Preliminary
Stormwater Control Plan for Regulated Projects

For

Kortum Ranch Subdivision

500 Kortum Canyon Road
Calistoga, CA
APN 011-290-007, 038, 039, 011-310-023

JN 21105
July 14th, 2023
July 10th, 2023

Prepared For:
Kortum Ranch, LLC
500 Kortum Canyon Road
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PRELIMINARY

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Prepared by:

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Stormwater Control Plan for Regulated Project For
Kortum Ranch Subdivision
500 Kortum Canyon Rd, Calistoga, California

I. Project Data Form

Project Name	Kortum Ranch Subdivision
Application Submittal Date	
Project Location	500 Kortum Canyon Rd, Calistoga, CA
Project Phase No.	N/A
Project Type and Description	Preliminary Regulated Project
Total Project Site Area	30.75 acres
Total New and Replaced Impervious Area	43,430 SF (1.00 acres)
Total Pre-Project Impervious Surface Area	N/A
Total Post-Project Impervious Surface Area	43,430 SF (1.00 acres)

II. Project Setting

A. Nature and Purpose of the Project

The Kortum Ranch Subdivision is located at 500 Kortum Canyon Road, in Calistoga south-west of Highway 128. The project proposes to subdivide 3-lots into a 22-lot subdivision for residential use. The tentative map is predicated on the resultant parcels being approved through a lot line adjustment between APN 011-310-023 & 011-290-007.

Zoning Table

APN #	Proposed	General Plan
011-310-023	RR-H	RR-H
011-290-007	RR-H	RR-H
011-290-038	RR-H	RR-H
011-290-039	RR-H	RR-H

RR-H = Rural Residential - Hillside

B. Existing Site Features and Conditions

The site previously had multiple residences, stockpiles, defunct car storage, construction material storage, and various other unpermitted activities. The Kortum Ranch, LLC has cleaned and cleared all previous structures, cars, and construction material in the past year. There are currently gravel access roads and building pads that will be utilized in the proposed improved subdivision. Within the site also exist several man-made check dams (to remain) along the major flow paths of Kortum Canyon Road and Terrace Drive.

The site is on a northerly facing hillside above the City of Calistoga with gentle to steep slopes ranging throughout the site. In areas where there are no proposed improvements existing slopes exceed 50%. The entire site historically drains to the north toward Foothill Blvd. (Highway 128). Several discharge points are observed through site topography, with

three distinctive major discharge points being of concern; the first outfall being into an existing ~224' long roadside swale along the northerly end of Kortum Canyon Road, that abuts Foothill Blvd, outfalling into an existing 36" culvert under Foothill Blvd; the second being a subtle valley south of APN's 011-310-027, 011-300-020, and 011-300-024 with a large percentage of runoff flowing to those respective parcels, this will be mitigated through the inclusion of a new bioretention site directly above dissipating such flows; the third discharge point flows from an existing 30" stromdrain with an unknown outfall on either Terrace Drive or Foothill Blvd, further site investigation is necessary. There are no blue line streams on the property.

The soil types in the project area are Forward Silt Loam (140), Hydrologic Soil Type C, see **Appendix C**.

C. Opportunities and Constraints for Stormwater Control

Bioretention facilities have the ability to be incorporated into the early stages of design and will more easily be integrated into the existing aesthetics. Areas shown and discussed in this report are for potential future development, final design and location of the bioretention facilities will be determined as these parcels are being developed.

As the future buildout is TBD, an analysis of the proposed lots and their potential footprint has been implied. In order to produce a feasible square footage requirement for individual lot bioretention facilities we assumed 60% of the implied buildable area is to be impervious, thereafter, 4% of that 60% impervious area square footage has been designated as the preliminary required bioretention footprint, as to incorporate within future site design. See **Table 1. Approximate Bioretention Area Sizing**

III. Low Impact Development Design Strategies

A. Optimization of Site Layout

Proposed improvements will be placed as close to existing grade as possible to minimize total site grading and preserve existing vegetation to the maximum extent practicable. The depth for each bioretention facility is shown on the Stormwater Control Plan Exhibit, as well as the Preliminary Grading Plan.

Documentation of Drainage Design

A. Description of Drainage Management Areas

DMA-1 totaling 21,690 SF drains to IMP-1 via roof down spouts. IMP-1 has a total area of 880 SF.

DMA-2 totaling 6,825 SF drains to IMP-2 via overland flow. IMP-2 has a total area of 340 SF.

DMA-3 totaling 16,820 SF drains to IMP-3 via overland flow. IMP-3 has a total area of 645 SF.

*See **Table 1. Approximate Bioretention Area Sizing** for individual lot potential requirements

B. Areas Draining to Bioretention Facilities

Bioretention Sizing: IMP-1

DMA Name	Area (SF)[1]	Post-Project Surface Type	Runoff Factor	Area x Runoff Factor	Facility Name: Bioretention Facility		
					Sizing Factor	Minimum Facility Size (SF)[1]	Proposed Facility Size (SF)[1]
DMA-1	20,810.00	Roof/ Paving	1.0	20,810.00			
	-	Landscape Areas	0.1	-			
	-	Permeable Pavers	0.2	-			
Total >				20,810.00	0.04	832	880
					Sized Correctly =		**TRUE**
					Area Oversized (SF) =		**48**

Bioretention Sizing: IMP-2

DMA Name	Area (SF)[1]	Post-Project Surface Type	Runoff Factor	Area x Runoff Factor	Facility Name: Bioretention Facility		
					Sizing Factor	Minimum Facility Size (SF)[1]	Proposed Facility Size (SF)[1]
DMA-2	6,485.00	Roof/ Paving	1.0	6,485.00			
	-	Landscape Areas	0.1	-			
	-	Permeable Pavers	0.2	-			
Total >				6485	0.04	259	340
					Sized Correctly =		**TRUE**
					Area Oversized (SF) =		**81**

Bioretention Sizing: IMP-3

DMA Name	Area (SF)[1]	Post-Project Surface Type	Runoff Factor	Area x Runoff Factor	Facility Name: Bioretention Facility		
					Sizing Factor	Minimum Facility Size (SF)[1]	Proposed Facility Size (SF)[1]
DMA-3	16,135.00	Roof/ Paving	1.00	16,135.00			
	-	Landscape Areas	0.10	-			
	-	Permeable Pavers	0.20	-			
Total >				16135	0.04	645	685

Sized Correctly =	**TRUE**
Area Oversized (SF) =	**40**

Table 1. ApproximateBioretention Area Sizing

Kortum Ranch Road Calistoga, California

Date: 7/3/2023

Lot Number	Potential Build-Out (SF)	Acres	Impervious Area 60% of Build-Out (SF)	Bioretention = 4% of Imp. (SF)
Lot 1	13,601	0.31	8,161	326
Lot 2	21,533	0.49	12,920	517
Lot 3	10,035	0.23	6,021	241
Lot 4	16,005	0.37	9,603	384
Lot 5	9,290	0.21	5,574	223
Lot 6	5,387	0.12	3,232	129
Lot 7	10,430	0.24	6,258	250
Lot 8	7,172	0.16	4,303	172
Lot 9	6,612	0.15	3,967	159
Lot 10	6,080	0.14	3,648	146
Lot 11	10,563	0.24	6,338	254
Lot 12	10,043	0.23	6,026	241
Lot 13	11,535	0.26	6,921	277
Lot 14	24,630	0.57	14,778	591
Lot 15	34,236	0.79	20,542	822
Lot 16	23,253	0.53	13,952	558
Lot 17	17,196	0.39	10,318	413
Lot 18	11,945	0.27	7,167	287
Lot 19	10,300	0.24	6,180	247
Lot 20	8,792	0.20	5,275	211
Lot 21	11,628	0.27	6,977	279
Lot 22	10,380	0.24	6,228	249
Total	280,266	6.67	174,388	6,976

IV. Stormwater Facility Maintenance

The applicant (owner) will be required to follow the recorded Operation and Maintenance Plan and to accept responsibility for interim operation and maintenance of stormwater treatment and flow-control facilities. An Operation and Maintenance Plan will be provided with the Final Stormwater Control Plan accompanying the Subdivision Construction Documents.

Some maintenance requirements for the landscape areas and Bioretention facilities will include general cleanup to remove any trash and debris that has collected, prune plants to maintain the design surface elevation, control weeds using manual methods or natural herbicides, add mulch as needed.

V. Construction Checklist

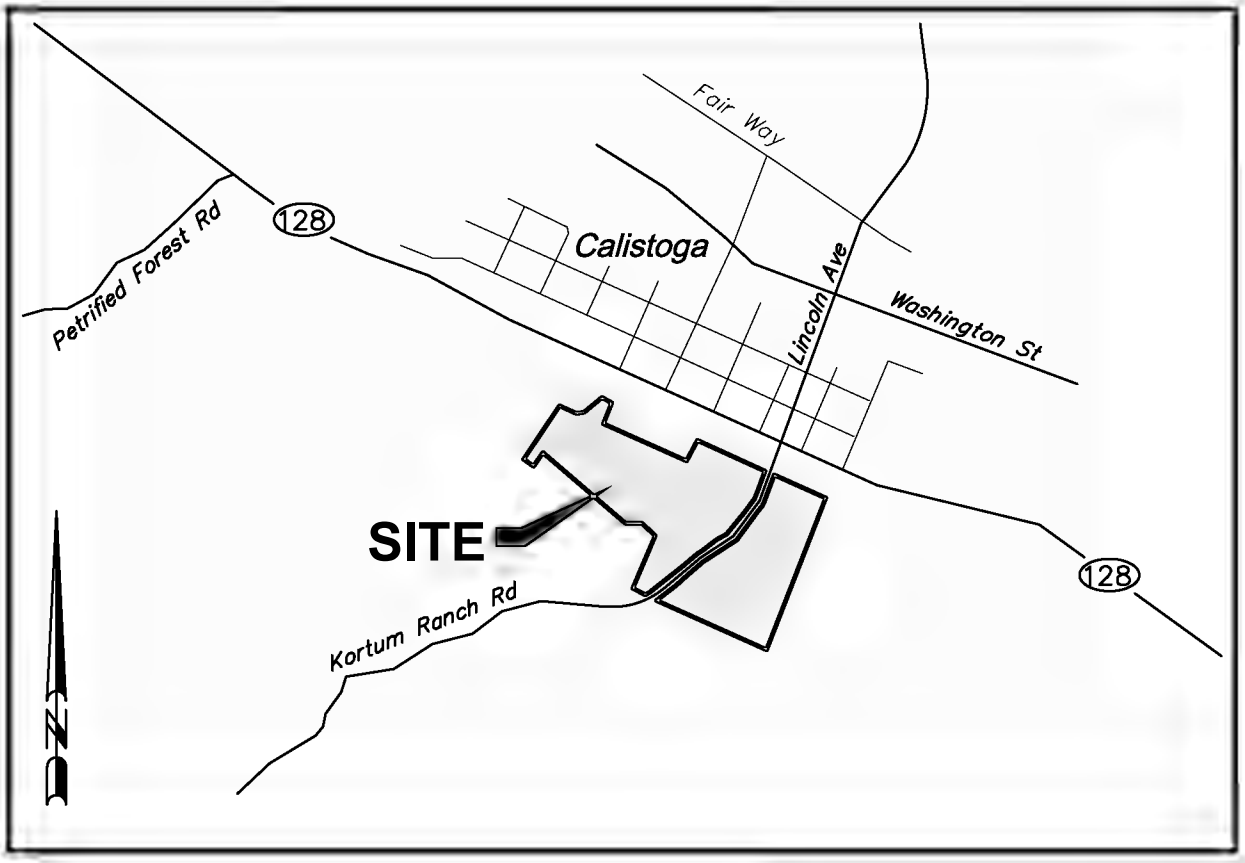
Construction and BMP details have been provided on the Preliminary Improvement Plans and the Stormwater Control Plan, see **Appendix B.**

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 dated January 2019.

APPENDIX A

Vicinity Map & Groundwater Documents



VICINITY MAP

NOT TO SCALE

VICINITY MAP

KORTUM RANCH LLC
1531 Foothill Blvd, Calistoga, CA
APN 011-290-038, 039 & 011-290-007 & 011-310-009, 023

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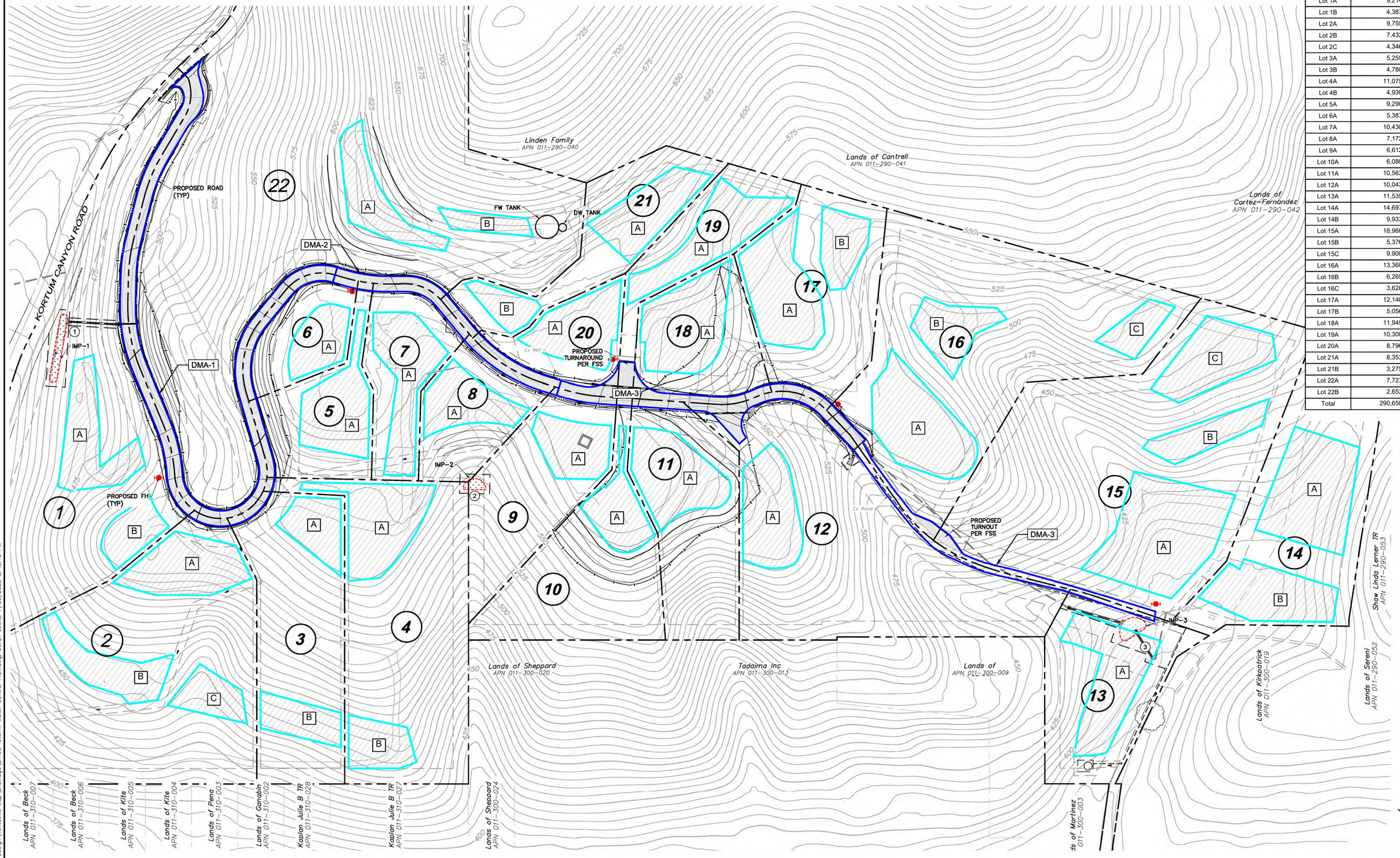
APPENDIX B

Stormwater Control Plan & BMP Typical Detail



POTENTIAL LOT BUILD-OUT TABLE

DMA# -or- Lot & Letter	Potential Buildable Area (SF)	Potential Impervious Area 60% of Buildable Area	Potential Build-Out Acres	Bioretention Area (SF) - 4% of Impervious -
Lot 1A	9,214	5,528	0.21	221
Lot 1B	4,387	2,632	0.10	105
Lot 2A	9,755	5,853	0.22	234
Lot 2B	7,432	4,459	0.17	178
Lot 2C	4,346	2,608	0.10	104
Lot 3A	5,255	3,153	0.12	126
Lot 3B	4,780	2,868	0.11	115
Lot 4A	11,075	6,645	0.25	266
Lot 4B	4,930	2,958	0.11	118
Lot 5A	9,290	5,574	0.21	223
Lot 6A	5,387	3,232	0.12	129
Lot 7A	10,430	6,258	0.24	250
Lot 8A	7,172	4,303	0.16	172
Lot 9A	6,612	3,967	0.15	159
Lot 10A	6,080	3,648	0.14	146
Lot 11A	10,563	6,338	0.24	254
Lot 12A	10,043	6,026	0.23	241
Lot 13A	11,535	6,921	0.26	277
Lot 14A	14,697	8,818	0.34	353
Lot 14B	9,933	5,960	0.23	238
Lot 15A	18,960	11,376	0.44	455
Lot 15B	5,376	3,226	0.12	129
Lot 15C	9,900	5,940	0.23	238
Lot 16A	13,360	8,016	0.31	321
Lot 16B	6,265	3,759	0.14	150
Lot 16C	3,628	2,177	0.08	87
Lot 17A	12,140	7,284	0.28	291
Lot 17B	5,056	3,034	0.12	121
Lot 18A	11,945	7,167	0.27	287
Lot 19A	10,300	6,180	0.24	247
Lot 20A	8,796	5,278	0.20	211
Lot 21A	8,353	5,012	0.19	200
Lot 21B	3,275	1,965	0.08	79
Lot 22A	7,727	4,636	0.18	185
Lot 22B	2,653	1,592	0.06	64
Total	290,650	174,390	6.67	6,976

DRAINAGE AREA LEGEND

- DMA-1 — DRAINAGE MANAGEMENT AREA
- (1) — POINT OF CONCENTRATION
- DRAINAGE AREA BOUNDARY
- PROPERTY LINE
- POTENTIAL BUILD-OUT

HATCH LEGEND

- BIORETENTION FACILITY
- POTENTIAL BUILD-OUT AREA

DRAINAGE ROUTING

DMA-1 → (1); DMA-2 → (2); DMA-3 → (3)

DMA Name	Total Area (SF)	IMP Name	Required Bioretention Area (SF)	Design Bioretention Area (SF)
DMA-1	21,690	IMP-1	832	880
DMA-2	6,825	IMP-2	259	340
DMA-3	16,820	IMP-3	645	685

IMPERVIOUS NOTE:

ROADWAY IMPERVIOUS AREA (DMA 1–3) = 45,335 SF

POTENTIAL BUILD–OUT IMPERVIOUS (@ 60% of Area) = 174,390 SF

*SEE TABLE 1. BIORETENTION AREA SIZING WITHIN 2ND SUBMITTAL

NOTE:

THIS MAP IS FOR REFERENCE ONLY

60' 30' 0 30' 60' 120' 180'

Graphic Scale: 1" = 60'

July 17, 2023

PRELIMINARY STORM WATER CONTROL PLAN

KORTUM RANCH SUBDIVISION
500 Kortum Canyon Rd, Calistoga, CA
APN 011-290-038, 039 & 011-290-007 & 011-310-023

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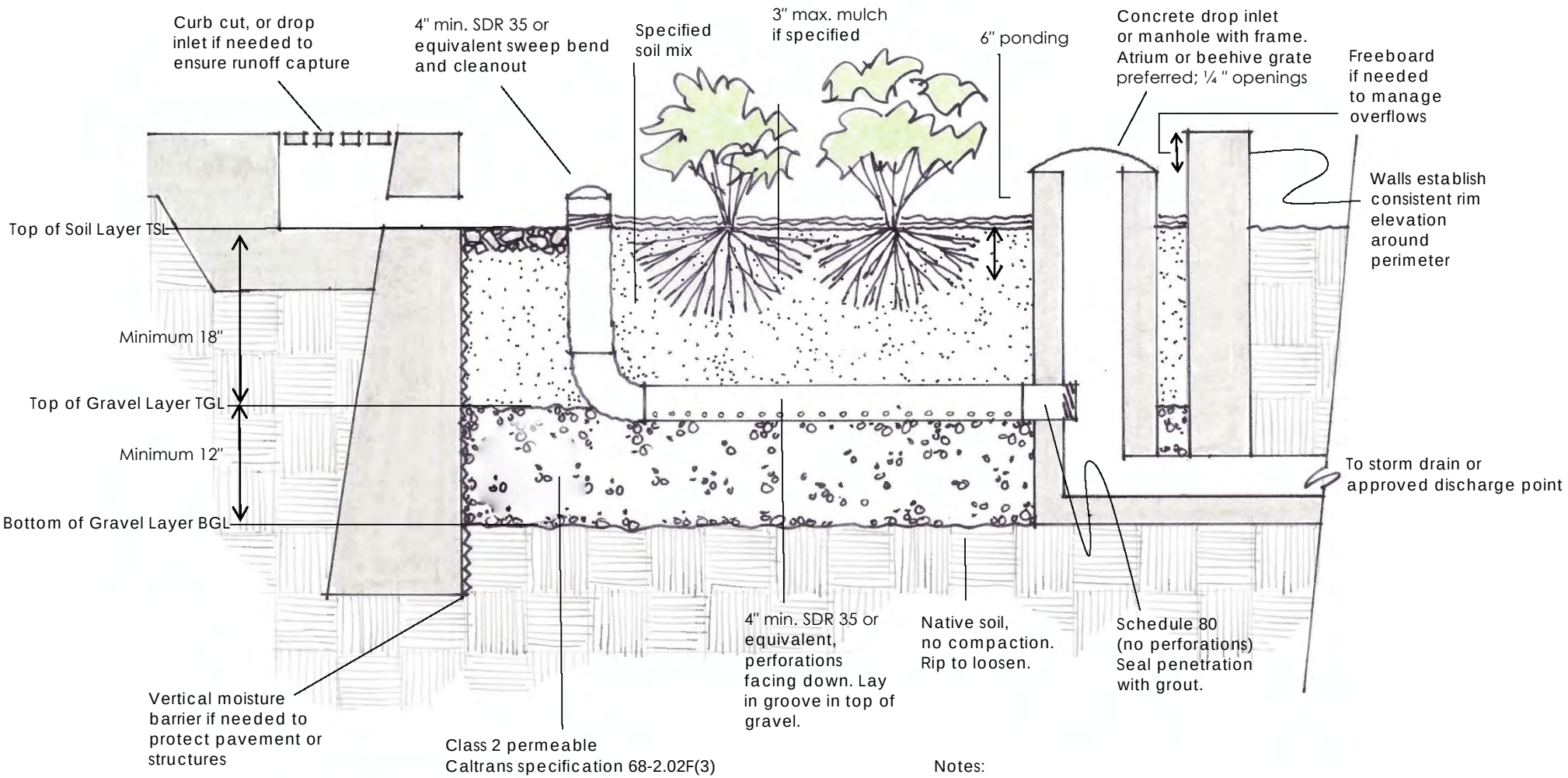
Figure 4-5. Bioretention Facility

Cross-section
Not to Scale



Notes:
No liner, no filter fabric, no landscape cloth.
Maintain BGL. TGL, TSL throughout facility area at elevations to be specified on drawing.
Elevation of perforated pipe underdrain is atop gravel layer.
See text for soil mix specification, planting and irrigation guidance.

APPENDIX C

Soil Analysis

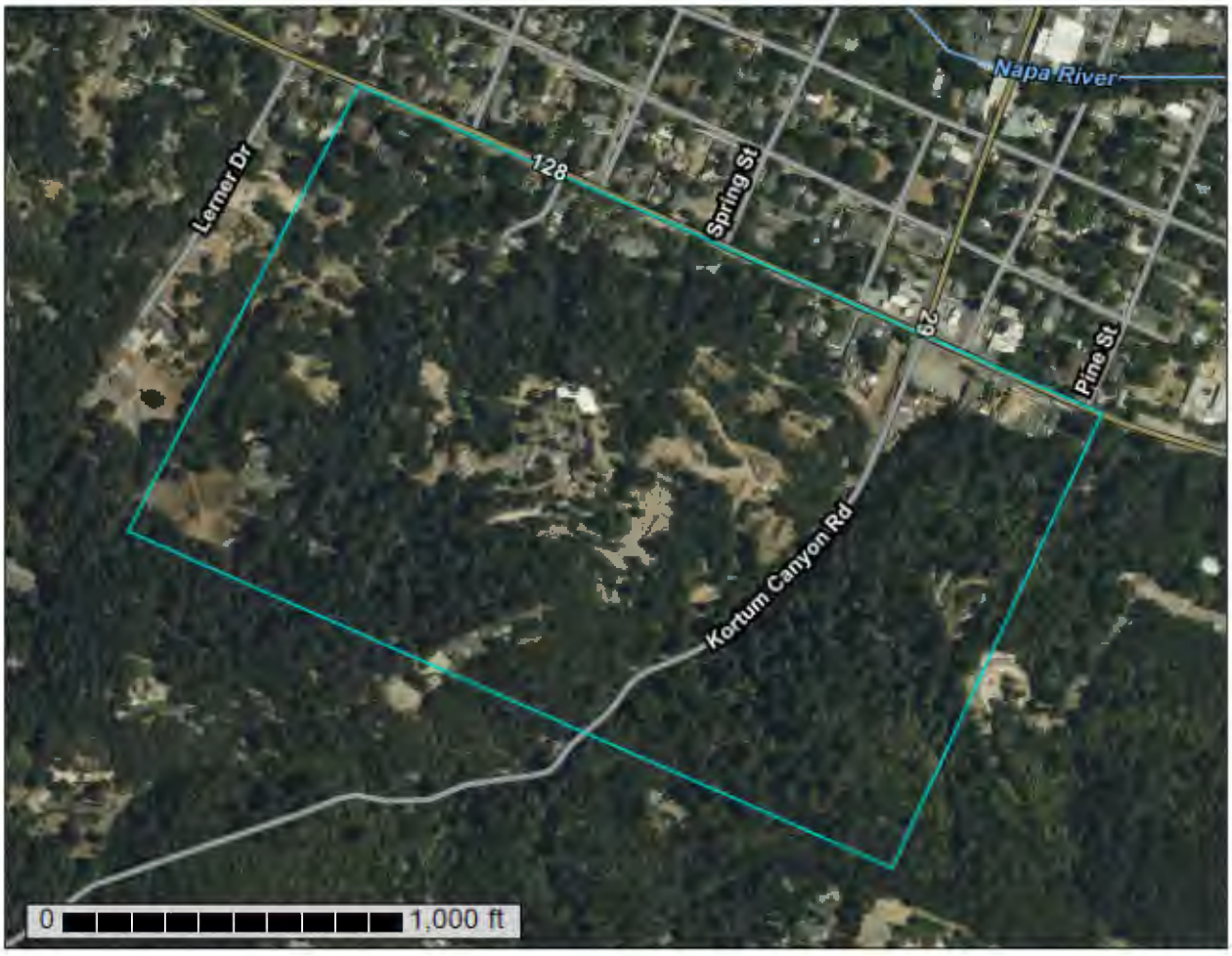
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Napa County, California



April 7, 2022

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:5,920 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

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 14, Sep 9, 2021

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

Date(s) aerial images were photographed: Jul 2, 2019—Jul 5, 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
103	Bale loam, 0 to 2 percent slopes	4.4	5.3%
105	Bale clay loam, 2 to 5 percent slopes	2.6	3.2%
140	Forward silt loam, 12 to 57 percent slopes, MLRA 15	73.6	89.7%
141	Forward-Kidd complex, 11 to 60 percent slopes, MLRA 15	1.4	1.8%
Totals for Area of Interest		**82.1**	**100.0%**

Napa County, California

103—Bale loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hdk3
Elevation: 20 to 400 feet
Mean annual precipitation: 25 to 35 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 220 to 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Bale and similar soils: 85 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bale

Setting

Landform: Alluvial fans, flood plains
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from rhyolite and/or alluvium derived from igneous rock

Typical profile

H1 - 0 to 24 inches: loam
H2 - 24 to 60 inches: stratified gravelly sandy loam to loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B
Ecological site: R014XG918CA - Loamy Fan
Hydric soil rating: No

Minor Components

Clear lake

Percent of map unit: 3 percent

Landform: Alluvial fans
Hydric soil rating: Yes

105—Bale clay loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: hdk5
Elevation: 20 to 400 feet
Mean annual precipitation: 25 to 35 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 220 to 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Bale and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bale

Setting

Landform: Flood plains, terraces
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from rhyolite and/or alluvium derived from igneous rock

Typical profile

H1 - 0 to 24 inches: clay loam
H2 - 24 to 60 inches: stratified gravelly sandy loam to loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B
Ecological site: R014XG907CA - Loamy Bottom
Hydric soil rating: No

140—Forward silt loam, 12 to 57 percent slopes, MLRA 15

Map Unit Setting

National map unit symbol: 2xc9y
Elevation: 310 to 2,370 feet
Mean annual precipitation: 33 to 56 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 260 to 338 days
Farmland classification: Not prime farmland

Map Unit Composition

Forward and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Forward

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Rhyolitic residuum weathered from volcanic rock

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 6 inches: silt loam
BA - 6 to 12 inches: silt loam
Bw1 - 12 to 19 inches: silt loam
Bw2 - 19 to 28 inches: silt loam
Bw3 - 28 to 37 inches: gravelly silt loam
Cr - 37 to 51 inches: bedrock

Properties and qualities

Slope: 12 to 57 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: C
Ecological site: R015XY009CA - Hills 20-40"ppt
Hydric soil rating: No

Minor Components

Boomer
Percent of map unit: 5 percent

Aiken
Percent of map unit: 5 percent

Kidd
Percent of map unit: 3 percent

Sobrante
Percent of map unit: 2 percent

141—Forward-Kidd complex, 11 to 60 percent slopes, MLRA 15

Map Unit Setting
National map unit symbol: 2y0fr
Elevation: 240 to 2,410 feet
Mean annual precipitation: 27 to 49 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 262 to 343 days
Farmland classification: Not prime farmland

Map Unit Composition
Forward and similar soils: 50 percent
Kidd and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Forward

Setting
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Rhyolitic residuum weathered from volcanic rock

Typical profile
Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 6 inches: silt loam
BA - 6 to 12 inches: silt loam
Bw1 - 12 to 19 inches: silt loam
Bw2 - 19 to 28 inches: silt loam
Bw3 - 28 to 37 inches: gravelly silt loam
Cr - 37 to 51 inches: bedrock

Properties and qualities

Slope: 11 to 60 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R015XD130CA - STEEP SHALLOW LOAMY UPLANDS
Hydric soil rating: No

Description of Kidd

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from rhyolite

Typical profile

A - 0 to 4 inches: gravelly loam
Bw1 - 4 to 10 inches: loam
Bw2 - 10 to 14 inches: loam
R - 14 to 25 inches: bedrock

Properties and qualities

Slope: 11 to 60 percent
Depth to restrictive feature: 5 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R015XD131CA - VERY SHALLOW

Hydric soil rating: No

Minor Components

Aiken

Percent of map unit: 5 percent
Hydric soil rating: No

Toomes

Percent of map unit: 3 percent

Rock outcrop

Percent of map unit: 2 percent