

# PRELIMINARY STORMWATER CONTROL PLAN FOR A REGULATED PROJECT

Robert Mondavi Winery Use  
Permit

**Prepared for:**

Robert Mondavi Winery  
7801 St. Helena Highway  
Oakville, CA 94562  
APN 027-280-066 & 067

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CIVIL STRUCTURAL ELECTRICAL WATER|WASTEWATER

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Project No. 2021201

March 2022

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- Vicinity Map
- Stormwater Control Plan

This Stormwater Control Plan was prepared using the Bay Area Stormwater Management Agencies Association (BASMAA) template dated January 2019.

**I. PROJECT DATA**

Table 1. Project Data

Project Name/Number	Robert Mondavi Winery Use Permit / 2021201
Application Submittal Date	March 2022
Project Location	7801 St. Helena Highway, Oakville, CA 94562 APN 027-280-066 & 067
Project Phase No.	1
Project Type and Description	Project Type: Regulated – This project will add employee parking, remodel the existing visitor parking, add a production canopy and add outdoor spaces to incorporate updates to production and hospitality.
Total Project Site Area (acres)	93.76 acres
Total New and Replaced Impervious Surface Area	568,581 sqft (13.1 acres)
Total Pre-Project Impervious Surface Area	434,150 sqft (9.97 acres)
Total Post-Project Impervious Surface Area	593,931 sqft (13.6 acres)

**II. SETTING****II.A. Project Location and Description**

The Robert Mondavi Winery project site is approximately 93.76 acres and located at 7801 St. Helena Highway, Oakville, CA 94562. The project site is located approximately 0.55 miles west of Napa River, and has approximate coordinates of 38.441531° N & -122.409500° W. Refer to the Vicinity Map in Appendix A.

The project improvements will include remodeling production and hospitality infrastructure, including parking and landscaping improvements.

**II.B. Site Features and Conditions**

The project site consists of an existing winery that includes production and hospitality buildings, parking, and vineyard. The area surrounding the project boundary consists of vineyards with similar vegetation density. The project site extends over flat to shallow sloping terrain. The average slopes of the area are around 1%. The existing drainage from the site will be maintained. Stormwater will be conveyed to self-retaining areas or existing drainage structures that connect to public infrastructure at Highway 29.

Based on mapping from the National Resources Conservation Service (NRCS) Web Soil Survey, the project site soils are classified as Bale loam and Bale clay loam (Hydrologic Soil Group B). According to the NRCS, Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of soils of moderately seep 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.

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

Opportunities of this project include the large amounts of flat vineyard and vegetation to be utilized as self-retaining areas, as well as the existing drainage infrastructure that ties into the public drainage system.

Constraints of this project include the shallow grades of the site to route and outlet stormwater.

### III. LOW IMPACT DEVELOPMENT DESIGN STRATEGIES

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

##### III.A.1. Limitation of development envelope

The shallow slopes throughout the site limits the development of long storm drain networks. The project is limited to be approximately within the existing development. Parking is proposed to be consolidated and designed to meet County standards.

##### III.A.2. Preservation of natural drainage features

The existing drainage pattern for the site shall be preserved where feasible.

##### III.A.3. Setbacks from creeks, wetlands, and riparian habitats

The proposed improvements are outside creek setbacks.

##### III.A.4. Minimization of imperviousness

Impervious surfacing of the site shall be minimized by incorporating landscaping as a prominent feature of the hospitality improvements.

##### III.A.5. Use of drainage as a design element

Vegetated area shall be utilized for both treatment and aesthetics.

#### III.B. Use of Pervious Pavements

There are no pervious pavements proposed for this project.

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

A majority of the improvements will drain to self-retaining areas.

#### III.D. Stormwater Control Measures

This project will follow the Post Construction Manual, prepared for the Bay Area Stormwater Management Agencies Association (BASMAA). Stormwater will be conveyed to self-retaining areas to minimize drainage runs and utilize the large amount of vegetated area for treatment. Level spreaders will be used to dissipate energy and spread stormwater throughout the vegetated areas to prevent erosion. The self-retaining areas are sized at a minimum of 2:1 impervious to pervious area. The areas naturally sheet flow through the vineyard. Locations of self-retaining areas and impervious areas can be seen in the attached Stormwater Control Plan (SCP). See the following tables for the different drainage areas.

**IV. DOCUMENTATION OF DRAINAGE DESIGN**

## IV.A. Drainage Management Areas

Table 2. Table of Drainage Management Areas

DMA Region	Surface Type	Runoff Factor	Area (acres)	Area (sf)	Area * Runoff Factor	Region receiving the DMA runoff
DMA-1A	Pavement	1	1.19	51896	51896	SRA-1
DMA-1B	Landscaped area	0.1	0.12	5096	509.6	SRA-1
DMA-2A	Pavement	1	0.09	4046	4046	SRA-2
DMA-2B	Landscape/DG	0.1	0.41	18004	1800.4	SRA-2
DMA-3A	Landscaped area	0.1	1.73	75481	7548.1	SRA-3
DMA-3B	Roof/Stabilized DG/Stone paving	1	3.67	159708	159708	SRA-3
DMA-4A	Roof/Concrete	1	1.00	43385	43385	SRA-4
DMA-4B	Landscape/DG	0.1	1.28	55548	5554.8	SRA-4
DMA-5A	Roof/Stabilized DG/Stone paving	1	0.55	23913	23913	SRA-5
DMA-5B	Landscaped area	0.1	0.45	19633	1963.3	SRA-5

## IV.B. Areas Draining to Self-Retaining Area

Table 3. Areas Draining to Self-Retaining Area

DMA Region	Total Area (SF)	Required Area to be treated (Area * Runoff factor)	Receiving self-retaining DMA	Receiving self-retaining DMA Area (SF)	Ratio Pervious to Impervious (min 0.5)
DMA-1A,1B	56992	52406	SRA-1	27337	0.52
DMA-2A,2B	22050	5846	SRA-2	4282	0.73
DMA-3A,3B	235189	167256	SRA-3	86353	0.52
DMA-4A,4B	98933	48940	SRA-4	24921	0.51
DMA-5A,5B	43546	25876	SRA-5	16250	0.63

**SOURCE CONTROL MEASURES**

**IV.A. Site activities and potential sources of pollutants**

- On-site Storm Drain Inlets
- Parking Areas
- Landscape Maintenance

**IV.C. Summary of Maintenance Requirements for Each Stormwater Facility**

- Energy dissipaters constructed of rip rap and level spreaders shall be specified at the outlets of new and replaced storm drains to minimize erosion.
- Parking areas shall be designed to minimize impervious surface areas and graded to direct runoff the storm drain network and outlet at self-retaining areas.
- Existing trees, shrubs and groundcover shall be preserved where feasible.
- Plant species tolerant of saturated soil conditions shall be specified in landscaped areas to be utilized for stormwater infiltration and treatment.
- Gutters tributary are screened with a leaf guard or maximum ½-inch to ¾-inch-minimum corrosion-resistant metallic hardware fabric.
- Water collected will be used for irrigation only.
- Large openings are secured to prevent entry by children.
- Gutters are to be cleaned annually.

Table 4. Source Control Table

Potential source of runoff pollutants	Permanent source control BMPs	Operational source control BMPs
On-site Storm Drain Inlets	Mark all inlets with the words "No Dumping! Flows to Creek" or similar.	Maintain and periodically replace inlet markings. Provide stormwater pollution prevention information to new site owners, lessees, or operators. See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance"
Landscaping/Pesticide Use/Ground Maintenance	<p>State that final landscaping will accomplish all the following:</p> <ul style="list-style-type: none"> <li>- Preserve existing native trees, shrubs, and ground cover to maximum extent possible</li> <li>- Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.</li> <li>- Where landscaped areas are used to retain or detain stormwater, specify plats that are tolerant of saturated soil conditions.</li> <li>- Consider using pest-resistant plants, especially adjacent to hardscape.</li> </ul> <p>To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.</p>	Maintain landscaping using minimum or no pesticides See applicable operational BMPs in Fact Sheet SC-41, "building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks Provide IPM information to new owners, lessees, and operators
Plazas, sidewalks and Parking Areas		Sweep 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 discharge to the sanitary sewer not to a storm drain.



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

All Source Control BMPs listed in the previous section will be implemented with corresponding and appropriate features, materials, and methods of construction.

**V. STORMWATER FACILITY MAINTENANCE**

**V.A. Ownership and Responsibility for Maintenance in Perpetuity**

The applicant accepts responsibility for interim operation and maintenance of stormwater treatment and flow-control facilities until such time as this responsibility is formally transferred to a subsequent owner. The owner then accepts full responsibility for the proper operation and maintenance of all stormwater facilities.

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

Any maintenance will be financed and implemented by the property owner. All facilities shall be inspected annually and documented. Any necessary repairs to facilities shall also be documented. Updated information, including contact information, must be provided to the municipality if property is sold and whenever designated individuals or contractors change.

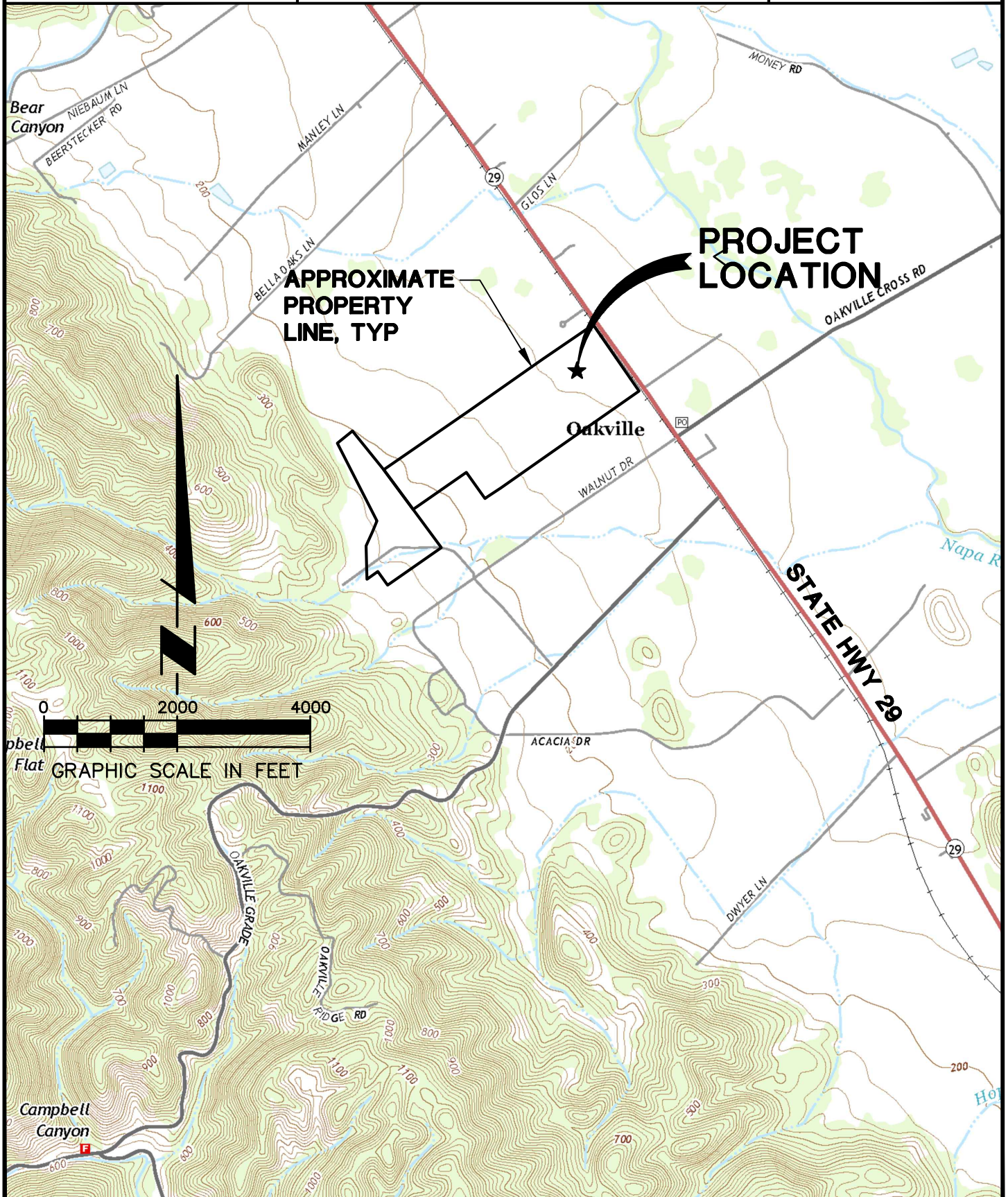
**VI. CERTIFICATIONS**

The preliminary 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*.



**ROBERT MONDAVI WINERY**  
**7801 ST. HELENA HIGHWAY**  
**OAKVILLE, CA 94562**  
**APN 027-280-066 & 067**  
**VICINITY MAP**

PROJECT NO. 2021201  
DATE 2022-03-23  
SHT NO 1 OF 1  
BY BG CHK TCS



Summit Engineering, Inc

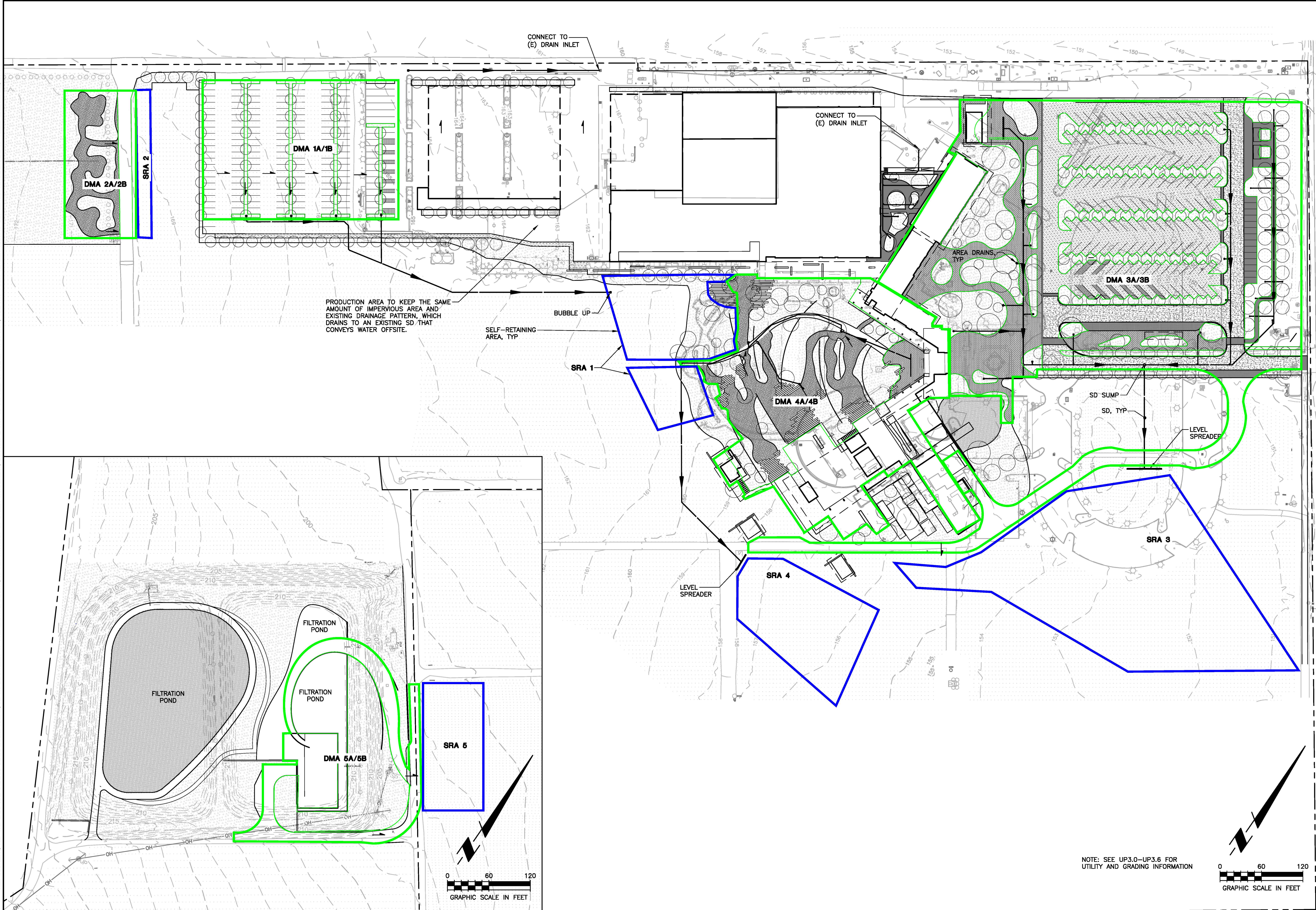
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**POND SITE PLAN**  
SCALE: 1"=60'

1

**WINERY SITE PLAN**  
SCALE: 1"=60'

2