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# Stormwater Control Plan Parable Winery Use Permit Minor Modification P23-00230-MM

Parable Winery Use Permit Minor Modification, P23-00230-MM Zoning Administrator Hearing – January 22, 2025



# STORMWATER CONTROL PLAN FOR A REGULATED PROJECT

## PARABLE WINERY 4300 SILVERADO TRAIL CALISTOGA, CA 94515

THIS REPORT WAS PREPARED IN CONJUNCTION WITH THE INSTRUCTIONS, CRITERIA, AND MINIMUM REQUIREMENTS IN THE BAY AREA STORMWATER MANAGEMENT AGENCIES ASSOCIATION'S (BASMAA'S) POST CONSTRUCTION MANUAL.

Prepared for: Parable Winery Attn: FTM Investments, LP 3215 Steck Avenue, Ste. 101 Austin, Tx 78757

August 5, 2024 Project No. 4122063.0



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#### **ATTACHMENTS**

- 1) Vicinity Map, USGS Map, Aerial Photo, Soils Map
- 2) Drainage Management Area Map



## I. Project Data

Table 1. Project Data Form

f) .ps 269,02	aria Porta Project Impervious Surface Area
fl.ps 954,52	Fotal Pre-Project Impervious Surface Area
ft .ps E28,74	Total New and Replaced Impervious Surface Area
10.29 ± Acres	Total Project Site Area (acres)
gniblind ynaniw waM	Project Type and Description
Use Permit Modification	Project Phase No.
4300 Silverado Trail S1249 A5, CA 94515 820-021-020 :N9A	Project Location
23, 2023	Application Submittal Date
Parable Winery (4122063.0)	Project Name/Number

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#### I.A. Project Location and Description

Parable Winery project is located at 4300 Silverado Trail Calistoga, California. The APN is 020-120-028. The parcel has an area 10.29 ± Acres. Parable Winery is applying for a Use Permit Modification to construct a new winery building in place of the burned winery building and to add visitation to its current use permit. The site is bounded to the north, east, by open space wooded area and vineyards, Silverado Trail to the south, and Clover Flat landfill to the west.

The topography on the parcel ranges from gentle slopes to mostly level areas near the existing development with slopes of 2-15% to steep slopes beyond the development to the northeast with slopes between 30-50%. Attachment 1 contains a Site Vicinity Map and a USGS Site Map showing the parcel topography, features, and boundary.

#### II.B. Existing Site Features and Conditions

The existing site has an asphalt concrete driveway, existing residence, wine cave, burned winery structure and vineyards. The remainder of the land is native trees and grasses. The site contains a blue-line creek at the western portion of the site that runs through the parcel. A portion of this creek has been previously channelized by the previous development at the site.

The Run-off from the project site flows southwest via surface flows and existing drains to the creek, before flows eventually discharges to the Napa River. Refer to the USGS Map in Attachment 1.

The predominant soil type on the project site is Perkins gravelly loam and Hambright rock-Outcrop complex, which are of the Hydrologic Soil groups B and D respectively. Soil group B has a moderate



infiltration rate when thoroughly wet while Soil group D has a very slow infiltration rate (high runoff potential) when thoroughly wet. Refer to Attachment 1 for the Soil Map.

#### II.C. Opportunities and Constraints for Stormwater Control

Stormwater treatment facilities have been integrated into the planning, design, construction, operation, and maintenance of the proposed development. The following potential opportunities and constraints were considered in determining the best stormwater control design for this development.

Opportunities for the site include the large continuous pervious areas which can help to promote infiltration. This also includes new proposed landscaped areas surrounding the building. In addition, the site has existing driveway and culvert improvements which can limit impacts of new grading and drainage work. Two (2) bioretention facilities will be installed around the site to treat stormwater runoff prior to discharge from the site. All runoff from new impervious areas around the winery and tasting building will be directed to bioretention facilities for treatment before draining into an existing culvert that discharges to a blue-line creek and runoff from new impervious areas along the driveway will be directed to self-retaining vegetated areas. Production activities will occur under a covered crush pad. Runoff from the crush pad will be directed to proposed Process Wastewater Treatment System.

Constraints include limitations for potential locations for bioretention areas due to the sloping nature of the site, and constraints for treating the driveway due to the existing proximity to the property line and drainage channel.

#### III. Low Impact Development Design Strategies

#### III.A. Optimization of Site Layout

1. Limitation of development envelope.

The footprint of the building has been kept to a minimum based on intended uses.

The development of the structure will occur outside of stream setback lines.

2. Preservation of natural drainage features.

Existing natural drainage features will be preserved. The site will utilize existing outfalls and surface flows to the maximum extent practicable to limit impacts to the drainage features.

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

No grading will take place within the setbacks of existing creeks, wetlands and riparian habitats.

4. Minimization of imperviousness.

Walkways, flatwork and decking are designed to the minimum widths necessary without compromising public safety and a walkable environment. Paths of travel that are not for the ADA circulation will be constructed with permeable materials. Landscaped areas are used instead of decorative impervious areas. Existing trees will be preserved to the maximum extent practicable.

5. Use of drainage as a design element.

Bioretention facilities are incorporated into the aesthetic landscape design of the site. Grading and storm drain locations have been designed to direct runoff to the bioretention facilities and existing pervious areas to the maximum extent practicable.



#### III.B. Use of Permeable Pavements

Permeable pavement will not be used.

#### III.C. Dispersal of Runoff to Pervious Areas

Stormwater runoff will be directed to landscaped areas to the maximum extent practicable.

#### III.D. Stormwater Control Measures

Two (2) bioretention facilities have been incorporated as stormwater control measures. The bioretention facilities will collect and treat onsite stormwater prior to discharge.

Bioretention facilities are designed and will be constructed to the criteria in the BASMAA Post-Construction Manual (Jan 2019)

#### IV. Documentation of Drainage

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Table 2. Drainage Management Areas

5-AMD	J23'200	58 <b>,</b> 190	069'T8T
DMA-2	10,721	8'085	18,803
1-AMD	J2,005	J4 <sup>,</sup> 423	56,428
AMD 9m6N	Pervious Area (square feet)	lmpervious ארפא (square feet)	Total Area (square feet)

<u>Drainage Management Area Descriptions</u>

DMA 1 consists of the northwestern portion of the site. It contains the winery production building, walkways, parking spaces, and a portion of the driveway and 12,005 square feet of landscaping. Runoff from this DMA is collected via roof drains, vegetated swale, and surface flows on the driveway and is then conveyed to Bioretention Facility 1. Bioretention Facility 1 is located at the northwest corner of the winery conveyed to Bioretention Facility 1.

DMA 2 consists of the northern and eastern portion of the site. This includes the tasting rooms, patio areas, and the eastern portion of the site walkways. This DMA also includes 10,721 square feet of landscaping. Runoff from this DMA is collected via surface flow and roof drains and is directed to Bioretention Facility 2. Bioretention Facility 2 is located east of the winery building on the north side of the loop road driveway connection, and has an area of 372 square feet.

DMA 3 consists of the southern portion of the site along the existing driveway. This includes the loop road driveway connection, the turnout to access the wine cellar, the residence, and the vineyard area. Runoff from this DMA is conveyed via surface flows to the south toward the Vineyard Area. The vineyard area is located south of the winery building below the loop road driveway connection.



#### IV.B. Tabulation and Sizing Calculations

#### Table 3. Information Summary for Bioretention Facility Design

<b>18,803</b>	2-AMD
56,428	1-AMD
Total Project Area (Square Feet)	AMQ

#### Table 4. Self-Treating Areas

#### The site does not include self-treating areas.

#### Table 5. Self-Retaining Areas

123'200	5-AMD

#### Table 6. Areas Draining to Self-Retaining Areas

58'190	5-AMD

#### Table 7. Areas Draining to Bioretention

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Facility Name			DMA BYA	AMQ ffonuA	Post-project	691A AMO	AMQ

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בפרוורא מפוווב			Area	ֈֈouny	Post-project	AMD	AMQ
occell vtilise3		AMD	AMD				



#### V. Source Control Measures

#### V.A. Site activities and potential sources of pollutants

The site activities and potential sources of pollutants for the Parable Winery project are listed in table 8, below.

Table 8. Control Table

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pest control features that discourage entry of Management information to
pest control teameree discourage entry of best and the second of the sec
D1. Need for future indoor & structural 🗌 Building design shall incorporate 🗌 Provide Integrated Pest
sump pumps plumbed to sanitary sewer. to prevent blockages and overflow.
B. Interior floor drains and elevator shaft 🗌 Interior floor drains shall be 🗌 Inspect and maintain interior drains
suiejo
Simple administration of the state of the st
periode appediate to accord wells
ton lists tonana" stramaanse
eseal ni aniwollof ett elulori 🗆
".eoneneinieM
Fact Sheet SC-74, "Drainage System
ni s9MB lenoiterable operational BMPs in
atis wan of noitem of in intravan
discharges and accidental spills or similar.
(unauthorized non-stormwater Dumping! Flows to River" or or replace inlet markings. discharges and accidental spills or similar.
A. On-site storm drain inlets I inlets with the words "No I Maintain and periodically repaint (unauthorized non-stormwater Dumping! Flows to River" or or replace inlet markings. discharges and accidental spills or similar. I Provide stormwater pollution leaks)



parking lots regularly to prevent		
hne .sylewalks .sezela a9we 🗆		P. Plazas, sidewalks, and parking lots
tank and hauling off-site.		
or ging isnosib (d' sintrib innos		
39M9 primollot edt tremelreri 🗆		
corrosion and runoff.		
suoiviedmi ne miw sienejiem	ອາກາຍການດວ	
	rooted and/or have secondary	
	to produce pollutants shall be	
iandscaping or by collecting in a	lsitn9top tiw tn9mqiup9 qoftooR 🗆	
storm drains by discharging to	the storm drain system.	
prevent rinse water from entering	drain lines may not discharge to	
, 1f patination is done on-site,	runoff will not occur. Condensate	<ul> <li>Other sources</li> </ul>
patinated at the factory.	tent dguone llems si wolt ent	<ul> <li>Roofing, gutters, and trim</li> </ul>
materials that have been pre-	discharge to landscaped areas if	<ul> <li>Drainage sumps</li> </ul>
🗆 If possible, purchase copper	vem sənil nisib ətesnəbno2 🗆	<ul> <li>Rooftop equipment</li> </ul>
:noitelleteni	discharge to the storm drain.	<ul> <li>Condensate drain lines</li> </ul>
gninub retewernt of tinsewater during	ton yem base metrys vewer startines	<ul> <li>Boiler drain lines</li> </ul>
implement the following BMPs for	or indirectly connected to the	other sources
If architectural copper is used,		O. Miscellaneous drain or wash water or
spriboro bris grinbriba Maintenance"	מוזכנומו פרמ נס נוור זמעונמו ל זראבו:	
		N. Fire sprinkler test water
Stormwater Quality Handbooks	be covered and protected.	
and Sc-23, Outdoor Storage of	liw yedt ebistue ere treargine	
"Outdoor Liquid Container Storage"	kept indoors to the maximum	ואופרבו ופוס
□ See the Fact Sheets SC-31,	🗆 Equipment and materials will be	i. Outdoor Storage of Equipment of
discharged to storm drains	or to storm drain system	
wastewater system and will not be	No processes to drain to exterior	
mitigated to the winery process	performed indoors or undercover.	
🛛 Industrial discharge will be	🗆 All process activities to be	H. Industrial processes
"lesoqsiQ bne gnilbneH		
See Fact Sheet SC-34, "Waste		
wet/qu/ vacuum.		
Clean by dry-sweeping only. or with		
available on-site.		
clean up spiils immediately.		
hne vlieb rettil au Asia bas ct and -	areas snaii drain to sanitary sewer	
sugis	made to the Refuse area/Refuse	
"no hazardous anaterials"	ed lleds snoitcennections shall be	
or hazardous wastes.	minimize direct precipitation.	
himmin to animum trevent/tiding []	to foor a sbuloni llads sears seufe A 🗆	
Keep receptacles covered.	site transport of trash.	
repair or replace leaky receptacies.	areas, and screened to prevent off-	
🗌 Inspect receptacles regulariv:	gniniojbe mort no-nur wolle of fon	
receptacles.	an impervious surface, designed	
o Provide adequate number of	tiw bavea be llall be paved with □	G. Refuse areas
Operational Source Control BIMPs	Permanent Source Control BMPs	Potential Sources of Runott Pollutants



drain.		
the sanitary sewer, not to a storm		
agent or degreaser and discharge to		
gninealo yne gninietnoo retewdrew		
storm drain system. Collect		
washing to prevent entry into the		
Collect debris from pressure		
accumulation of litter and debris.		
Operational Source Control BMPs	Permanent Source Control BMPs	Potential Sources of Runoff Pollutants

#### V.B. Features, Materials, and Methods of Construction of Source Control BMPs

Source control BMPs will be designed and implemented per construction specifications and CASQA BMP fact sheets.

#### VI. Stormwater Facility Maintenance

#### VI.A. Ownership and Responsibility for Maintenance in Perpetuity

The applicant accepts responsibility for operation and maintenance of stormwater treatment and flowcontrol facilities until such time as this responsibility is transferred to a subsequent owner.

An Operations & Maintenance Plan will be prepared for this project prior to project closeout.

#### VI.B. Summary of Maintenance Requirements for Each Stormwater Facility

The site incorporates 2 Bioretention Facilities and 1 self-treating area. The BMPs all require as needed maintenance for any damage that may occur. Semi-annual inspections are required for possible erosion, damaged vegetation, debris, and health of any trees or shrubs. These inspections usually occur at the beginning of the wet season and end of the wet season. Any dead or diseased vegetation should be removed and replaced during the inspection. An annual inspection is required to complete the annual report for all Stormwater Facilities. During this inspection mulch may be added, and tree stakes and wires replaced.

For all Stormwater facilities, refer to the Operation & Maintenance Plan for a full description of required inspections and maintenance requirements.

#### VII. Construction Checklist

Агсһ	D1. Need for Future indoor & structural pest control	S
Arch	B. Interior floor drains	S
C2.0	A. On-site storm drain inlets	S
EXH - SCP	Self-Treating Areas	4
EXH - SCP	seərA gninistər-flə2	4
0.29U	Bioretention Facilities	S '⊅
		# 9869
s# teed2	Source Control or Treatment Control Measure	Control Plan
nsl9 992		Stormwater
		1

Table 9. Construction Checklist





UP3.0	Plazas, sidewalks, and parking lots	Р.	L
0.29U	Miscellaneous drain or wash	0.	L
Агсһ	Fire sprinkler test water	.N	9
Агсһ	Outdoor storage of equipment or materials		9
Arch/UP3.0	Industrial Process	н.	9
Агсһ	Refuse areas	.9	9
	esnenetniem		
UP3.0	Landscape/ outdoor pesticide use/ building and ground	D7 <sup>.</sup>	9

#### VIII. Certifications

The design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the current edition of the BASMAA Post-Construction Manual, dated January 2019.



## ATTACHMENT 1

## Vicinity Map, USGS Map, Aerial Photo, Soils Map





RSA<sup>+</sup> CONSULTING CIVIL ENGINEERS + SURVEYORS + 1980









0 2.25 4.5 9 Disclaimer: This map was prepared for informational purposes only. No liability is assumed for the accuracy of the data delineated hereon.

Produced by Napa County GIS



**Conservation Service** 

MAP LE	GEND	MAP INFORMATION
Area of Interest (AOI) Area of Interest (AOI)	C C/D	The soil surveys that comprise your AOI were mapped at 1:24,000.
Soils Soil Rating Polygons A A/D	D Not rated or not availab Water Features Streams and Canals	Warning: Soil Map may not be valid at this scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contracting soils that could have been shown at a more detailed
B/D C	Transportation +++ Rails Interstate Highways	Please rely on the bar scale on each map sheet for map measurements.
C/D D Not rated or not available	US Routes Major Roads	Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)
Soil Rating Lines	Background Aerial Photography	Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.
B/D		This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
		Survey Area Data: Version 15, Sep 1, 2022 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.
Not rated or not available		Date(s) aerial images were photographed: Mar 26, 2022—Apr 25, 2022
A A/D B		The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
B/D		



## Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI			
152	Hambright rock-Outcrop complex, 30 to 75 percent slopes	D	5.7	47.3%			
155	Kidd loam, 15 to 30 percent slopes	D	0.1	1.0%			
168	Perkins gravelly loam, 1 to 10 percent slopes, MLRA 14	В	6.2	51.8%			
Totals for Area of Intere	est	12.0	100.0%				

### Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.



## ATTACHMENT 2

### DRAINAGE MANAGEMENT AREA MAP



## HATCH LEGEND



