

Exhibit A-2

Meka Vineyard

Vineyard Development Erosion Control Plan

Erosion Control Plan Narrative

- I. *The nature and purpose of all/any land clearing, grading or earthmoving activity, the amount of cut & fill, the location of spoils storage and disposal areas, the total number of acres of grading involved including but not limited to roads, vineyards, avenues, trenching for irrigation or pipes, reservoirs, wells, water tanks, septic systems, etc. Indicate the acres of land clearing, grading or earthmoving activity that will occur on 30% or greater slopes. (Note: slopes shall be calculated in whole percent)*

The project site is located northeast of the City of Napa near the northerly end of Atlas Peak Road in an unincorporated portion of Napa County, California (Napa County APN 032-540-034). Access to the project areas is via the existing residential driveway that provides access to the lower portions of the property adjacent to Atlas Peak Road and via a secondary dirt road that provides access to the higher portions of the property.

The purpose of the proposed land clearing, grading and earthmoving is to prepare the project area for planting with new vineyard. Following is a list of planned land preparation activities:

- Clearing and grubbing of existing vegetation
- Re-contouring and land smoothing to promote sheet flow
- Repair of small landslide in Block A
- Ripping and rock breaking as needed to fracture subsoils and rock to a depth of approximately 24 to 48 inches to prepare soil for planting and to incorporate soil amendments within the vineyard footprint area
- Mechanical and hand rock raking to remove loose rocks from the ground surface
- Discing and harrowing to prepare seedbed for vegetative erosion control measures
- Installation of erosion control features
- Installation of vineyard irrigation and trellis systems
- Planting of vines

Grading within the project area will be the minimum amount needed to smooth out the existing ground surface and create smooth slopes to promote sheet flow and to install the proposed runoff and erosion control measures. Cuts and fills will be minor and are expected to average from 0 to 12 inches. The estimated quantity of grading is approximately 1,000 cubic yards of cut and 1,000 cubic yards of fill for a total of 2,000 cubic yards of earthwork. An earthwork balance will be achieved onsite. Import and/or export of soil material is not planned however, soil amendments will be imported and incorporated into the project area as needed to improve soil tilth and thereby support vine and cover crop growth.

All temporary debris, vegetation, soil and soil amendment stockpiles and storage areas, if needed, will be located within the proposed vineyard project area. No long-term stockpiles of rock or soil are anticipated.

No new roads are required to access the proposed vineyard development area. Access is via an existing residential driveway for Blocks A & B and an existing dirt driveway for Block C.

The total disturbed area for the vineyard development project is $26 \pm$ acres. The total disturbed area includes the area to be planted with vines and the area used for perimeter avenues and access roads for farming equipment and incidental disturbance for installation of erosion control features. The total area to be planted with vines within the $26 \pm$ acre project area is $19.8 \pm$ acres.

Stream and drainage course setbacks will be provided in accordance with the Napa County Conservation Regulations. There are no streams located within or near the project area. However, there are potential wetlands as identified by the project biologist. Wetland setbacks are shown on the erosion control plan.

The proposed vineyard development consists of three vineyard blocks. The blocks will have a row spacing of 7 feet and vine spacing along the row of 4 feet for an average vine density of 1,556 vines per acre and a total of approximately 30,803 vines.

The details of the proposed vineyard development are shown on the Meka Vineyard Vineyard Development Erosion Control Plan prepared by Applied Civil Engineering Incorporated.

2. *Comprehensive description of existing site conditions, including topography, vegetation (including under-story and canopy cover), and soils. Provide extent of tree canopy covered and shrub and brush without a tree canopy covered areas in acres for each parcel. Identify and indicate the project boundaries in watersheds, including municipal watersheds, and in the water deficient area. The plan preparer is required to visit the site and the narrative must include the date, purpose, and persons making each site visit. The description shall verify the source or validity of the topographic map. Wide angle or panoramic photographs documenting existing site conditions shall be provided. A photo location map indicating the date of the site visit and by whom it was made shall accompany such documentation.*

Topography:

The project area is located on a moderately sloping hillside in Napa County northeast of the Town of Yountville (Latitude = 38.442497° N & Longitude = 122.25262° W). Topography on the property varies and is characterized by gentle to steep slopes ranging from less than 5% to in excess of 30%.

Average slopes within the proposed vineyard development area are moderate and range from 4% to 27% with an overall average slope of 12%. Slopes were determined using topographic data obtained from the Napa County Geographic Information System database and the slope transect method in several representative locations in the proposed development area. Isolated areas within the project area, totaling less than $0.5 \pm$ acre, have slopes slightly in excess of 30%.

Vegetation:

The Calveg designations for the subject parcel were obtained from the Napa County GIS database and are as follows:

AG - Agriculture
HG - Annual Grass/Forbs
NX - Mixed Hardwoods
QA - Coast Live Oak
QK - California Black Oak

Our visual observation of onsite vegetation in the vicinity of the project area is consistent with the Calveg designations.

A detailed assessment of vegetation within the parcel and subject project area was prepared by WRA, Inc. According to the report by WRA, there are no sensitive plant species that will be affected by the proposed project. Please refer to the report prepared by WRA for additional information.

Using 2018 aerial photographs of the subject parcel obtained from the Google Earth we have estimated the following land use / coverage statistics for the entire property:

Developed	0.9 ± acres
Tree Canopy Cover (Natural Woodland)	66.6 ± acres
Grass & Brush Cover	29.1 ± acres
Total Parcel Size	96.6 ± acres

In total, approximately 3.2 acres of tree canopy cover and approximately 21.3 acres that was classified as grass and brush cover will be converted to new vineyard. The calculated tree canopy cover and grass cover retention percentages for the entire parcel are as follows:

Tree Canopy Retention	95%
Grass Retention	27%

Approximately 1.5 acres in the southwesterly portion of the property is located in the Milliken Reservoir watershed which is considered a Sensitive Domestic Water Supply Drainage. This 1.5 acres is grass / brush understory vegetation type. The project proposes to remove 0.9 acres of this vegetation and therefore retain 40% of the grass / brush understory which is in compliance with the 40% required by NCC Section 18.108. 027. There is no tree canopy in this area.

Watershed:

The project site is located in the Vaca range along the east side of the Napa Valley. Rainfall runoff from the majority of the project area flows easterly and southerly and thence concentrates in an unnamed blueline stream located approximately 3,100 feet southeast of

the subject property. The stream is tributary to Capell Creek. A small area of the southwest portion of the property drains southerly into an unnamed blue line stream located approximately 850 feet south of the subject property. This stream is tributary to Milliken Reservoir and thence the Napa River.

No changes in runoff patterns are proposed as part of this project. All existing drainage patterns will be maintained.

The southwesterly portion of the property is located in the Milliken Reservoir Watershed which is a municipal drinking water supply watershed. The remaining majority of the property is not located in a municipal drinking water supply watershed.

The subject parcel is not located within the Milliken-Sarco-Tulocay groundwater deficient area.

Site Visits & Photograph Documentation:

Representatives from Applied Civil Engineering Incorporated have visited the site several times since first visiting the site in 2021. The purpose of the site visits was to review existing site conditions and to verify the general validity of the topographic mapping for this project that was obtained from the Napa County GIS database. Isometric photographs of the project area were obtained from Google Earth and are presented in the Photographic Documentation of Existing Site Conditions for the Meka Vineyard Vineyard Development Erosion Control Plan.

3. *All natural and man-made features on-site including but not limited to, streams, watercourses (drainage, channels, etc.), wetlands, riparian habitat, lakes, reservoirs, roads, water tanks, septic systems, reservoirs, ponds, etc. Indicate which ones may be affected by the proposed activity. For blue line and County-definitional streams indicate top, toe, and slope of bank, channel depth, and existing and proposed setback conditions. The entire length of blue line streams & 41 County-named streams on the parcel(s) shall be included in photo documentation (a recent aerial may be included). Provide the name and distance of the nearest blue line and/or County-definitional stream(s) to the project site.*

Existing manmade improvements on the subject parcel include a residence, driveway, three wells, two springs, a dilapidated building and the related access and utility infrastructure typical of this type of residential and agricultural development. None of the existing manmade improvements outside of the project area will be affected by the proposed project. The dilapidated building is located within the project footprint and will be removed to accommodate the vineyard development.

There are no blue-line streams located on the subject property. The nearest blue-line stream is unnamed and is located more than 1,000 feet southeasterly of Block C at its closest point.

4. *Location and source of water for irrigation or other uses. Provide copies of all necessary permits.*

The existing onsite wells and springs will be the source of irrigation water for the proposed vineyard development. No other new wells or other water sources are planned at this time.

Please refer to the Water Availability Analysis prepared by Richard C. Slade & Associates LLC for additional information regarding estimated water use and estimated aquifer recharge rates.

5. *Soil types/soil series identified in the Soil Conservation Service (SCS) Napa County Soil Survey, or, if prepared, a site-specific soils report.*

The United States Department of Agriculture Soil Conservation Service Soils Map for Napa County shows several soil types mapped on the subject property including:

100	Aiken loam, 2 to 15 percent slopes
101	Aiken loam, 15 to 30 percent slopes
102	Aiken loam, 30 to 50 percent slopes
152	Hambright rock-Outcrop complex, 30 to 75 percent slopes
154	Henneke gravelly loam, 30 to 75 percent slopes

Nearly all of the parcel and project area is mapped as Aiken loam. The approximate soil type boundaries based on data obtained from the Napa County Geographic Information System database are illustrated on Sheet C1 of the Meka Vineyard Vineyard Development Erosion Control Plan.

6. *Critical areas of erosion and slope instability such as gullies, landslides, etc. within or potentially affecting the "development site" (i.e., the area disturbed by the project) or potentially affected by the work to be undertaken within the development site. In the case of landslides a report indicating the probable effects of the planned work on slope stability and erosion levels shall be prepared and submitted by a registered geologist.*

A landslide hazard evaluation was prepared by RGH Consultants. RGH found a small landslide within the southerly portion of Block A. The landslide area will be treated in accordance with the recommendations of RGH and will be re-graded to a stable condition in accordance with the procedures specified by RGH.

Furthermore, representatives from Applied Civil Engineering Incorporated have visited the site several times to review the project area and have not observed any signs of gullies, landslides, slope instability or excessive erosion in any other parts of the project area or in close proximity to the project area that would affect, or be affected by, the proposed project.

7. *Any erosion calculations prepared.*

The Universal Soil Loss Equation (USLE) was used to model pre-project and post-project conditions and estimate soil loss rates from the project area due to sheet erosion. The Soil Loss Analysis prepared by Dave Steiner, CPESC, CPSWC is included as an attachment to this document.

The USLE calculations predict that net soil loss rates will decrease relative to existing conditions after implementation of the proposed vineyard erosion control plan and will be less than the prescribed soil loss tolerance (T) for the soil type.

8. *Any/all proposed erosion control methods including, but not limited to:*

- a. *All drainage systems and facilities, walls, cribbing or other erosion protection devices to be constructed with, or as a part of the proposed work.*

The following measures will be implemented to minimize the potential for erosion on the project site during development and following completion of the vineyard development program:

- Sediment Barriers – Temporary silt fence and/or straw wattle type sediment barriers will be installed throughout the development area. The planned locations and installation details are provided on the erosion control plan. Additional sediment barriers will be installed as deemed necessary throughout the course of construction. The sediment barriers are intended to provide temporary sediment control during development and until the cover crop is established.
- Erosion Control Blankets – Erosion control blankets will be installed over seed on all cut and fill slopes that are steeper than 3:1 (Horizontal : Vertical). Erosion control blankets will provide additional protection from rainfall impact on exposed soils while the cover crop is getting established. The erosion control blanket locations, specifications and installation details are provided on the erosion control plan.
- Water Bars – Temporary water bars will be installed on vineyard avenues to divert runoff from the avenues to prevent rutting. Water bar locations and installation details are shown on the erosion control plan.
- Energy Dissipators – Rock rip-rap energy dissipators will be constructed at the outlet of all water bars that direct flow outside of the vineyard area to dissipate runoff energy and minimize the potential for erosion.
- Water Bars/ Rolling Dips – Temporary water bars or permanent rolling dips will be installed on vineyard avenues to divert runoff from the avenues to prevent rutting along the avenues. Water bar and rolling dip locations and installation details are shown on the erosion control plan.

- Straw Mulch – Weed free agricultural straw derived from wheat, rice, barley, or native grass shall be used. Straw mulch can be applied by hand and can be adhered to slopes by roughening the soil surface before the mulch is applied, spreading the straw in a manner that promotes formation of an interwoven matrix, then crimping the straw into the soil. Straw mulch shall be applied at a rate of 3,000 pounds per acre over disturbed areas.
- b. *Proposed vegetative erosion control measures including maintenance of plant material and slopes until a specified percentage of plant coverage is uniformly established.*

Establishing an effective vegetative cover crop will be the primary method of preventing erosion from the vineyard development area. After the land preparation activities are complete a temporary cover crop will be planted and straw mulch will be spread throughout the cleared area to stabilize the project area through the winter. A minimum coverage of 85% in Blocks A & B and 75% in Block C is required to maintain erosion rates at acceptable levels. The seed, fertilizer and mulch specifications are provided on the erosion control plan.

This temporary cover crop will be cultivated in the spring and replanted in the fall for the first three years of the vineyard establishment period. Straw mulch will also be applied each fall during the vineyard established period. In the Fall, following the vineyard establishment period, all vineyard blocks will be planted with a permanent cover crop seed mix and farming practices will transition to a permanent cover, no-till, farming regime. The permanent cover crop will be mowed in the Spring. Spring mowing will be timed to allow maturation of seeds and promote natural stand regeneration. All permanent cover crop areas will be reseeded every two to three years or more frequently as needed to maintain the specified cover. Straw mulching will also be implemented as needed to achieve the specified coverage requirement.

Weed control under the vine rows will be primarily via mechanical means such as string trimmers and minimal herbicide usage. Herbicide used to control weeds within the vineyard block will be limited to spraying of post-emergent herbicide in a narrow 18-24 inch maximum width strip spray, if necessary to control weeds at the bases of the vines. The post emergent herbicide will be applied in the late winter or early spring to ensure that the spray area has vegetative protection through the rainy season. If the spray areas are not achieving adequate cover, they must be mulched with straw and reseeded each year to provide the required cover.

The cover crop should be irrigated prior to the onset of the rainy season for at least the first Fall following development to establish a dense cover prior to the onset of heavy winter rains.

- c. *Proposed erosion control measures for vineyard avenues to accommodate farm or vineyard equipment and materials storage locations*

A permanent cover crop will be planted in the vineyard avenues the first Fall following land preparation activities and it will be maintained as permanent cover throughout the life of the vineyard. No tilling will occur in the vineyard avenues. The permanent cover crop will be mowed in the Spring. Mowing will be timed to allow maturation of seeds and promote natural cover crop regeneration. All permanent cover crop areas will be reseeded every two to three years or more frequently as needed to maintain at least the percentage cover specified for the vineyard block. Straw mulching and / or pre-irrigation of the cover crop will also be implemented as needed to achieve the required coverage. No herbicides will be used in the vineyard avenues.

Alternatively, vineyard avenues may be lined with crushed rock to limit their susceptibility to erosion and provide all weather access.

Water bars and / or straw wattles will be installed across the sloping vineyard avenues to force runoff to adjacent stable areas so that runoff does not concentrate on the vineyard avenues and cause erosion. Locations are shown on the erosion control plans.

9. *Storm water stabilization measures to handle any increased peak rates of runoff from the development of the site that would result in flooding or channel degradation downstream. Include calculations of estimated increased runoff and/or an explanation of why an increase is/is not expected.*

Detailed calculations of predicted runoff rates within the project area for both pre- and post-project conditions utilizing the United States Department of Agriculture Technical Release 55 (USDA TR-55) methodologies are presented in the Hydrologic Analysis prepared by David Steiner, CPESC, CPSWQ. These calculations indicate that post-project conditions, including built in project design parameters, will result in runoff rates that are not greater than current conditions for the 2, 5, 10, 25, 50 and 100 year design storm events.

Since the project has been designed to maintain existing drainage patterns and since there will be no increase in peak runoff rates, the proposed project will not result in any significant change to local or regional hydrology / runoff patterns that could result in downstream flooding or channel degradation.

10. An implementation schedule indicating:

- a. *The proposed vegetation clearing, earth moving/grading, and construction/planting schedule.*
- b. *The proposed schedule for winterizing the site (by October 15th of each year the permit is in effect except in a municipal watershed where it is by September 1st).*
- c. *The proposed schedule for installation of all interim erosion and sediment control measures (including vegetative measures) and the state of completion of such devices/measures at the end of the grading season (i.e., on October 15th [except in 5 designated municipal watersheds where it is September 1st] of each year the permit will be in effect).*
- d. *The proposed schedule for installation of any permanent erosion and sediment control devices required.*

Vineyard Development Schedule

The schedule below is an estimate and is subject to change. Implementation of winterization and erosion control measures must be adjusted to accommodate any changes in development and planning under consultation with the Engineer. All land preparation, planting and erosion control work is to be performed by the property owner or by their contractor / vineyard manager.

April 2025

Commence Vineyard Development Program

Begin clearing and grubbing of existing vegetation. Complete land preparation for vineyard planting including: ripping, discing, minor recontouring and incorporation of soil amendments. Install waterbars and rock energy dissipators.

Install irrigation and trellis systems. Plant rootstock.

Prior to September 1, 2025

Complete all earth disturbing activities & drainage improvements installation.

Prior to September 15, 2025	Winterize Site - Seed vineyard with temporary cover crop seed mix - Seed vineyard avenues with permanent cover crop seed mix - Place, fertilizer, straw mulch and erosion control blankets - Install sediment barriers - Install water bars - Pre-irrigate cover crop to establish cover prior to rainy season. Establish reserve of erosion control measures to be maintained onsite throughout the rainy season to facilitate rapid deployment. Materials shall include silt fence, straw wattle, straw, erosion control seed mix, erosion control blanket and plastic sheeting.
September 15, 2025 - April 2026	Inspect and maintain vegetative cover and erosion control devices at least once per week, prior to each anticipated rainfall event, at least once every 24 hours during extended rainfall events and following each rainfall event. Reseed and mulch any erosion damaged areas or areas with less than the specified cover percentage and repair or replace erosion control devices as necessary.
Spring 2026	Cultivate temporary cover crop within vineyard block footprint area and perform fine site grading to repair any storm damaged areas. No tilling of vineyard avenues is to be performed.
Prior to September 1, 2026	Complete all earth disturbing activities
Prior to September 15, 2026	Winterize Site - Seed vineyard with temporary cover crop seed mix - Seed vineyard avenues with permanent cover crop seed mix - Place, fertilizer, straw mulch and erosion control blankets - Install sediment barriers - Install water bars

September 15, 2026 - April 2027

Inspect and maintain vegetative cover and erosion control devices at least once per week, prior to each anticipated rainfall event, at least once every 24 hours during extended rainfall events and following each rainfall event. Reseed and mulch any erosion damaged areas or areas with less than the specified cover percentage and repair or replace erosion control devices as necessary.

Spring 2027

Cultivate temporary cover crop and perform fine site grading to repair any storm damaged areas.

Prior to September 1, 2027

Complete all earth disturbing activities

Prior to September 15, 2027

Winterize Site

Seed vineyard with temporary cover crop seed mix
Seed vineyard avenues with permanent cover crop seed mix

Place, fertilizer, straw mulch and erosion control blankets

Install sediment barriers

Install water bars

September 15, 2027 - April 2028

Inspect and maintain vegetative cover and erosion control devices at least once per week, prior to each anticipated rainfall event, at least once every 24 hours during extended rainfall events and following each rainfall event. Reseed and mulch any erosion damaged areas or areas with less than the specified cover percentage and repair or replace erosion control devices as necessary.

Spring 2028

Cultivate temporary cover crop and perform fine site grading to repair any storm damaged areas.

Prior to September 1, 2028

Complete all earth disturbing activities

Prior to September 15, 2028

Winterize Site

Seed vineyard rows with permanent cover crop seed mix

Seed vineyard avenues with permanent cover crop seed mix

Place, fertilizer, straw mulch and erosion control blankets

Install sediment barriers

Install water bars

September 15, 2028 - April 2029

Inspect and maintain vegetative cover and erosion control devices at least once per week, prior to each anticipated rainfall event, at least once every 24 hours during extended rainfall events and following each rainfall event. Reseed and mulch any erosion damaged areas or areas with less than the specified cover percentage and repair or replace erosion control devices as necessary.

Spring 2029 & Beyond

See Annual Maintenance Schedule

*Note: for portions of the project outside of the Milliken Reservoir watershed the deadline for completion of earth disturbing activities and winterization is October 15th of each year.

Annual Maintenance Schedule

Spring

Mow permanent cover crop in vineyard and vineyard avenues and perform fine site grading to repair any storm damaged areas.

Prior to September 15

Winterize Site

Repair any damage to vineyard and vineyard avenues that has occurred during the farming season. Place seed and straw on all vineyard avenues as needed to achieve the specified cover percentage. Install water bars.

Place erosion control seed, fertilizer, straw mulch, erosion control blankets and sediment barriers as necessary to stabilize any erosion prone areas outside and adjacent to the vineyard areas.

September 15 - April 1

Inspect and maintain vegetative cover and erosion control devices at least once per week, prior to each anticipated rainfall event, at least once every 24 hours during extended rainfall events and following each rainfall event. Reseed and mulch any erosion damaged areas or areas with less than the specified percentage cover and repair or replace erosion control devices as necessary.

*Note: for portions of the project outside of the Milliken Reservoir watershed the deadline for completion of earth disturbing activities and winterization is October 15th of each year.

11. The estimated cost of implementation of the erosion and sediment control measures.

Implementation of erosion and sediment control measures for this project is anticipated to cost approximately \$3,000 to \$5,000 per acre for installation and maintenance. This estimate includes only the erosion and sediment control portions of the project, not the entire cost of permitting, engineering, land preparation, development, irrigation systems, trellis systems, and plants.