Stormwater Control Plan
for a Regulated Project

Hourglass Winery
701 Lommel Road
Calistoga, CA
APNs 018-060-024 & 021-010-001

PREPARED FOR:
Hourglass Winery
701 Lommel Road
Calistoga, CA 94515

PREPARED BY:

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This Stormwater Control Plan was prepared using the template by Dan Cloak Environmental Consulting dated July 2014.

Table of Contents

I. Setting 1
I.A. Project Location and Description 1
I.B. Opportunities and Constraints for Stormwater Control 2
II. Low Impact Development Design Strategies 2
II.A. Optimization of Site Layout 2
II.A.1. Limitation of development envelope 2
II.A.2. Preservation of natural drainage features 2
II.A.3. Setbacks from creeks, wetlands, and riparian habitats 2
II.A.4. Minimization of imperviousness 2
II.A.5. Use of drainage as a design element 3
II.B. Use of Permeable Pavements 3
II.C. Dispersal of Runoff to Pervious Areas 3
II.D. Stormwater Control Measures 3
III. Documentation of Drainage Design 4
III.A. Descriptions of Each Drainage Management Area 4
III.A.1. Table of Drainage Management Areas 4
III.A.2. Drainage Management Area Descriptions 4
III.B. Tabulation and Sizing Calculations 5
III.B.1. Information Summary for Bioretention Facility Design 5
III.B.2. Self-Treating Areas 5
III.B.3. Self-Retaining Areas 5
III.B.4. Vegetated Receiving Areas 5
III.B.5. Areas Draining to Bioretention Facilities 6
III.B.6. Areas Draining to Vegetated Receiving Areas 7
IV. Source Control Measures 7
IV.A. Site activities and potential sources of pollutants 7
IV.B. Source Control Table 7
IV.C. Features, Materials, and Methods of Construction of Source Control BMPs 13
V. Stormwater Facility Maintenance 13
V.A. Ownership and Responsibility for Maintenance in Perpetuity 13
V.B. Summary of Maintenance Requirements for Each Stormwater Facility 13
VI. Construction Checklist 14
VII. Certifications 15

Project Data

Table 1. Project Data Form

Project Name/Number	Hourglass Winery
Application Submittal Date	February 2023
Project Location	701 Lommel Road Calistoga, CA 94515 APNs 018-060-024 & 021-010-001
Project Phase No.	1
Project Type and Description	Use Permit Modification
Total Project Site Area (acres)	2 +/- (total disturbed area)
Total New and Replaced Impervious Surface Area	0.5 acres (approximate)
Total Pre-Project Impervious Surface Area	1 acres (approximate)
Total Post-Project Impervious Surface Area	1.5 acres (approximate)

I. Setting

I.A. Project Location and Description

Figure 1: Location Map

Hourglass Winery is applying for a Use Permit Modification to add features to the existing winery facility and utility infrastructure at their property located at 701 Lommel Road in Napa County, California. The subject property, known as Napa County Assessor's Parcel Numbers 018-060-024 & 021-010-001, is located along the northwest side of Lommel Road southeast of the City of Calistoga in an unincorporated portion of Napa County.

The two parcels are zoned Agricultural Watershed (AW). Topography can be described as gentle to steep with average slopes ranging from less than 5% to in excess of 30%. The United States Department of Agriculture Soil Conservation Service Soils Map for Napa County shows at least five soil types mapped on the property. The proposed development will occur primarily within the Bale clay loam, Perkins gravelly loam and Boomer loam soils types. All proposed above ground site improvements are located within the Pleasanton soils area (HSG B & C).

Existing improvements on the property include the winery and agricultural buildings, vineyards, caves and the related access and utility infrastructure. New hospitality buildings and cave expansion is proposed as part of the Use Permit Modification. Please see the

Hourglass Winery Site Plan Exhibit by Albion Surveys for approximate locations of existing and proposed facilities.

Runoff from the property generally flows south and westerly. Runoff concentrates in onsite drainage infrastructure and ultimate reaches Biter Creek which flows through the subject property in a westerly direction and is tributary to the Napa River.

I.B. Opportunities and Constraints for Stormwater Control

Opportunities for stormwater control include:

1. The moderately sloping topography will allow roof and impervious area runoff to be routed to treatment areas at lower elevations
2. Large vegetated buffers between all site improvements and drainage ways.

Constraints for stormwater control include:

1. The near surface soils have a moderate to slow infiltration rate (HSG B & C).
2. Existing vineyard areas and stream setback areas to be preserved.

II. Low Impact Development Design Strategies

II.A. Optimization of Site Layout

II.A.1. Limitation of development envelope

- The original winery footprint and outdoor work areas are being developed on areas that are already improved with winery development.
- New caves are being used to accommodate much of the new square footage.
- One of the new hospitality buildings will replace a previous residence in a location that was previously already developed.
- The proposed buildings and access roads have been carefully designed to preserve natural vegetation and vineyards on the property.

II.A.2. Preservation of natural drainage features

All natural drainage features on the property will be preserved.

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

The project has been designed with respect to stream setbacks as required by the Napa County Conservation Regulations. A setback is shown along Biter Creek located just south of the winery driveway.

II.A.4. Minimization of imperviousness

All access ways and parking areas have be designed to the minimum Napa County width standards and will not be excessively large. This ensures that excess impervious surfaces are not created. The new buildings have been carefully designed to house the required functions with the minimum footprint necessary.

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

Drainage design has been 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 are not proposed.

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.

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 a single bioretention facility as shown on the Stormwater Control Plan Exhibit. The facility will be designed and constructed to the criteria in the BASMAA Post-Construction Manual (2019), including the following features:

- Surrounded by a compacted soil berm.
- Each layer built to the elevations specified in the plans and referenced details:
    - o Bottom of Gravel Layer (BGL)
    - o Top of Gravel Layer (TGL)
    - o Top of Soil Layer (TSL)
    - o Overflow Grate
    - o Facility Rim
- 12 inches of Class 2 permeable rock, Caltrans specification 68-2.02F(3)
- 18 inches sand/compost mix meeting BASMAA specifications
- 6-inch-deep reservoir between top of soil elevation and overflow elevation
- Drain inlet with frame overflow structure, with grate set to specified elevation, connected to storm drain (overflow used where storm drain connection is available and omitted where no storm drain exists)
- Plantings selected for water conservation
- Irrigation system on a separate zone, with drip emitters and "smart" irrigation controllers
- Sign identifying the facility as a stormwater treatment facility.

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	Hospitality building roofs, asphalt parking, etc.	17,000 +/-
DMA #2	Lookout and tasting room roofs and path	2,000 +/-
DMA #3	Loop road driveway	7,300
DMA #4	Cave portal	1,100
DMA #5	Utility yard	3,400

III.A.2. Drainage Management Area Descriptions

DMA #1, totaling 17,000 +/- square feet, consists of the hospital building roofs, parking, walkway, turnaround, etc. DMA #1 drains to Bioretention Area #1.

DMA #2, totaling 5,000 +/- square feet, consists of the lookout and tasting room roofs and access path. DMA #2 drains to Vegetated Receiving Area #2.

DMA #3, totaling 7,300 +/- square feet, consists of the loop road. DMA #3 drains to Vegetated Receiving Area #3.

DMA #4, totaling 1,100 +/- square feet, consists of the cave portal area. DMA #4 drains to Vegetated Receiving Area #4.

DMA #5, totaling 3,400 +/- square feet, consists of the utility yard. DMA #5 drains to Vegetated Receiving Area #5.

III.B. Tabulation and Sizing Calculations

III.B.1. Information Summary for Bioretention Facility Design

DMA #1	17,000 +/-

III.B.2. Self-Treating Areas

DMA Name	Area (square feet)
N/A	

III.B.3. Self-Retaining Areas

DMA Name	Area (square feet)
N/A	

III.B.4. Vegetated Receiving Areas

DMA Name	Area (square feet)
VRA #2	5,000
VRA #3	16,000
VRA #4	3,900
VRA #5	4,100

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							

III.B.5. Areas Draining to Bioretention Facilities

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area × runoff factor	Facility Name		
					Bioretention Area #1		
DMA #1	17,000	Impervious	1.0	17,000	Sizing factor	Min Facility Size	(P) Facility Size
DMA #1	0	Permeable	0.1	0			
Total=				17,000	0.04	680	700

Areas Draining to Vegetated Receiving Areas

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]<2
DMA#2	2,000	Imperv	1	2,000	VRA#2	5,000	0.4
DMA #3	7,300	Imperv	1	7,300	VRA #3	16,000	0.5
DMA #4	1,100	Imperv	1	1,100	VRA #4	3,900	0.3
DMA #5	3,400	Imperv	1	3,400	VRA #5	4,100	0.8

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.	☒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,	☒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.

	air movement, ecological consistency and plant interactions.	
☒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 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.	☐Drain must be connected to grease interceptor and 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	☒See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks

	exterior or to storm drain system.	
☒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 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	☒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
☒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 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.	☐Move loaded and unloaded items indoors as soon as possible. See Fact Sheet SC-30, "Outdoor Loading and Unloading" in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks

	☐Water from loading dock areas shall be drained to a containment system that is pumped regularly to avoid overflows.	
☒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 storm drain system. ☒Rooftop equipment with potential to produce pollutants shall be roofed	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. ☐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.

	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.	
☒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 washwater 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.

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.

VI. Construction Checklist

Stormwater Control Plan Page #	Source Control or Treatment Control Measure	
1	Bioretention Area #1	
1	Storm Drain Inlets	
1	Interior Floor Drains and Elevator Shaft Pumps	
N/A	Interior Parking Garages	
1	Indoor and Structural Pest Control	
1	Landscape / Outdoor Pesticide Use / Building and Grounds Maintenance	
N/A	Pools, Spas, Ponds, Decorative Fountains and other Water Features	

N/A	Food Service	
I	Refuse Areas	
I	Industrial Processes	
I	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	
I	Fire Sprinkler Test Water	
I	Miscellaneous Drain, Wash Water or Other Sources Boiler Drain Lines Condensate Drain Lines Rooftop Equipment Drainage Sumps Roofing, Gutters and Trim Other:	
I	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.

LEGEND:

⚠	CONTROL POINT
AC	ASPHALTIC CONCRETE
CL	CENTERLINE
DI	DRAIN INLET
(E)	EXISTING
EOB	ELECTRICAL OUTLET BOX
FF	FINISHED FLOOR
FH	FIRE HYDRANT
GP	GUY POLE
JP	JOINT POLE
LO	LIVE OAK
(P)	PROPOSED
SSCO	SANITARY CLEANER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
UG	UNDERGROUND
WV	WATER VALVE
WO	WHITE OAK
	UTILITY POLE
12/25	TREE TRUNK DIA. IN INCHES/DRIPLINE IN FEET
	FLOW LINE OF CREEK OR DRAINAGE DITCH
	EDGE OF DIRT/GRAVEL ROAD
	EDGE OF CURB
	EDGE OF ASPHALT/CONCRETE PAVEMENT
	CHAIN LINK FENCE
	WOOD FENCE
	1' CONTOUR
	5' CONTOUR
DHL DHL DHL DHL	OVERHEAD POWER AND/OR TELEPHONE LINE
	EXISTING PROPERTY LINE
	EXISTING PROPERTY LINE TO BE ADJUSTED
	PROPOSED LOT LINE ADJUSTMENT PROPERTY LINE
	BUILDING LINE
	EASEMENT LINE
	GRADE BREAK–TOP/TOE
	VINEROW
	EROSION CONTROL PLAN LIMITS (APPROX.)
	PROPOSED CAVE AREA

Dutch Henry Canyon Road

Silverado Trail

Lommel Road

1st Water County Road

START OF PRIVATE DRIVEWAY (STA 0+00)

WIDEN (E) GATE TO PROVIDE 22' MIN CLEAR WIDTH WHEN OPEN; WIDEN TO NORTH, AWAY FROM STREAM

21' GATE(E)

22'

TOP OF BANK

300' SETBACK FROM LOMMEL ROAD CL

STA 2+50 TO 3+50

EXCEPTION REQUESTED IN THIS AREA FOR 100' OF DRIVEWAY TO HAVE A WIDTH LESS THAN 22' TO PRESERVE EXISTING TREES AND AVOID REMOVAL OF NATIVE VEGETATION IN THE STREAM SETBACK AREA

TREES(E)

SEE DETAIL

Lands of
LOOKING GLASS VINEYARD LLC
Portion of 021-010-001
PROPOSED PARCEL ONE
6.00 AC±

VINEYARD BLOCK(E)

PROPOSED PROPERTY LINE

WELL(E)

WATER TANK(E)

CONCRETE PAD(E)

100'

POND(E)

BITER CREEK

R=200'

R=150'

Lommel Road (extension)

A County Road

VINEYARD BLOCK(E)

VINEYARD AVENUE(E) (TYPICAL)

Lands of
LOOKING GLASS VINEYARD LLC
Portions of 021-010-001 & 018-060-024
PROPOSED PARCEL TWO
39.00 acres±

14'–20' WIDE PAVED ROAD UTILIZED FOR WINEI & RESIDENCE ACCESS FROM LOMMEL RD.(E) INSIDE EASEMENT AREA.
MAINTAIN SHOULDER / WIDEN ON VINEYARD SID PROVIDE 20' PAVED AND 22' TOTAL WIDTH PER STANDARDS WITH ONE EXCEPTION WHERE NOTED PROVIDE EXTRA WIDTH IN CURVES WITH R<200' ALL WORK ON NORTH SIDE OF ROAD IS EXISTIN ROAD AND NO VEGETATION REMOVAL IS REQUIR

APPROXIMATE STREAM SETBA

40' ACCESS & EASEMENT SERVING THE WINERY PARCEL(E)

TOP OF BANK

22'

R=200'

BITER CREEK

100'

R=150'

TOP OF BANK

DRIVEWAY NOTE:
DRIVEWAY SLOPES ARE LESS THAN 16% THROUGHOUT AND SURFACE WILL BE A MINIMUM OF 5" CLASS 2 AB WITH A DOUBLE SEAL COAT PER COUNTY STANDARDS.

SELBY CREEK

EROSION CONTROL PLAN LIMITS (APPROX.)

(P) PATH OF SPOILS FROM CAVE EXCAVATION AND NEW PORTAL

CAVE PORTAL (P)

597'± TO CL ROAD

DMA #2
2,000 SF
IMPERVIOUS

VEGETATED
RECEIVING AREA
#2
5,000 SF

DMA #3
7,300 SF
IMPERVIOUS

VEGETATED
RECEIVING AREA
#3
16,000 SF

DMA #1
17,000 SF
IMPERVIOUS

BIORETENTION
AREA #1
700 SF

DRIVEWAY & ADA PARKING (P)

FIRE TRUCK HAMMERHEAD (P)

DRIVEWAY (P)

589°± TO CL OF ROAD

24'

30.5'(E)

28'

R=50'

24' PAVED
26' TOTAL
IN CURVE

WINERY WELL #5 (E)

100'

Lands of
PEJU PROVINCE WINERY

VEGETATED
RECEIVING AREA
#4
3,900 SF

DMA #4
1,100 SF
IMPERVIOUS

PROPOSED PROPERTY LINE

S60°19'33"E
786.04

PROPOSED PROPERTY LINE

WATER TANKS(E)

CAVES (P)

WATER TANK(E)

100'

WELL(E)

CAVE WINERY PORTAL(E)

PARKING(E)

FOOTPATH (P)

GRAVEL (E)

SEE DETAIL

CRUSH PAD(E)

FERMENTING TANKS UNDER COVERED CRUSH PAD(E)

CAVES(E)

CAVES (P)

FIRE TRUCK TURNOUT ON (E) GRAVEL

PUMP HOUSE(E)

POOL(E)

100'

WELL SHED(E)

PATH(E)

(P) PW IRRIGATION AREA (2 ACRES)

CAVE PORTAL(E)

CAVE PORTAL (P)

CAVES (P)

BATHROOM /MECHANICAL ROOM(E)

N35°44'43"W
1538.03

DMA #5
3,400 SF
IMPERVIOUS

VEGETATED
RECEIVING AREA #5
4,100 SF

EROSION CONTROL PLAN LIMITS (APPROX.)

ROAD MIN. 14' WIDE(P)

HOSPITALITY CENTER (P)

UTILITY AREA (P)

ONE-WAY LOOP (P) INTERSECTION PER DETAIL P-2

22'(P)
19'(E)

R=200'

WINERY LEACH FIELD (E)

(P) PW IRRIGATION AREA (2 ACRES)

PATH(E)

(P) PROCESS WASTE TREATMENT SYSTEM

20'

100'

Lands of
CALISTOGA RANCH CLUB
018–060–086

400' CAVE SETBACK
NO EXISTING SEPTIC SYSTEMS IN SETBACK AREA

Lands of
PAN MACEDONIAN ASSOC OF SF
021–020–007

N54°48'25"E
43.98

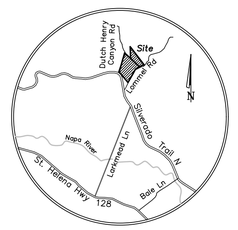
N53°29'28"E
27.31

N55°26'44"E
124.06

N81°33'02"E
146.54

Lands of
781466 ALVERTA LTD
018–060–025

Lands of FROSTFIRE
VINEYARDS II LLC
021–010–074



VICINITY MAP
NOT TO SCALE