegetated Receiving Areas

DMA Name	Area (square feet)
DMA #1	24,500 +/-

III.A.8. Areas Draining to Self-Retaining Areas

DMA Name	Area (square feet)	Post-project surface type	Runoff factor	Product (Area x runoff factor)[A]	Receiving self-retaining DMA	Receiving self-retaining DMA Area (square feet) [B]	Ratio [A]/[B]
None							

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area × runoff factor	Facility Name		
					Bioretention Area #1		
None					Sizing factor	Minimum Facility Size	Proposed Facility Size
Total=							

DMA Name	Area (square feet)	Post-project surface type	Runoff factor	Product (Area x runoff factor)[A]	Vegetated receiving area DMA	Receiving self-retaining DMA Area (square feet) [B]	Ratio [A]/[B]
DMA #1	24,500	Impervious	1	24,500	#1	35,000	0.7

IV. Source Control Measures

IV.A. Site activities and potential sources of pollutants

IV.B. Source Control Table

Potential source of runoff pollutants	Permanent source control BMPs	Operational source control BMPs
☒Storm Drain Inlets	☒Mark all inlets with the words "No Dumping! Drains to Waterway" or similar.	☒Maintain and periodically repaint or replace inlet markings. ☒Provide stormwater pollution prevention information to all onsite personnel. ☒See applicable BMPs in Fact Sheet SC-44, "Drainage System Maintenance" in the CASQA Stormwater Quality Handbook at: www.casqa.org/resources/bmp-handbooks ☒Include the following in lease agreements (if facility is leased): "Tenant shall not allow anyone to discharge anything to the storm drains or to store or deposit materials so as to create a potential discharge to storm drains."
☒Interior Floor Drains and Elevator Shaft Pumps	☒All interior floor drains will be plumbed to the sanitary sewer or process waste as appropriate.	☒Inspect and maintain drains to prevent blockage and overflow.

☐Interior Parking Garages	☐Parking garage floor drains will be plumbed to the sanitary sewer	☐Inspect and maintain drains to prevent blockage and overflow.
☒Indoor and Structural Pest Control	☒Buildings will be designed to meet applicable code requirements to discourage entry of pests.	☒Provide Integrated Pest Management information to Owners, lessees and operators.
☒Landscape / Outdoor Pesticide Use / Building and Grounds Maintenance	☒Landscape will be designed to accomplish the following: Preserve existing native trees, shrubs and groundcover to the maximum extent practicable. Minimize irrigation and runoff, promote surface infiltration where appropriate and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. Where landscape areas are used to retain or detain stormwater plants that are tolerant of saturated soil conditions will be used. Pest resistant plants will be specified where practicable. Plants will be selected for site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency and plant interactions.	☒Maintain landscaping using the minimum required or no pesticides and fertilizers. ☒See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance" in the CASQA Stormwater Quality Handbook at: www.casqa.org/resources/bmp-handbooks ☒Provide IPM information to new owners, lessees and operators.
☐Pools, Spas, Ponds, Decorative Fountains and other Water Features	☐Do not connect to onsite wastewater disposal systems. Drain to landscape area for infiltration	☐See applicable operational BMPs in Fact Sheet SC-72, "Fountain and Pool Maintenance" in the CASQA Stormwater Quality Handbook at: www.casqa.org/resources/bmp-handbooks
☐Food Service	☐Restaurants, grocery	☐Drain must be connected to grease interceptor and

	stores and other food service operations will have a floor sink or other area for cleaning floor mats, containers and equipment located either indoors or in a covered area outdoors.	grease interceptor must be pumped whenever solids accumulate to 35% of total tank capacity.
☒Refuse Areas	☒Refuse and recycling will be collected in the trash enclosure. The enclosure will be fenced to prevent dispersal of materials. If covered, the area will be drained to the sanitary sewer system. If not covered, all bins will have water tight lids. Adjacent areas will be graded to prevent run-on.	☒Refuse area must be patrolled and cleaned regularly.
☒Industrial Processes	☒All winery processing activities to be performed indoors or outdoors under roof. No processes to drain to exterior or to storm drain system.	☒See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks
☒Outdoor Storage (Equipment or Materials)	☒All winemaking materials to be used onsite are to be unloaded and immediately moved to a covered area to minimize exposure to rainfall. ☒Material deliveries shall be scheduled for times when it is not raining to minimize exposure to	☒See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials" in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks

	rainfall. ☒Facility shall comply with Napa County requirements for Hazardous Waste Generation, Storage and Disposal, Hazardous Materials Release Response and Inventory, California Accidental Release (CalARP) and Uniform Fire Code Article 80 Section 103(b) & (c) 1991	
☒Vehicle and Equipment Cleaning	☒No vehicle or equipment washing will be performed onsite. All employees will be informed that car washing is prohibited.	☒Not Applicable
☒Vehicle and Equipment Repair and Maintenance	☒No vehicle or equipment repairs will be performed onsite. All employees will be informed that vehicle maintenance onsite is prohibited.	☒Notify all future owners, lessees and operators that the following restrictions apply to this site: ☒No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinse water from parts cleaning into storm drains. ☒No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. ☒No person shall leave unattended parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.
☐Fuel Dispensing Areas	No vehicle fueling will be performed onsite. All employees will be informed that vehicle fueling onsite is prohibited.	☐The property owner, lessee or operator, as applicable, shall dry sweep the fueling area routinely. ☐See the Business Guide Sheet, "Automotive Service–Service Stations" in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks
☐Loading Docks	☐Loading docks shall be	☐Move loaded and unloaded items indoors as soon as

	covered and graded to minimize run-on to and runoff from the loading area. ☐ Roof downspouts shall be positioned to direct stormwater away from the loading area. ☐ Water from loading dock areas shall be drained to a containment system that is pumped regularly to avoid overflows.	possible. See Fact Sheet SC-30, "Outdoor Loading and Unloading" in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks
☒ Fire Sprinkler Test Water	☒ Provide a means to drain fire sprinkler test water to infiltrate into landscaping and not discharge to the storm drain.	☒ See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks
Miscellaneous Drain, Wash Water or Other Sources ☒ Boiler Drain Lines ☒ Condensate Drain Lines ☒ Rooftop Equipment ☐ Drainage Sumps ☒ Roofing, Gutters and Trim ☐ Other:	☒ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. ☒ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. ☒ Condensate drain lines may not discharge to the	If architectural copper is used, implement the following BMPs for management of rinsewater during installation: ☐ If possible, purchase copper materials that have been pre-patinated at the factory. ☐ If patination is done on-site, prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling off-site. ☐ Consider coating the copper materials with an impervious coating that prevents further corrosion and runoff.

	storm drain system. ☒ Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ☐ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. ☐ Include controls for other sources as specified by local agency.	☐ Implement the following BMPs during routine maintenance: ☐ Prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling offsite.
☒ Plazas, Sidewalks and Parking Lots	None.	☒ Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect wash water containing any cleaning agent or degreaser and haul offsite to municipal waste treatment plant for disposal, do not discharge to a storm drain.

IV.C. Features, Materials, and Methods of Construction of Source Control BMPs

Full design specifications for all source control BMPs will be submitted with the building permit drawing package.

V. Stormwater Facility Maintenance

V.A. Ownership and Responsibility for Maintenance in Perpetuity

The Applicant must commit to executing a Post Construction Stormwater BMP Maintenance Agreement which will be recorded with Napa County. This agreement will obligate the applicant to accept responsibility for operation and maintenance of stormwater treatment and flow-control facilities in perpetuity or until such time as this responsibility is formally transferred to a subsequent property owner. Refer to the Stormwater Treatment Facilities Operation and Maintenance Plan for The Vineyard House Winery for detailed requirements.

V.B. Summary of Maintenance Requirements for Each Stormwater Facility

The bioretention facilities will be maintained on the following schedule at a minimum. Details of maintenance responsibilities and procedures will be included in a Stormwater Facility Operation and Maintenance Plan to be submitted for approval prior to the completion of construction.

At no time will synthetic pesticides or fertilizers be applied, nor will any soil amendments, other than aged compost mulch or sand/compost mix, be introduced.

Daily: The facilities will be examined for visible trash during regular policing of the site, and trash will be removed.

After Significant Rain Events: A significant rain event is one that produces approximately a half-inch or more rainfall in a 24-hour period. Within 24 hours after each such event, the following will be conducted:

The surface of the facility will be observed to confirm there is no ponding.

- Inlets and outlets will be inspected, and any accumulations of trash or debris will be removed.
- The surface of the mulch layer will be inspected for movement of material. Mulch will be replaced and raked smooth if needed.

Prior to the Start of the Rainy Season: In September or each year, the facility will be inspected to confirm there is no accumulation of debris that would block flow, and that growth and spread of plantings does not block inlets or the movement of runoff across the surface of the facility.

Annual Landscape Maintenance: In December – February of each year, vegetation will be cut back as needed, debris removed, and plants and mulch replaced as needed. The concrete work will be inspected for damage. The elevation of the top of soil and mulch layer will be confirmed to be consistent with the 6-inch reservoir depth.

Refer to the Stormwater Treatment Facilities Operation and Maintenance Plan for The Vineyard House Winery for additional stormwater facility maintenance requirements.

VI. Construction Checklist

Stormwater Control Plan Page #	Source Control or Treatment Control Measure	
C10	Vegetated Receiving Area #1	
C10	Storm Drain Inlets	
C10	Interior Floor Drains and Elevator Shaft Pumps	
N/A	Interior Parking Garages	
C10	Indoor and Structural Pest Control	
C10	Landscape / Outdoor Pesticide Use / Building and Grounds Maintenance	

N/A	Pools, Spas, Ponds, Decorative Fountains and other Water Features	
N/A	Food Service	
C10	Refuse Areas	
C10	Industrial Processes	
N/A	Outdoor Storage (Equipment or Materials)	
N/A	Vehicle and Equipment Cleaning	
N/A	Vehicle and Equipment Repair and Maintenance	
N/A	Fuel Dispensing Areas	
N/A	Loading Docks	
C10	Fire Sprinkler Test Water	
C10	Miscellaneous Drain, Wash Water or Other Sources Boiler Drain Lines Condensate Drain Lines Rooftop Equipment Drainage Sumps Roofing, Gutters and Trim Other:	
C10	Plazas, Sidewalks and Parking Lots	

VII. Certifications

This preliminary design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in intended to be in accordance with the current edition of the BASMAA *Post-Construction Manual* as required by Napa County.