

PORTION OF NAPA 7.5 MIN. QUAD MAP

Vicinity Map

1" = ±2000'

Narrative

This project is the new planting of approximately ±0.96 gross acres (±0.68 net acres) of vineyard, the authorization of ±0.29 gross acres (±0.20 net acres) of existing vineyard, and the removal of ±0.39 acres vineyard within APN 049-200-003, a ±6.10 acre parcel located at 1228 Hagen Road, Napa. Within the parcel boundaries are residences and outbuildings, existing vineyard, access roads, ±2.7 acres of tree canopy and resident grasses. Primary access is from Hagen Road.

Existing vineyard on the property that is on slopes less than 5% and that is outside of stream setbacks is defined as Block A1; this Block is not part of this plan. Existing vineyard that is outside of stream setbacks and on slopes greater than 5% slopes is defined as Block A2; this project seeks to authorize this vineyard. Existing vineyard inside stream setbacks and outside of property boundaries is considered a violation is to be removed and restored. New vineyard planting area is defined as Block B.

Existing ground slopes in the project area range from 2% to 15%, with no slopes over 30% within the vineyard blocks. Block A2 is existing vineyard having 6' vinerow spacing oriented North/South; Block B will be planted with a vinerow spacing of 7' oriented East/West. All blocks will be hand-farmed and using ATVs and harvest tractors. A new drip irrigation system will be installed in Block B. Trucked recycled water will be the water source for all of the vineyard, NO GROUNDWATER WILL BE USED FOR VINEYARD IRRIGATION.

There is one blue line stream (Sarco Creek) along the northern property boundary and an ephemeral drainage near the southern property boundary. Setbacks have been provided pursuant to Napa County Conservation Regulations. The project drains toward and lies within the Sarco Creek subwatershed.

Soils within the block boundaries have been classified in the USDA Soil Conservation Service's Napa County Soil Survey, as SCS#123, Coombs gravelly loam.

No Special Status Species will be impacted by this project as concluded in the Biological Resource Survey prepared by Kjeldsen Biological Consulting, dated June, 2021.

No Cultural Resources occur in the vicinity of this project as concluded in the Cultural Resources Study prepared by Tom Origer & Associates, revised date December 16, 2020.

Vegetation Removal consists of resident grasses, brush and eight black walnut orchard trees. All organic material to be burned shall be stacked at strategic locations within the cleared areas. Burning of the organic material shall only take place after obtaining approval from all the governing agencies. Alternate to burning is chipping and/or off-hauling to a properly permitted disposal site.

Ground Preparation shall include removal of vegetation and rocks, ripping and disking. **Rocks** shall be used for local landscaping, and/or erosion control features, and/or they may be crushed and used as surfacing for existing traffic areas, and/or they may be off-hauled to a properly permitted disposal site.

Wildlife Exclusion Fence is existing and shall remain in place as shown on the plan sheet, new gates and/or cattle guards may be installed at convenient locations.

Temporary Erosion Control Measures consist of the installation of fiber rolls and the application of straw mulch where seeding occurs. The installation of all **fiber rolls** shall be completed in accordance with the appropriate detail along the contours at locations shown on the plan and prior to the rainy season at the end of years P-1 and P. They shall be left in place through the winter after planting after which they may be removed. A **straw mulch** cover shall be applied over all open and/or disturbed and seeded areas at the rate specified in the *Project Notes*.

Permanent Erosion Control Measures consist of the following:

1) The vineyard may be full tilled in years P-1 and P, and a winter cover crop shall be seeded and mulched at the end of growing season P-1. At the end of the growing season in year P, a permanent cover crop shall be planted within the new vineyard. (refer to cultivation chart under *Project Notes*). The cover crop may be mowed and weeds may be individually spot sprayed as needed using a post-emergent contact spray. **NO PREEMERGENT SPRAYS SHALL BE USED.** As a normal cultural practice, no tillage shall occur within the vineyard once the permanent cover crop has been established. Areas outside the vineyard blocks, including avenues and turnspaces, shall not be tilled or sprayed at any time. Using this method, a minimum ground cover of 80% will be obtained each winter. From time to time (every three or four years), it may be necessary to till the cover crop to open up the ground or to re-establish proper ground cover. Should this be necessary, notification shall be provided to Napa County and Napa Valley Vineyard Engineering, Inc. and the work shall proceed as prescribed in Napa County Conservation, Development and Planning Department guidelines, dated April 8, 2004, entitled "Protocol for Replanting/Renewal of Approved Non-Tilled Vineyard Cover Crops".

2) Implementation and adherence to the **Annual Winterization** program presented in the *Project Notes*.

Costs: The total cost of all erosion control measures is estimated to be \$5000-8500/acre including equipment, materials, and labor.

The project site was visited by the plan preparer in April, 2022 to inspect the site, and will be visited during and after development to check for proper implementation of erosion control measures.

Napa de Oro 1228 HAGEN ROAD EROSION CONTROL PLAN FOR NEW VINEYARD

SHEET INDEX

1. TITLE SHEET
2. PLAN & DETAILS

Project Notes

APN & Owner: 049-200-003

1228 Hagen LLC
3435 Wilshire Boulevard Suite 1050
Los Angeles, CA 90010

Site Address: 1228 Hagen Road, Napa

Contact: Rudy Zuidema @ 707-310-4925
Zuidema Wine Co.
4334 East 3rd Avenue
Napa, Ca 94558

Drew L. Aspegren, P. E. @ 707-963-4927
Napa Valley Vineyard Engineering, Inc.
176 Main St., Suite B
St. Helena, CA 94574

Mapping: Terra Firma Surveys Inc. (9-21-20)

Implementation Schedule: Work may begin during the first growing season after project approval and may be completed over several years. Preplant and planting year operations may be conducted over two growing seasons or they may be conducted during the same year. The work will be scheduled as follows:

Year P-1 April 1 thru Oct 15	Clearing, rock and root removal, stacking vegetation for burning or other disposal, disking, installing permanent erosion control measures prior to vineyard layout, staking and installation of drip system, installing temporary erosion control measures. Winterization, consisting of seeding and mulching, shall be completed by October 15, or by the end of any extension of time granted by Napa County PBES.
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Rainy Season Oct 16 thru March 31	Maintain erosion control measures, burning as allowed by government agencies.
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Year P Apr 1 thru Oct 15	Complete unfinished pre-plant operations, plant vineyard and begin cultural practices (refer to cultivation chart below). Maintain all erosion control features.
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Cover Cropping and Cultivation Practices

Year	Cultivation during growing season	Cover Crop, planted or maintained at end of growing season
Pre-plant (P-1)	rip and disk	winter cover crop
Planting (P)	full till	permanent cover crop
P+1	mow, weed control	permanent cover crop
P+2 Forward	mow, weed control	permanent cover crop

All ground disturbing activities shall be completed by October 15 of each year, and all erosion control measures shall be in place by October 15, or by the end of any extension of time granted by Napa County PBES.

Seeding Requirements: All exposed or disturbed soils shall be seeded. Seed and fertilizer shall be applied hydraulically or broadcast at the rates specified below:

Napa De Oro Cover Mix @ 100 lbs/ac	Peas	15%
	Rye	25%
	Clover	25%
	Vetch	20%
	Beans	15%

Fertilizer: Ammonium phosphate sulfate (16-20-0) 200-240 lbs/ac

An alternate seed mix and/or fertilizer may be used after review and approval by Napa County PBES.

Straw Mulch shall be spread over all disturbed and seeded areas. The mulch shall be spread mechanically or by hand at the rate of 2 tons/acre. As an alternate to mulch, the seeded areas may be irrigated through germination until the onset of winter rains.

As an alternate to seeding and mulching, the vineyard may be hydro-seeded using the same mix and fertilizer at the rates specified above.

Fiber Rolls shall be installed at the locations shown on the plan in accordance with the appropriate detail. Fiber Rolls shall be maintained through the winter after planting, after which they may be removed.

Maintenance: Cover cropping and cultivation shall be implemented as described in the Narrative (Permanent Erosion Control Measures) and elsewhere in the Project Notes (Cover Cropping and Cultivation Practices).

Annual Winterization: shall be completed by October 15 each year, or by the end of any extension of time granted by Napa County PBES, and shall include the following:

- 1) The condition of the non-tilled cover crop, including those areas outside the vineyard, and the suitability and effectiveness of the seed mix and fertilizer shall be evaluated. Weak areas shall be reseeded as necessary; if addition of soil amendments is indicated, they shall be incorporated and those areas shall be seeded and mulched.
- 2) All roads and turnspaces which are not rocked or paved shall be seeded, fertilized and mulched, and they shall remain undisturbed throughout the rainy season.
- 3) All existing erosion control and drainage features shall be inspected, cleaned, and repaired as necessary.

All existing erosion control features and drainages shall be inspected and cleaned, or repaired as necessary. All erosion control measures shall be inspected after each storm event, and any necessary repairs, cleaning and maintenance shall be promptly performed.

Special Notes - Existing Facilities

Contractor shall determine exact location of all existing facilities and other obstructions prior to beginning of work, and shall be responsible for their safekeeping during the course of work.

Contractor shall be responsible for the location of all utilities in the work area, and shall be responsible for their safekeeping during the course of work.

Some underground utilities and facilities can be located by underground services alert (U.S.A.) call 1 (800) 642-2444, or 811 at least forty eight (48) hours before all work operations.

Contractor shall locate all existing utilities, storm drains, and shall make all efforts not to damage them during the course of construction. Should damage occur, owner or engineer shall be notified and repairs shall be made immediately. In no case shall damage pipelines be allowed to remain unrepaired overnight.

Restoration Planting Plan

At the time of plan implementation, the vineyard area to be abandoned will be restored to pre-project conditions. Vines and their roots, weeds, trellising, irrigation, avenues/turnspaces and other appurtenances, shall be removed. The ground shall be prepared for a seedbed and seeded in accordance with the Tree Replanting and Carbon Sequestration Plan prepared by Kjeldsen Biological Consulting, dated August 22, 2022, and mulched. Restoration shall commence in the dry season, and work, when possible, shall be done by hand to avoid erosion. Restoration area shall be monitored for a minimum of five years, ensuring the growth of native vegetation, which includes removal of weeds and non-native plants. A minimum success rate of 80% shall be obtained to ensure the success of revegetation efforts.

Legend

	BLOCK BOUNDARY
	AVENUE/TURNSPACE
	VINEROWS (APPROX.)
	DETAIL 2
	EXISTING
	FIBER ROLL
	MINIMUM SETBACK
	PLANTING YEAR
	NEW PROPOSED VINEYARD
	PLANNING, BUILDING AND ENVIRONMENTAL SERVICES
	PROPERTY LINE APPROXIMATE LOCATION
	SOIL CONSERVATION SERVICE
	SCS SOIL MAPPING UNIT
	SCS SOIL TYPE BOUNDARY
	TREE TO REMOVE
	WILDLIFE EXCLUSION FENCE (E)
	WILDLIFE EXCLUSION FENCE PROPOSED
	VINEYARD ACCESS ROAD
	AREA TO BE ABANDONED

Napa de Oro 1228 HAGEN ROAD EROSION CONTROL PLAN FOR NEW VINEYARD

Napa Valley Vineyard Engineering, Inc.
176 Main St., Suite B
St. Helena, CA 94574
(707) 963 4927

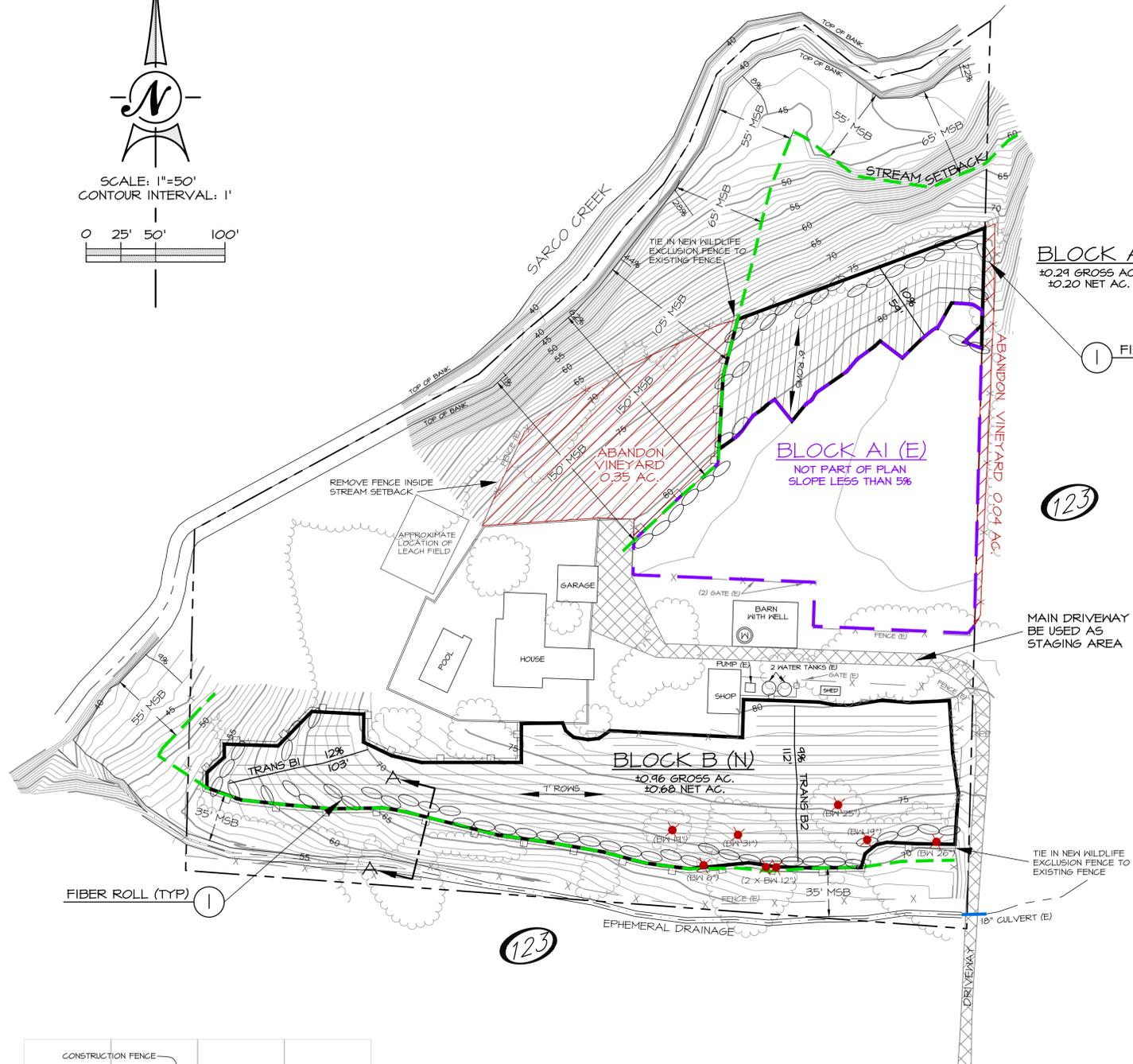


September 30, 2021

DREW L. ASPEGREN, PE
R.C.E. 31418

DATE

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BLOCK A2
±0.29 GROSS AC.
±0.20 NET AC.

① FIBER ROLL (TYP)

123

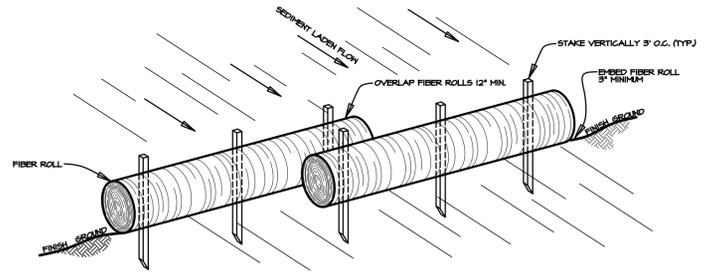
MAIN DRIVEWAY TO BE USED AS STAGING AREA

BLOCK B (N)
±0.96 GROSS AC.
±0.68 NET AC.

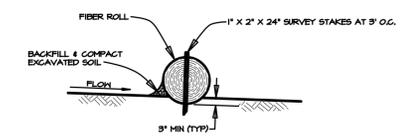
TIE IN NEW WILDLIFE EXCLUSION FENCE TO EXISTING FENCE

FIBER ROLL (TYP) ①

123

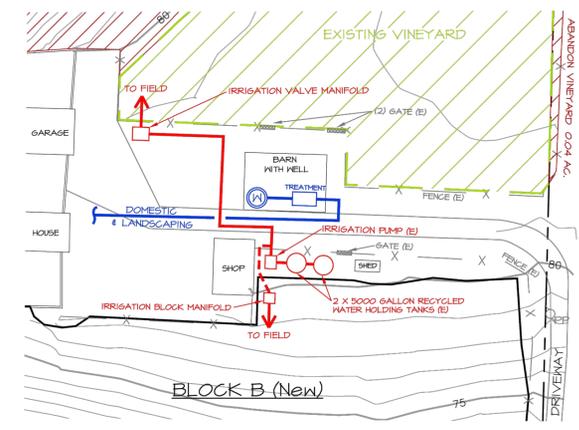


FIBER ROLL SEDIMENT BARRIER (ISOMETRIC VIEW)



FIBER ROLL SEDIMENT BARRIER (SECTION)

① FIBER ROLL
N.T.S.



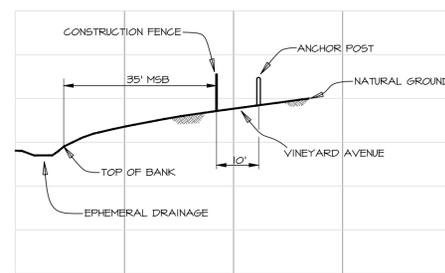
Color Legend

- EXISTING VINEYARD IRRIGATION SYSTEM MAINLINE
- PROPOSED VINEYARD IRRIGATION SYSTEM MAINLINE
- EXISTING DOMESTIC & LANDSCAPING SYSTEM

NOTE: NEW IRRIGATION SYSTEM MATERIALS AND CONSTRUCTION SHALL CONFORM TO NAPA SANITATION DISTRICT STANDARDS AND SPECIFICATIONS

IRRIGATION SYSTEM PLAN

N.T.S.



SECTION A

N.T.S.

TREES TO BE REMOVED	
NUMBER OF TREES	DESCRIPTION
8	BLACK WALNUT (BW) NON-NATIVE

SPECIAL NOTE - BLOCK A

▨ AREA TO BE ABANDONED. AT THE TIME OF PLAN IMPLEMENTATION, VINES AND THEIR ROOTS, TRELLISING, IRRIGATION, AVENUES/TURNSPACES AND OTHER APPURTENANCES, SHALL BE REMOVED. THE GROUND SHALL BE PREPARED AND SHALL BE SEEDED IN ACCORDANCE WITH THE TREE REPLANTING AND CARBON SEQUESTRATION PLAN PREPARED BY KJELDSEN BIOLOGICAL CONSULTING, DATED AUGUST 22, 2022, AND MULCHED.

TOPO SURVEY BY TERRA FIRMA SURVEYS INC. (4-21-20)

REV.	DESCRIPTION	BY	DATE
2	PER COUNTY COMPLETENESS DETERMINATION 9-22-22	DLA	9-8-22
1	PER COUNTY COMMENTS 11-10-21 & 11-16-21	DLA	1-31-22

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Napa Valley Vineyard Engineering, Inc.
176 Main St., Suite B
St. Helena, CA 94574
(707)963-4927



DATE	9-30-21	SCALE	AS SHOWN
DRAWN	20ECPHagenR2.dwg	CHECKED	BPM
APPROVED			DLA
DREW L. ASPERGREN, PE		R.C.E. 31418	

Napa de Oro
1228 HAGEN ROAD

**EROSION CONTROL PLAN
NEW VINEYARD
PLAN, DETAILS**