

# Stormwater Control Plan



Sept 6, 2016

# Stormwater Control Plan For a Winery Distribution Center Devlin Road, Napa Ca

Sept 6, 2016

Category: Regulated
Use appendix D

Name of Owner:

David and Yolanda L. Del Dotto Family Trust

### Prepared by:

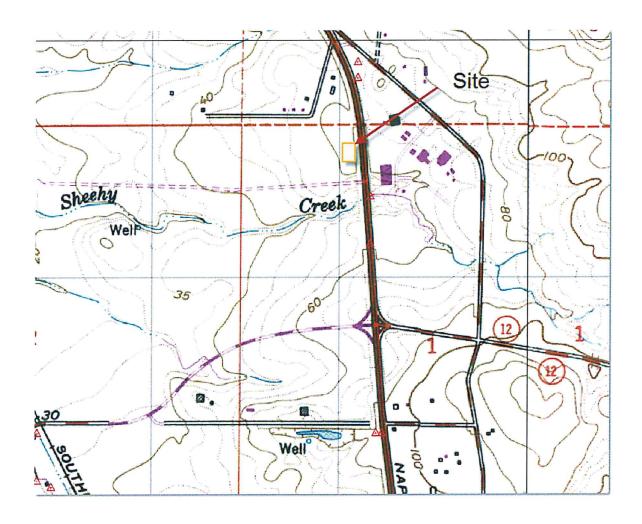
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# APPENDIX D

Project Name/Number	
Application Submittal Date	9/5/2016
[to be verified by municipal staff]	
Project Location	
[Street Address if available, or intersection and/or APN]	Devlin Road
Name of Owner or Developer	David and Yolanda Del Dotto Family Trust
Project Type and Description	Winery distribution/office/deli
Total Project Site Area (acres)	3.36
Total New or Replaced Impervious Surface Area	94,951
the project]	
Total Pre-Project Impervious Surface Area	0
Total Post-Project Impervious Surface Area	94,951
Runoff Reduction Measures Selected	
(Check one or more)	1. Disperse runoff to vegetated area
	2. Pervious pavement
	3. Cisterns or Rain Barrels
	4. Bioretention Facility or Planter Box





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Type of project: new facility.

Category:

regulated project, Use appendix D

# II. Setting

II.A. Project Location and Description

The project includes winery distribution center, office and deli.

Project is located on Devlin Road in an industrial park. This parcel has no improvements on it and has been graded.

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

[Include site size, shape, and topography. Hydrologic features, including any contiguous natural areas, wetlands, watercourses, seeps, or springs. Existing land uses. Soil types and hydrologic soil groups, vegetative cover, and impervious areas, if any. Existing drainage for site and nearby areas, including location of municipal storm drains.]

#### Site size, shape, and topography

The site is approximately 3.36 acres in a form of a rectangle.

The project is on a flat land 2% to 5%.

North: commercial industrial building



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South: commercial industrial building

East: Hwy 29

West: Devlin Road and open field

Hydrologic features, including any contiguous natural areas, wetlands, watercourses, seeps, or springs.

**Hydrologic features:** The hillside drainage will be diverted by the vineyard drainage features.

No run-on drainage will occur from the vineyard area on west.

The existing slope currently sheet drains from the site to the vineyard below.

Wetlands: none visible or listed on county data base

Contiguous natural areas: none visible

Watercourses, seeps, or springs: Sheehy Creek is about 1000 ft south of the project. The drains

indirectly into the creek via storm drains. No seeps or springs visible.

#### Soil type

Haire loam 2%-9% :Type D

#### Impervious areas.

No current improvements

#### Drainage

The parcel drains from East to West. There storm drain stub outs along Devlin Road. There are no areas within this property that are within the 100 flood zone per county base maps.

#### **Proposed hydraulics**

The proposed swales along the east and south sides will drain the property during the 10 year storm. The combination of a drainage pipe and swales will drain the property

The Tr55 run for a 10 year storm yields 0.77 cfs and 1.48 cfs Areas A and B. a sample calc is provided for the swale pipe sized.



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The Tr55 run for a 10 year storm yields 0.41 cfs for area C. see Reference # 2

The rain data is based on the Noaa Atlas 14 see reference #3

# Municipal drains

There are no municipal drains in the area. There is a county storm drain system along Devlin Road.

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

#### **Opportunities**

Bmp used in this area are

- 1. Evergreen trees
- 2. Disconnected roof drains

#### Constraints

- 1. Limited space
- 2. Existing utility easements along east side

#### **III. Low Impact Development Design Strategies**

III.A. Optimization of Site Layout All grading is a balanced cut and fill.

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

The building has been centralized on the site. However, the development it within an industrial park that has been parceled out.

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

Storm drain stub outs have been provided along Devlin Road



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

Not apply

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

Landscaped areas around building and parking lot.

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

Bio retention areas see reference 1

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

N/a

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

Disconnected drains to parking lot and biorentention facilities

#### **III.D. Stormwater Control Measures**

biorentention facilities

## IV. Documentation of Drainage Design

See plan and calculations.

#### IV.A. Descriptions of Each Drainage Management Area

There are 4 DMAs. Each has a combination of Roofs, asphalt, sidewalks and landscaping. A composite C value has been calculated for each area.

There are areas that are untouched by this development These drain directly into the proposed storm drain system.

#### IV.A.1. Table of Drainage Management Areas

See Reference # 2

#### V. Source Control Measures

V.A. Site activities and potential sources of pollutants

#### **SOURCES OF POLLUTION would include run off from roofs**

V.B. Source Control Table



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Potential source of Permanent	Operational	runoff
pollutants	source control BMPs	source Control BMPs

Roof	Inspect roofs and downspouts	Grassy area/Bioretention
Waste disposal	Inspect and keep clean	Cover on can or roof
Asphalt	Maintain asphalt and	Grass/bioretention area
	bioretention area	
Asphalt	Maintain asphalt and	Grass/bioretention area
	bioretention area	
Deli	Inspect and maintain drains	Floor drains to septic

#### VI. Stormwater Facility Maintenance

TO BE DONE B OWNER

VI.A. Ownership and Responsibility for Maintenance in Perpetuity

[Include (1) a commitment to execute any necessary agreements, and (2) a statement such as the

following: "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."

#### VII. Construction Checklist

[See the instructions beginning on page 3-7 of the Post-Construction Manual.]

Storm water control plan Page #	Source control or treatment control measure	See plan sheet
Roof leaders	Treatment control	2 of 2 storm water plan
DMA 1-4	Bio retention Swale	2 of 2 storm water plan

#### **VIII.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* 

#### References



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- 1. Bioretention table
- 2. Hydraulic calcs
- 3. Tr 55 runs
- 4. NOAA ATLAS 14 DATA