

P23-00130

**TRACK I ECPA Narrative
for Maxville Winery
REV 1**

Project Site:

APN 025-020-023, 027, 028
4000, 4105, 4128, 4300, 4321 Chiles Pope Valley Rd
St Helena, CA 94574

Preparation Date:

September 6, 2024

Prepared for:

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c/o Garvey Vineyard Management
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TRACK I
ECPA Narrative
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A. Narrative

The purpose of this application is for a new vineyard development project on parcels owned by Koko Nor Corporation, proprietor of the Maxville Winery. Proposed vineyard development areas are summarized in the following table:

Vineyard Block	VB GROSS (acres)	VB NET (acres)	Acres >30% slope	Canopy TBR (acres)
A	1.2	0.8	0.1	0.8
B	1.1	0.7	0.1	0.7
C	11.7	8.9	0.4	0.1
D1	5.6	4.5	0.2	1.5
D2	1.1	0.7	0.1	0.0
E	3.8	2.6	0.1	1.3
F	2.3	1.6	0.1	2.1
G	7.5	5.6	0.2	1.3
H	1.7	1.1	0.0	0.1
I	16.5	12.7	0.3	2.6
J	3.7	2.8	0.1	0.1
Total	56.2	42.0	1.7	10.8

TABLE 1 Vineyard Block Summary

All blocks have access via existing dirt or gravel avenues off Chiles Pope Valley Rd. The total area required for vineyard development is termed the “gross” vineyard area and is comprised of the “net” vine area plus avenue space and staging areas. There will be no expansion or other ground disturbance beyond the gross vineyard boundary for each development area. Properties are behind a locked gate; please call ahead for entry.

1. Land Clearing, Grading or Earthmoving Activity

The scope of this project includes removal of trees and grassland. There are some existing culverts throughout the property as part of the existing road structure. A few drainage ditches are proposed in select areas as depicted on the Site Plan.

Slopes range from 5% to 37% with an average of 20%. Staging of spoils, rocks, and soil amendments will remain within mapped vineyard boundaries. Any staging of materials or equipment will occur on level areas within each development area. Minimal rocks are expected, but any encountered will be stored within the disturbed area or may be used for vineyard avenues or landscaping. Other activities planned include installation of trellis and surface irrigation, erosion control BMP installation; planting and seeding; and mulching of areas with no cover.

2. Existing Site Conditions

Topography: The site is located east of Napa Valley in Chiles Valley.

- Blocks A through D and G through J are situated on the east side of Chiles Pope Valley Rd with elevations ranging from about 935 ft asl to 1400 ft asl.
- Blocks E and F are situated on the west side of Chiles Pope Valley Rd with elevations range from about 965 ft asl to 900 ft asl on low hills surrounding the Maxville winery and reservoir.

Vegetation: Vegetation in development areas is primarily scattered coast live oak and blue oak woodland within wild oat grassland. In total, 10.8 acres total canopy is planned to be removed. The lands east of Chiles-Pope Valley Road is primarily used as rangeland for cattle. As such, the quality of the groundcover is degraded in lower slopes of hillsides that have been grazed by cattle.

Soils: The NRCS web soil survey lists the soil types as follows; see Site Plan – Aerial Map for soil boundaries.

- Most soils in the project area are Bressa-Dibble complex (113-114) soils, which are described as moderately steep to steep soils on uplands and narrow ridgetops. The soils formed from weathered sandstone and shale. Bressa is the dominant soil type (65%-70%), then Dibble soils (20%), with minor components of other soils intermingled (10%-15% Contra-Costa, Lodo, Los Gatos, Maymen, Millsholm, Montara, and/or Sobrante).
- Blocks H and J are on Haire series soils (146) and consist of moderately well drained soils on old terraces and alluvial fans.

Watershed: The development area crosses two watersheds; Block J, and the southeast portion of Block I in the Chiles Creek watershed and the northwest portion of Block I and the rest of the blocks in the Maxwell Creek watershed.

- Block J and the southeast portion of Block I are part of the Main Fork of Chiles Creek that flows south along the western border of the vineyard into Sage Creek, Lake Hennessy, and ultimately the Napa River and the San Francisco Bay. The Chiles Creek drainage area is part of the municipal drainage area for Lake Hennessy.
- Blocks A through H and the northwest portion of Block I are part of the Upper Maxville Creek Watershed that flows into Pope Creek, Lake Berryessa, Putah Creek, and ultimately the Sacramento River. The Maxville Creek drainage area is not part of a municipal watershed.

Coda Rainsford of HDVine LLC (CPESC #9225), visited the site on the following occasions:

DATE	PURPOSE
6/29/22	Evaluate Site Conditions and GPS data collection
7/28/22	Evaluate Site Conditions and GPS data collection

Napa County GIS contours (2011) were utilized in ECPA Site Plan. Item 7 (Photos) contains photographs documenting existing conditions; a photo location map was also included.

3. Natural and Man-Made Features

The project area covers three parcels:

- 025-020-027: This parcel contains proposed vineyard Blocks A thru D and part of H and existing vineyard. The parcel also contains a residence that is occupied part-time), fencing, and limited dirt access roads. The majority of the parcel is protected in an existing conservation easement.
- 025-020-023: This parcel contains proposed vineyard Block E and F, extensive existing vineyard, fencing, access roads, worker housing, the large reservoir (Maxville Lake), and Maxville Winery and tasting room.
- 025-020-028: This parcel contains proposed Block I, J and part of Block H, existing vineyard on the lower elevations as well as three retention ponds along an ephemeral blue line stream. The eastern portion of the parcel is protected in an existing conservation easement.

4. Location and Source of Water

Irrigation water is from the water retention ponds, including those east of Chiles Pope Valley Rd and Maxville Lake on the west side of the road. There will be no increase in groundwater use as a result of the proposed project. The net vine area (where irrigation would occur) was designed entirely within specified Place of Use (POU) Maps for respective water rights documents (A013711 and A016960). Note that some vineyard avenues and storage areas lie outside designated POU since they are areas where no irrigation is planned.

All existing water rights allow for diversion of surface water to on-stream storage during the specified withdrawal season. Wagner & Bonsignore files and maintains the following four water rights for the Maxville properties. OEI Inc. prepared a comprehensive baseflow analysis to demonstrate that there is sufficient run-off to support the maximum annual diversion allotment for vineyard and livestock uses.

- Water Right A013711, Permit 8526, License 5300 (as amended 5-5-2000 and 10-6-2014):
 - Point of diversion on the downstream side of Maxville Lake on APN 025-020-023 (aka Catacoula Lake). Use areas include all current and future

vineyard development areas on both the EAST and WEST sides of Chiles Pope Valley Rd (212 ac total; APNs 025-020-002,008,023). The 10-6-2014 amendment also included industrial water use for winery operations. Reservoir capacity and maximum take for this diversion is 183 acre-ft; withdrawal season between November 1 and April 1.

- Water Right A016960, Permit 10990, License 6874 (as amended 5-5-2000 and 10-6-2014)
 - Point of diversion on the downstream side of the pond on the SW corner of APN 025-020-002. Use areas include current and future vineyard development areas on the EAST side of Chiles Pope Valley Rd (126 ac total; APNs 025-020-002,008). Reservoir capacity and maximum take for this diversion is 12 acre-feet; withdrawal season between November 1 and June 1.
- Two small on-stream storage ponds are permitted for livestock watering as noted below. The ponds are located just upstream of the storage pond for A016960.
 - Water Right L032173 permits diversion of 3 acre-feet of water for livestock watering; withdrawal season between November 1 and April 1.
 - Water Right L032174 permits diversion of 7 acre-feet of water for livestock watering; withdrawal season between November 1 and April 1.

Water usage for vineyard irrigation is summarized below. Vine Count assumes 6 ft x 4 ft spacing and water usage assumes 144 gal/vine/year (per direction from vineyard manager based on water usage at existing vineyard blocks).

Vineyard Block	VB NET (acres)	Vine Count	Water Use (AF/yr)
A	0.8	1,441	0.64
B	0.7	1,306	0.58
C	8.9	16,121	7.12
D1	4.5	8,085	3.57
D2	0.7	1,359	0.60
E	2.6	4,794	2.12
F	1.6	2,952	1.30
G	5.6	10,136	4.48
H	1.1	2,065	0.91
I	12.7	23,015	10.17
J	2.8	5,010	2.21
Total	42.0	76,284	34

TABLE 2 Estimated water usage for vineyard irrigation

Existing Water Usage was analyzed for a Track II application (P22-00068) for all existing vineyard areas. Any increase in irrigation water use that was proposed for the Track II project is included in the Pre-development condition for this Track I water usage analysis (TABLE 3). Usage factors from Napa County “Attachment D” form, were utilized to calculate winery¹ and residential water usage. Water source type is also included, there are four groundwater wells on the property that serve domestic, residential, and winery uses. Total anticipated surface water usage (69.5 AF/yr) is well below the total surface water right annual allotment (195 AF/yr)

Water Usage Type	PRE	POST	Water Source
Vineyard & Agriculture			
Vineyard	32.8	49.0	Surface
Frost Protection	15.1	15.1	Surface
<i>subtotal</i>	47.9	64.1	
Domestic			
Residential	1	1	Well
Farm Labor	1	1	Well
<i>subtotal</i>	2.0	2.0	
Other			
Winery Process	5.4	5.4	Well & Surface
Winery Domestic	1.3	1.3	Well
<i>subtotal</i>	6.6	6.6	
Total	56.5	72.7	

TABLE 3 Estimated water usage for property

5. Soil Types/Soil Series

The NCRS web soil survey lists the soils type in the project areas as predominantly Bressa-Dibble Complex (113-114), Haire Series (146). See Site Plan Arial Map for soil boundaries. The Napa County Soil Survey [5] describes site soils as follows:

- Bressa-Dibble complex (113-114) is described as moderately steep to steep soils on uplands and narrow ridgetops. The soils formed from weathered sandstone and shale. Bressa is the dominant soil type (65%-70%), then Dibble soils (20%), with minor components of other soils intermingled (10%-15% Contra-Costa, Lodo, Los Gatos, Maymen, Millsholm, Montara, and/or Sobrante). Areas with these soils are predominantly used for grazing, which is the case at the Maxville site. Plant cover is typically grassland and scattered oaks.

¹ Winery usage is a combination of well and surface water, however, for the purposes of this analysis, it was assumed that the Winery Process water is 100% surface water, since the exact breakdown is not known.

- The Haire series (146) consists of moderately well drained soils on old terraces and alluvial fans. These soils formed from alluvium derived from the upland soils. Vegetation is typically grasses and forbs.

6. Critical Areas of Erosion and Slope Instability

A geotechnical report from PJC and Associates did not identify any risk to overall slope stability [8]. Vineyard blocks were selectively removed from the development plan based on recommendations of the geologist. All recommendations in the report were adopted, including a 25ft setback from any feature identified in the geotechnical report.

7. Erosion Calculations

See Attachment 8H Soil Loss Analysis for full evaluation of soils and erosion potential. See Item 5 Site Plan – Aerial Map for soil boundaries and flow lines used in soil loss analysis.

8. Erosion Control Methods

Fiber rolls and straw mulch will be used for temporary erosion control. Disturbed areas will be straw mulched at 2 tons/ac on areas greater than 5% slope. Extra sediment retention materials shall be staged on-site (fiber rolls and silt fence or straw bale dike materials). Rocks shall remain within the vineyard boundaries and may be used on avenue surface or for landscaping.

The vineyard project will establish an average of 80% cover throughout all blocks. All seeding and mulching of disturbed areas will be completed by October 15. Any areas of cover crop that have less than their designated cover, will be seeded, fertilized (16-20-0 at a rate of 100 lbs/acre) and mulched annually, as needed, until adequate cover is reached. As an alternative, an annual cover crop may be used in the first three years. In the first three years, cover may be disked or otherwise cultivated to develop healthy soil structure; after three years a permanent, no-till cover shall be established. Please note that every year that ground is tilled will extend winterization inspection requirements by one year. Post-emergent herbicide may be applied so long as specified cover is maintained throughout the vineyard.

9. Storm Water Stabilization Measures

Nine primary watersheds were defined for the project area. The vineyard development will result in no change or a slight reduction to the weighted average Cn in the watersheds. Two sub-watersheds were defined for areas where additional diversion ditches were specified. There will not be an increase in time peak flows as a result of diversions. See Hydrology Report for full analysis [2].

10. Clearing Retention Analysis

Per Napa County Code (NCC) Conservation Regulations, Section 18.108.020.C, a minimum of 70% Canopy Cover must be retained compared to baseline canopy on June 16, 2016. In addition, any canopy proposed for removal shall be mitigated, typically, at a 3:1 ratio (NCC 18.108.020.D). Overall canopy removal for each vineyard block is listed in TABLE 1, Vineyard Block Summary. Total Canopy to be removed (TBR) the calculated required canopy preservation size and total canopy on parcels are listed in TABLE 4.

Preservation Requirements	
Total Canopy TBR	10.8
Canopy Preservation (3:1)	32.3
Total Canopy on Parcels ¹	541.2

¹From NW Bio Report, Table 1 (sum of BLKWAL, BLUEOK, CLOW, DF, GP, MOW, OWO)

TABLE 4 Canopy Preservation Requirements

It is of note, that about 560 acres of the property (including about 395 acres of canopy) are protected in “Forever Wild Areas” as part of an existing Conservation Easement filed in 2001 (Record #2001-0046663) and amended in 2019 (Record #2019-0009087). The Conservation Easement was granted voluntarily by the owner at the time of filing and was not recorded as mitigation for any property clearing or grading activity.

We believe it is within the property owner’s rights to claim canopy within the forever wild zone as mitigation for the proposed vineyard development. However, the owner has opted to proceed with a new canopy preservation zone outside of the existing “Forever Wild Area” to simplify review and processing.

The new canopy preservation areas were selected to allow for a large, contiguous preservation zones with core habitat value and connections for wildlife movement (see attached Maxville – Canopy Preservation Area map). Lands 0% - 30% slope were prioritized for preservation, however, complete avoidance of lands greater than 30% was not feasible in order to maintain contiguous habitat and to connect wildlife corridors. In total, about 11.8 acres of the mapped canopy preservation area is less than 30% slope, which is greater than the anticipated 10.8 acres of canopy planned for removal. As such, the canopy preservation area, as proposed, will satisfy the preservation of canopy on developable lands that is required for GHG mitigation.

Please see additional comments from Northwest Biosurvey in support of this preservation strategy [1.b]. Environmental benefits of the canopy preservation design include:

- The new preservation areas 1 and 2 will extend the existing western Forever Wild Area and create a continuous wildlife corridor along the western edge of APN 025-020-023.

- Preservation area 3 will preserve corridor adjacent to a tributary of Maxville Creek that will connect the existing eastern and western Forever Wild Areas across Chiles-Pope Valley Road.
- Sensitive plant habitat would be protected as part of preservation area 1. Plant species with sensitive regulatory status include: Holly-leaf ceanothus, Jepson's leptosiphon, and Mt. St. Helena morning glory.

11. Implementation Schedule

The following is the proposed implementation schedule. Unless prior approval has been obtained, construction on any area greater than 5% slope must occur within the grading season (April 1 – October 15) of any given year. Schedule may shift earlier or later due to permit approval timeline.

DATE	ACTIVITY
May 2025	Clear development area and prepare ground
To	Install trellis system and irrigation
Oct 15, 2025	Install erosion control BMPs, seed and straw mulch disturbed areas

The plan preparer, HDVine LLC, will provide oversight and direction as required for implementation of the permit. BMP installation must be complete prior to October 15 of any given year. The following inspections will be conducted under the direction of the plan preparer as required in Napa County Code Chapter 18.108.135 - Oversight and Operation:

1. Pre-construction meeting with vineyard owner/operator and contractor
2. Mid-construction meeting with contractor to review placement and installation of BMPs
3. Winterization inspection to document that site is stable and all BMPs are installed

Winterization inspections are required for three years following planting of the vineyard. If tilling or disking is conducted in the first three years after planting, then the winterization schedule will be extended for each year that tilling occurs, up to a total of six years, or more if adequate cover has not been established. Final inspections may be conducted after all work has been completed in relation to the permit and the site has been found to be stable, with minimum cover achieved, for three consecutive years. Finalization is dependent on approval by the director of the Planning Department or his/her agent (NCC 18.108.135.E.1).

12. Estimated Cost

The estimated cost of implementing the erosion and sediment control measures defined in this plan is about \$4000-\$5000 per acre. Costs are based on estimates outlined in the CA

Stormwater BMP Handbook [9] and industry experience. Copies of BMP Fact Sheets were presented to site contact.

B. Site Plan

The site plan for this project is included as Item 6: Site Plan, which includes the 7½ min USGS vicinity map, Topographic map and ECP detail, and Aerial Image Map. The Site Plan also includes specifications for erosion control BMPs and all items set forth in the document titled “Erosion Control Plan (ECP) Review Application Packet,” dated 02/11/2008 and created by the Napa County Conservation, Development and Planning Department.

C. Scale and Contour Intervals for Erosion Control Plans

The site plan was prepared in accordance with the scale and contour requirements set forth in the document titled “Erosion Control Plan (ECP) Review Application Packet,” dated 02/11/2008 and created by the Napa County Conservation, Development and Planning Department.

D. References

1. Attachments B&C, *Biological Resource Assessment with Botanical and Bat Habitat Surveys, Woodland Assessment, and Delineation of waters of the U.S. for the Maxville Winery & Vineyard Project*, APNs 025-020-002, 008 & 023, Napa, CA, prepared by Northwest Biosurvey, December 30, 2022.
 - a. *Response to Napa County Comments AND Addendum to “Biological Resource Assessment with Botanical and Bat Habitat Surveys, Woodland Assessment, and Delineation of waters of the U.S. for the Maxville Winery & Vineyard Project”*, Napa County, CA, prepared by Northwest Biosurvey, August 26, 2024
 - b. *Review of Proposed Woodland Conservation Plan for the Maxville Lake Vineyard Project*, prepared by Northwest Biosurvey, September 2, 2024
2. Attachment E, *Cultural Resources Study for the Maxville Lake Potential Vineyard Project St. Helena, Napa County, California* prepared by Rachel Hennessy, B.A. and Eileen Barrow, M.A., May 8, 2019.
3. *Baseflow Water Availability for Diversion at Maxville Winery*, O’Connor Environmental, Inc, June 2024
4. Attachment G, *Hydrology Report – Maxville Winery (REV 1)*, prepared by Coda Rainsford, HDVine LLC, September 2024
5. Attachment H, *Soil Loss Analysis – Maxville Winery, USLE Calculations*, prepared by Sarah Pistone with HDVine LLC, April 2023
6. *Custom Soil Resource Report for Napa County, California, Maxville Vineyard*, from USDA NRCS Web Soil Survey, April 2023
7. Lambert, G., Kashiwagi, J. et al., *Soil Survey of Napa County, California*, USDA in cooperation with UC Agricultural Experiment Station, August 1978
8. *Stability Report Proposed Vineyard Development Maxville Winery*, PJC and Associates, Inc, March 2024
9. *Stormwater Best Management Practice Handbook Portal: Construction*, California Stormwater Quality Association, November 2009