

Preliminary Stormwater Control Plan

For the

Schematic Design

6638 Yount Street, Yountville, California

APN 036-010-008

JN 19216

January 31, 2020

Prepared for:

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Timothy L. Schram, RCE 67890
My license expires 6/30/2021



Prepared by:

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I. Project Data Form

II. Project Setting

- a. Nature and Purpose of the Project
- b. Existing Site Features and Conditions
- c. Runoff Reduction Measures and Stormwater Control

Appendices

Appendix A – Vicinity Map

Appendix B – Stormwater Control Plan Exhibit

Appendix C – Soil Analysis

**Preliminary Stormwater Management Plan For
Schematic Design
6638 Yount Street, Yountville, California**

I. Project Data Form

Project Name	Kiely Residence
Application Submittal Date	September 2019
Project Location	6638 Yount Street
Project Phase No.	N/A
Project Type and Description	Small Project/ Single Family Residence
Total Project Site Area	0.28 acres
Total New and Replaced Impervious Surface Area	5,583 SF
Total Pre-Project Impervious Surface Area	5,248 SF
Total Post-Project Impervious Surface Area	5,985 SF
Runoff Reduction Measures Selected	Disperse Runoff to Vegetated Area

II. Project Setting

A. Nature and Purpose of the Project

The Schematic Design Review of this project proposes the construction of a new private residence, A.C driveway, garage, ADU, and other associated landscaping and hardscaping.

B. Existing Site Features and Conditions

The existing site is located within the City of Yountville, see the **Vicinity Map** in **Appendix A**. The parcel is 0.28 acres and is currently vacant. The land slopes Northeast to Southeast draining into hopper creek. Average slopes on the site range from 0% to 2%. Runoff currently sheet flows towards hopper creek. The soil type belongs to hydrologic Soil Group D, see **Soils Analysis** in **Appendix D**.

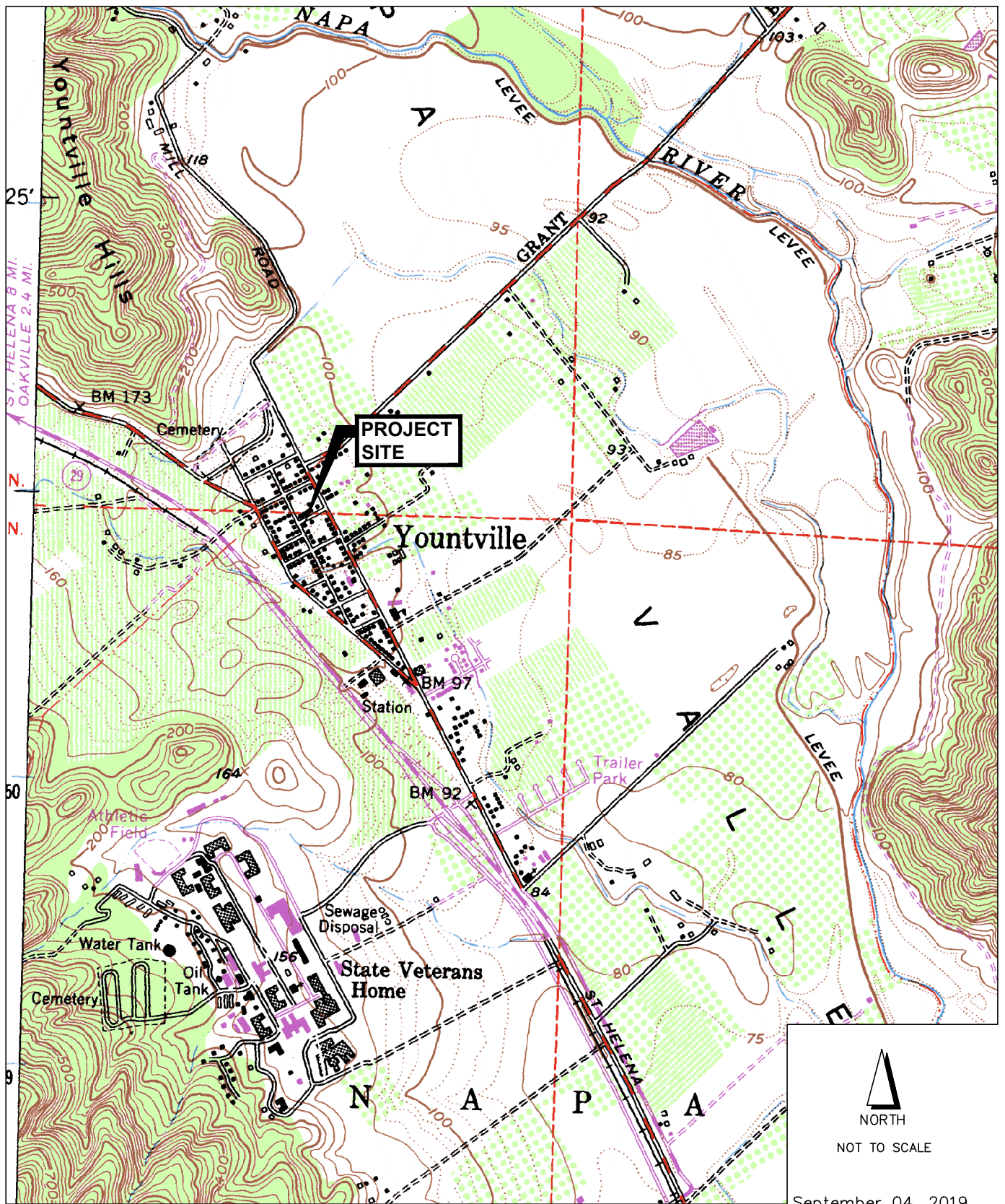
C. Runoff Reduction Measures and Stormwater Control

Pursuant to the BASMAA Post – Construction Manual, this project is classified as a small project/ single family home. Due to limited space on site, runoff reduction will be achieved through dispersal of runoff to vegetated areas. Vegetated areas have been designed to meet the stated minimum. Runoff from the impervious areas will be directed towards existing vegetation, see **BASMAA Exhibit** in **Appendix B** and **Vegetation Sizing** in **Appendix C**

Appendix A

Vicinity Map

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September 04, 2019

VICINITY MAP

Kiely Residence
6638 Yount Street, Yountville, CA

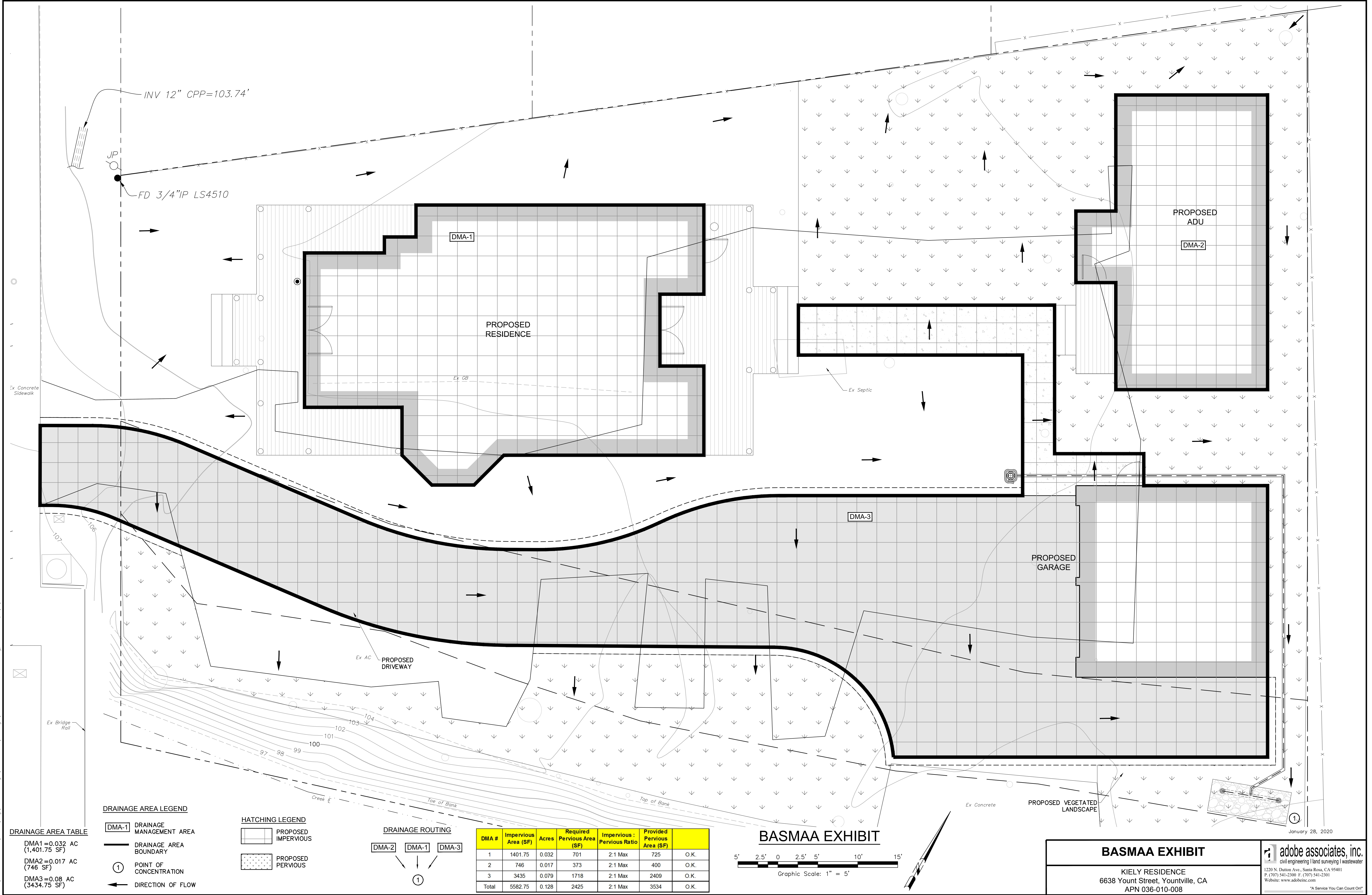
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Appendix B
BASMAA Exhibit

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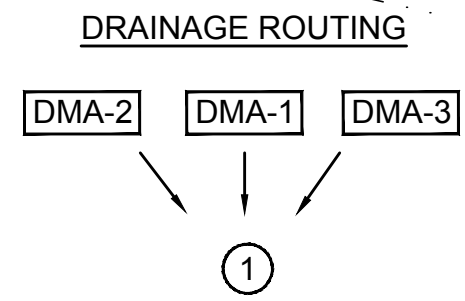


DRAINAGE AREA TABLE

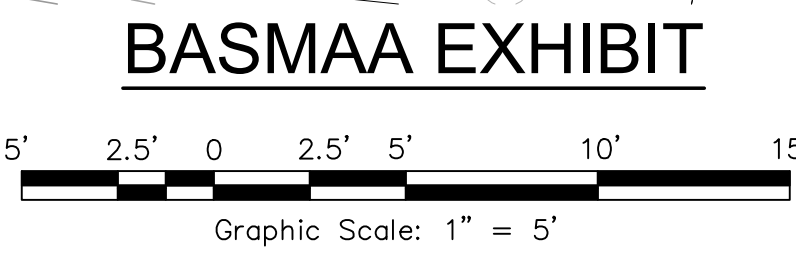
DMA1 = 0.032 AC (1,401.75 SF)
DMA2 = 0.017 AC (746 SF)
DMA3 = 0.08 AC (3,434.75 SF)

- DRAINAGE AREA LEGEND**
- DMA-1 DRAINAGE MANAGEMENT AREA
 - DRAINAGE AREA BOUNDARY
 - ① POINT OF CONCENTRATION
 - DIRECTION OF FLOW

- HATCHING LEGEND**
- PROPOSED IMPERVIOUS
 - PROPOSED PERVIOUS



DMA #	Impervious Area (SF)	Acres	Required Pervious Area (SF)	Impervious : Pervious Ratio	Provided Pervious Area (SF)	
1	1401.75	0.032	701	2:1 Max	725	O.K.
2	746	0.017	373	2:1 Max	400	O.K.
3	3435	0.079	1718	2:1 Max	2409	O.K.
Total	5582.75	0.128	2425	2:1 Max	3534	O.K.



BASMAA EXHIBIT

KIELY RESIDENCE
6638 Yount Street, Yountville, CA
APN 036-010-008

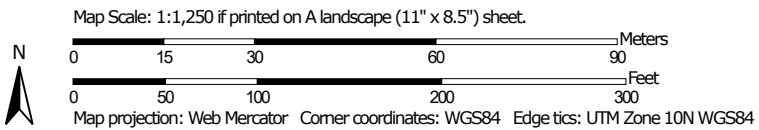
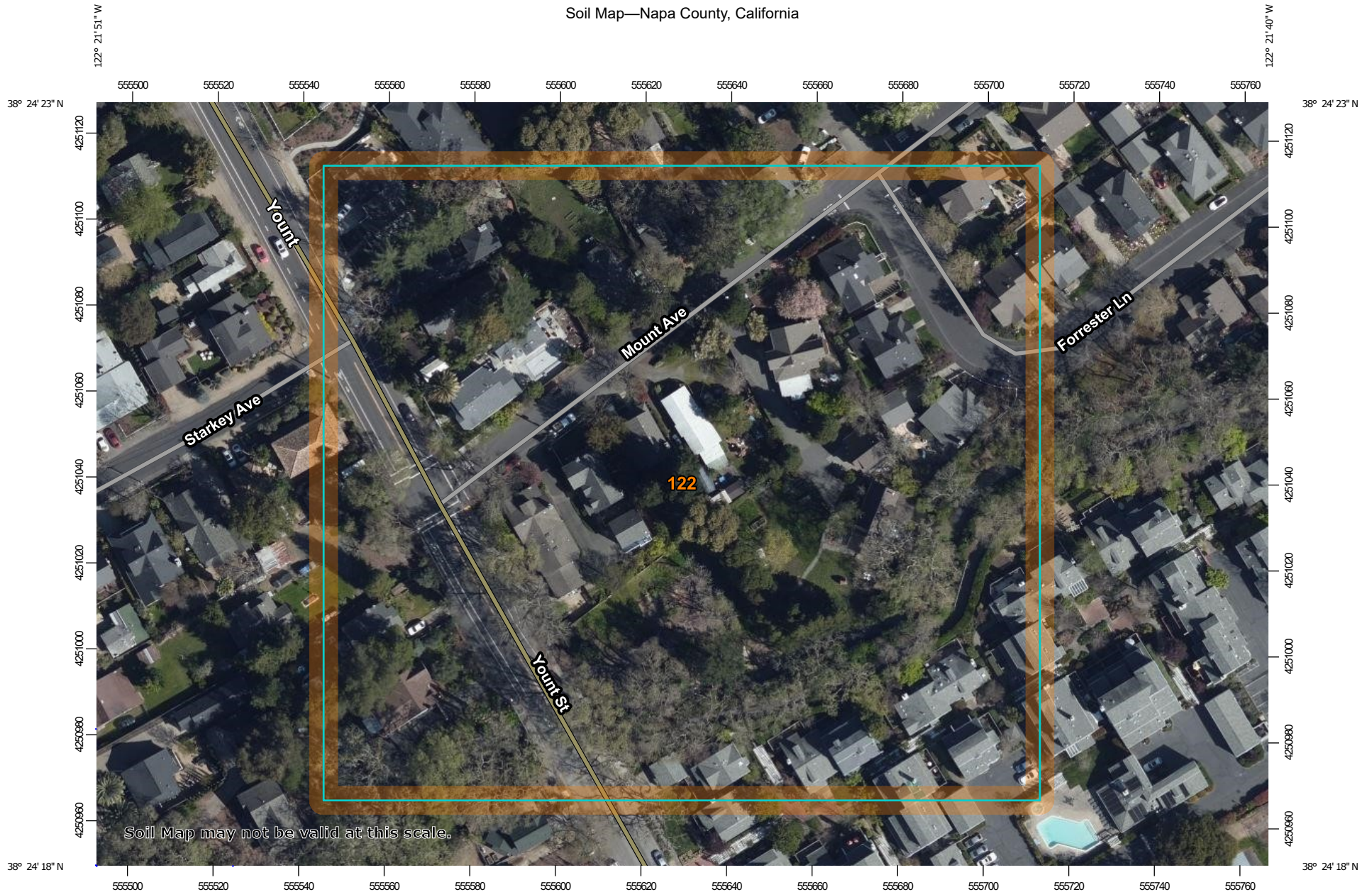
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January 28, 2020

Appendix C

Soil Analysis

Soil Map—Napa County, California



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

8/30/2019
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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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 contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California

Survey Area Data: Version 11, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 15, 2019—Apr 10, 2019

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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
122	Coombs gravelly loam, 0 to 2 percent slopes	6.1	100.0%
Totals for Area of Interest		6.1	100.0%

Napa County, California

122—Coombs gravelly loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hdkq

Elevation: 50 to 500 feet

Mean annual precipitation: 24 to 30 inches

Mean annual air temperature: 59 to 63 degrees F

Frost-free period: 220 to 260 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Coombs and similar soils: 85 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Coombs

Setting

Landform: Alluvial fans, terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope, tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from sedimentary rock and/or alluvium derived from igneous rock

Typical profile

H1 - 0 to 14 inches: gravelly loam

H2 - 14 to 54 inches: clay loam, gravelly clay loam

H2 - 14 to 54 inches: very gravelly loamy fine sand

H3 - 54 to 60 inches:

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high (0.20 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Very high (about 16.2 inches)

Interpretive groups

Land capability classification (irrigated): 2s

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Clear lake

Percent of map unit: 5 percent

Landform: Alluvial fans

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Napa County, California

Survey Area Data: Version 11, Sep 12, 2018