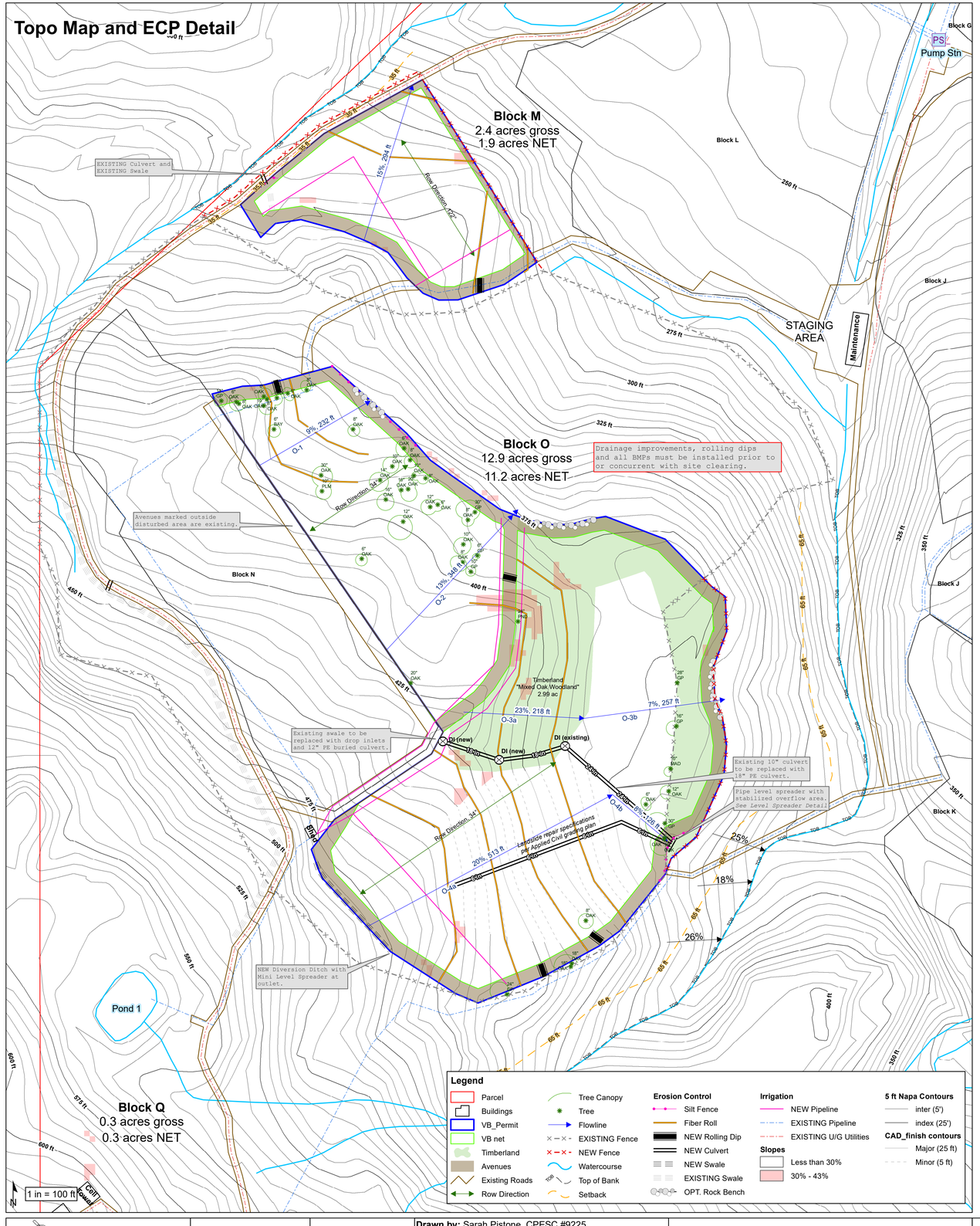
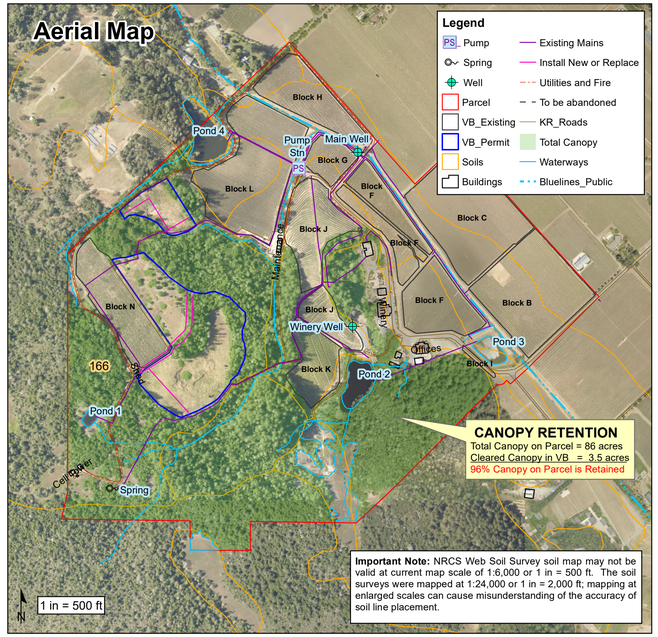
Exhibit A-1

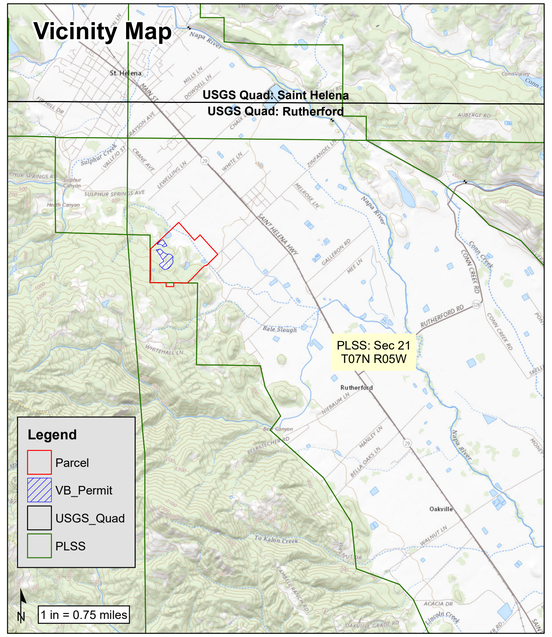
Topo Map and ECP Detail

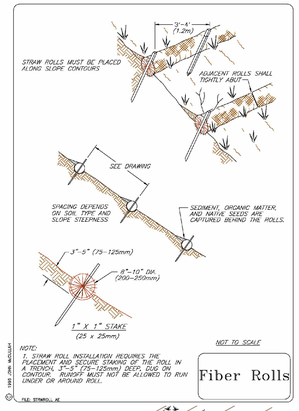


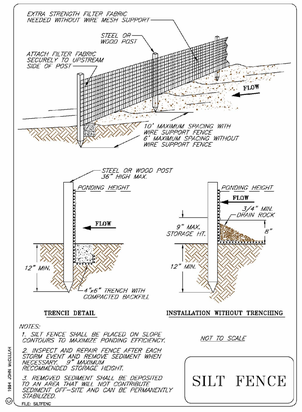
Aerial Map

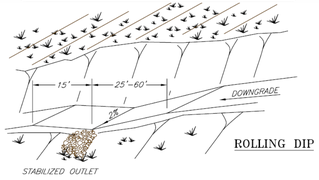


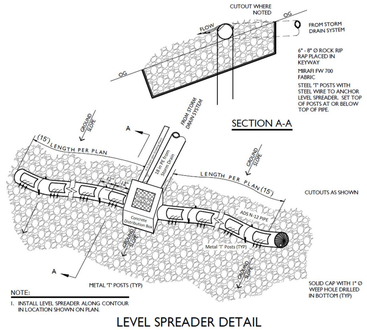
Vicinity Map

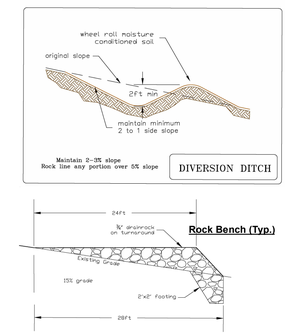












REVISED EROSION CONTROL PLAN NOTES

1. Property Owner: SHL Cathiard LLC
2. Site Contact: Ben Morken, General Manager, b.morken@cathiardfamilyestates.com
3. ECP prepared by Sarah Pistone, CPESC #9225, sarah@lincolnAE.com, 707-533-3511
   signature:
4. ECP prepared: 3/16/2020 ECP Revised: 11-30-2020
5. Property Address: 1889 West Zinfandel Lane, St Helena, CA 94574
   APNs: 027-100-037
6. See Vicinity Map
   USGS Quad: Rutherford
   PLSS: Section 2: T07N, R05W
7. Access from St Helena Highway via West Zinfandel Lane. Property is gated; call ahead for access.
8. Legend, North arrow, and scale are noted on each map detail.
9. Soil type in disturbed areas is Montara clay loam (166). Soil boundaries on Aerial Map. No potentially serious erosion problem areas were noted. (*Custom Soil Resource Report for Napa County, California, Komes Ranch*, from USDA NRCS Web Soil Survey, January 2019). It is noted that the mapped soil type, Montara complex is generally comprised of weathered serpentine. **Potential Hazard: Serpentine rock contains asbestos (a group of naturally-occurring minerals). If serpentine bedrock or boulders are encountered and disturbed during grading, then make sure that the material is thoroughly wetted to avoid any airborne particles.**
10. The closest blue-line stream is an unnamed tributary to Napa River that flows east and is located about 800 ft north of the closest disturbed area. There is one developed spring on the property, located east of Block R, that is currently piped to the winery buildings.
11. Existing vegetation in the project area includes a mix of woods, grassland, and brush; the open areas of Blocks M and O were previously developed as vineyard. Other portions of the property have been developed as a vineyard and winery since the late 1800s. There are four water retention ponds developed on the property. 2.99 acres of timberland (located in Block O) will be removed as part of this project under the CalFire Less than 3 acres Conversion Exemption. No riparian habitat will be affected as part of this development. (*Biological Resource Assessment with Botanical Survey and Delineation of Waters of the U.S. for the Komes Ranch Vineyard Project, APN 027-100-037, Napa County, CA*, prepared by Northwest Biosurvey, September 27, 2018).
12. No structures are within the disturbed area. There is a small shed near Block O that contains valves and filters as part of the irrigation system that connects Pond 1 to the valley floor irrigation system. Other existing structures include winery buildings and offices to the east of the project site. Verizon has an easement to maintain their public utility infrastructure located at the top of the hill. No underground utilities are known in the vicinity of the project area (other than old irrigation submains in Block O that will be replaced).
13. Napa County Contours (5 ft) are displayed on the Topo Map and ECP Detail. Approximate final contours are shown in the landslide repair area (Prepared by Mike Muelrath as part of grading plan).
14. Slope Sections are shown on Topo Map and ECP Detail. Average slope across all blocks is 14%.
15. Irrigation lines are shown on the Topo Map and ECP Detail. Existing irrigation lines are installed in Block M and Block O. Water will be provided by existing surface water allotments from an active water permit (Pond 1) and a water board application (Ponds 1-3).
16. Vineyard layout, including row direction and avenues, is shown on the site plan. Avenues that require turnaround are planned for 24 ft wide and may be narrower (10 ft) parallel to vine rows. Vine spacing will be 4 ft and row spacing will be 7 ft. Block access is from the main easement road.
17. There is a cut-off swale west of the main access road. There is also a swale that transects Block O, discharges into a drop inlet, and is conveyed to a level energy dissipator via a 10" smooth walled pipe (pipe is non-metallic and assumed to be asbestos). As part of vineyard development, the swale will be modified to an 12" culvert with the addition of two drop inlets, that will discharge into a new 18" culvert (to replace the existing 10" culvert). **Potential Hazard: The existing 10" culvert (assumed to be asbestos) should be thoroughly wetted during removal to avoid any airborne particles.** In addition, the energy dissipator will be improved by adding a pipe level spreader (see detail). Proposed erosion control features are noted on the site plan and design drawings on this sheet. Additional details about drainage upgrades in Block O are included in the hydrology report. Specifics about the landslide repair keyways and subdrain are included in the Grading Plan and Geotechnical Report.
18. Silt fence, fiber rolls and straw mulch will be used for erosion control. Disturbed areas on slopes greater than 5% will be straw mulched at 2 tons/ac. Silt fence must be removed or replaced 2 yrs from installation. Rocks will remain within the vineyard boundaries and may be used as rock benches in specified locations; dimensions will be updated based on rocks encountered and field conditions.
19. Seed permanent cover crop to 80% cover throughout, except where noted, (see table for seed mix or equivalent). Cover crop will be fertilized with 16-20-0 at a rate of 100 lbs/acre the first year and as needed in future years. 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 and mulched annually until adequate cover is reached. As an alternative, a temporary cover crop of Dwarf Barley or similar at 100#/acre may be used in the first three years. In the first three years, cover may be disked or otherwise cultivated after April 1st, after three years a permanent, no-till cover shall be established.
20. Inspections are required pursuant to Napa County Code Chapter 18.108.135 - Oversight and Operation, to include a "Pre-Construction Meeting" with the owner/manager and contractor, a "Mid-Construction Meeting" to advise on BMP placement, and a "Winterization Inspection". The plan preparer, LincolnAE LLC, is required to oversee implementation of the permit. Prior to the first winter rains after construction begins and each year thereafter until the project has received a final inspection. The plan preparer is required to inspect the site and certify in writing to the director that all of the erosion control measures have been installed in conformance with the ECP.
21. 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 for three years (following last year that ground was disturbed for construction or tillage). Finalization is dependent on approval by the director of the Planning Department or his/her agent (NCC 18.108.135.E.1).

SUPPLEMENTAL EROSION NOTES FOR SLOPES

MATERIALS AND APPLICATION RATE (VINEYARD SPECIAL FROM LE BALLISTER'S 526-6723

SEED MIX	SEED MIX (LBS/ACRE)
BROMUS MOLLIS (BLANDO BROME)	40
ZORRO FESCUE	20
CRIMSON CLOVER	20
ROSE CLOVER OR RED	20
TEMPORARY COVER CROP LESS THAN 20%	
BARLEY (BEARDLESS)	100
PENNY WISE PLOWDOWN *LE BALLISTERS MIX	100
FERTILIZER:	16-20-0 & 15% SULPHUR 500
MULCH RICE STRAW:	4000 LBS/ACRE or ENOUGH SO THE GROUND IS COVERED

Projection: Lambert Conformal Conic
Datum: North American 1983

Property Boundaries are approximate
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

LincolnAE LLC
Agricultural Engineering

If bar does not measure 1 in then map is not to scale.

Drawn by: Sarah Pistone, CPESC #9225
Date: 11/30/20 **Version:** 1.1
File: ...Cathiard_D_ECP_REV_2020-11-30.mxd

REVISED
TRACK I ECPA

SHL Cathiard LLC Vineyard (P20-00103)
APN 027-100-037
1889 West Zinfandel Ln, St Helena, CA 94574

REVISED

TRACK I

P20-00103-ECPA
for
SHL Cathiard LLC
Vineyard Development

Project Site Address:
APN 027-100-037
1889 West Zinfandel Lane
St Helena, CA 94574

Preparation Date:
~~March 16, 2020~~
November 30, 2020

Prepared for:
SHL Cathiard LLC
c/o Sean Maher
1889 W. Zinfandel Ln.
St. Helena, CA 94574
707-484-4604

Prepared by:
Sarah Pistone, CPESC #9225
LincolnAE LLC
PO Box 1686
Middletown, CA 95461
707 533-5331

Erosion Control Plan

Table of Contents

A. Narrative

The applicant submits the enclosed development plan for 15.3-acres of vineyard at the subject site located at APN 027-100-037, 1889 West Zinfandel Lane, St Helena, CA. Access to the site is from St Helena Highway, via West Zinfandel Lane. Property is gated; call ahead for entry.

Note that supplemental reports in the reference section refer to "Komes Ranch", which was the prior owner of the property. All reports were prepared to support the proposed vineyard design at 1889 West Zinfandel Lane, St Helena, CA.

1. Land Clearing, Grading or Earthmoving Activity

This vineyard permit application will require clearing of about 15.3 acres of land in order to plant about 13.1 acres of vines. Slopes range from 9% to 23% with an average of 14%. In Block O, 0.4 acres of land are greater than 30%. The need for spoils and disposal areas is not anticipated but would remain within the disturbed areas. Minimal rocks are expected, but any encountered will be stored within the disturbed area or may be used for vineyard avenues or landscaping (Note: Serpentine boulders, if encountered, shall not be crushed or otherwise disturbed in a way that would create airborne dust). Potential areas for rock benches and a generic specification drawing are included on the updated ECP Site Plan. Other activities planned include drainage upgrades, trellising, installing end posts; disking; ripping (up to 4'; 3' over landslide repair area); vineyard layout; drip system installation; erosion control system installation; trellising, planting and seeding; and mulching of areas with no cover. Vineyard Blocks are summarized as follows:

Block	VBGr	Vbnet	Canopy	Shrub/grass
M	2.4	1.9	0.00	2.40
O	12.9	11.2	3.50	9.40
Total	**15.3**	**13.1**	**3.5**	**11.8**
		Total	85.60	23.40
		% Retained	96%	50%

TABLE 1 Vineyard Block Summary

2. Existing Site Conditions

Topography: The subject site is located on the western side of Napa Valley with a mix of steeply sloping terrain and gently-sloping ridgelines and knolls. The main access road serves existing vineyard Block N as well as a Verizon cell tower at the top of the hill. Vineyard development areas are sited on land that ranges from 9%-23% slopes that generally slope to the east; average slope across all blocks is 14%. Block O contains 0.4 acres greater than 30%.

Vegetation: The dominant vegetation types in the proposed vineyard blocks are wild oat grassland and mixed oak woodland [1]; the woodland within Block O does qualifies as timberland and will be cleared under a less than 3-acre Timberland Conversion Exemption [7]. The open spaces in Block M and Block O were previously developed as vineyard, but vines were removed in the late 1990s or early 2000s (as such are not eligible to Track II replant). There is potential to expand the proposed vineyard blocks and develop additional areas if a full Timber Harvest Plan were to be pursued in the future.

Other habitat types on the subject parcel include douglas fir forest, blue oak woodland, wetland/marsh areas, ruderal and existing vineyard [1].

The subject parcel contains about 86 acres of canopy and about 23 acres of shrub/grassland [1]. A total of about 3.5 acres of canopy and 11.8 acres of shrub/grassland is proposed for clearing, which corresponds to retention ratios of 96% and 50%, respectively (see TABLE 1).

Soils: The NRCS web soil survey lists the soil type in the vineyard area as 166 Montara clay loam [8]; see Site Plan – Aerial Map for soil boundaries. The Napa County Soil Survey describes the Montara series as well-drained soils on uplands derived from weathered serpentine. Plant cover is typically grassland and grey pine. Run-off is rapid and the hazard of erosion is moderate. **Potential Hazard: Serpentine rock contains asbestos (a group of naturally-occurring minerals). If serpentine bedrock or boulders are encountered and disturbed during grading, then make sure that the material is thoroughly wetted to avoid any airborne particles.**

Watershed: The subject site is part of the Bear Canyon planning watershed, that flows into Napa River (via an unnamed tributary to the Napa River), and San Pablo Bay. The project is not located in a municipal watershed nor a water-deficient area. The closest blueline stream is an unnamed tributary to Napa River that is located about 800 ft north of the closest disturbed area (Block M).

The plan preparer, Sarah Pistone of LincolnAE LLC (CPESC #9225), visited the site on the following occasions:

DATE	PURPOSE
02/20/19	Bill Lincoln site visit to take photos
9/19/19	Site visit to review conditions and take photos and collect data
10/10/19	Site Meeting with Scott Butler (RFP) to review Timberland areas
11/25/19	Site visit to measure spring flow and review site conditions
12/6/19	Pre-Application Site Meeting with Daniel Basore (Napa County Engineering Department) to establish existing cover conditions.
5/5/20	Post-Application Site Visit with Don Barrella & Daniel Basore.
11/12/20	Additional GPS Data Collection

The topographic map was prepared in 2002 by Napa County. Item 7 (Photos) contains photographs documenting existing conditions.

3. Natural and Man-Made Features

The parcel has been a vineyard and winery property since the late-1800s and is comprised of winery and office buildings, vineyard, water storage ponds, and undeveloped forest. The existing vineyard fence was installed concurrent with vineyard development and pre-dates 1993 (well before the February 16, 2007 cut-off).

4. Location and Source of Water

Irrigation water will be provided by surface water. There are two CA State Waterboard Water Rights Documents for the subject site:

- Permit #17297 (Application #24287) issued 1978. Point of diversion is reservoir on the north side of the property (labelled on LincolnAE Site Plan as "Pond 4"). This permit authorizes up to 90 AF per year to be used for irrigation of vineyard, and/or heat control, and/or frost protection. This permit was amended in 1997 to add 93 acres of new development to the authorized use areas, which includes the previously planted portions of Block M and Block O.

- Application #30597 submitted 1997 authorizes up to 52 AF per year to be used for irrigation and/or frost protection of vineyard. Point diversion/rediversion include three impoundments (labelled on LincolnAE Site Plan as Pond 1, Pond 2, and Pond 3). The authorized use area includes the previously planted portions of Block M and Block O.

In addition to the water use summary included in Attachment D [2], a breakdown of water use requirements by block is included in TABLE 3. In total, all proposed vineyard blocks will require a maximum of about 4.4 acre-feet per year and there is adequate supply to support it. No groundwater use is proposed for this development so a full water availability study is not required.

		1556 vines/ac 70 gal/vine/yr
Block	**NET Vineyard Area**	**Surface Water Use**
	(acres)	(AF/yr)
M	1.9	0.63
O	11.2	3.74
Total	**13.1**	**4.4**

TABLE 2 Estimated water usage

5. Soil Types/Soil Series

The NRCS web soil survey lists the soil type in the vineyard area as 166 Montara clay loam [8]; see Site Plan – Aerial Map for soil boundaries. The Napa County Soil Survey describes the Montara series as well-drained soils on uplands derived from weathered serpentine. Plant cover is typically grassland and digger pine. Run-off is rapid and the hazard of erosion is moderate. **Potential Hazard: Serpentine rock contains asbestos (a group of naturally-occurring minerals). If serpentine bedrock or boulders are encountered and disturbed during grading, then make sure that the material is thoroughly wetted to avoid any airborne particles.**

6. Critical Areas of Erosion and Slope Instability

A landslide is evident on the southeastern portion of Block O. A Stability Report and Landslide Repair was conducted by PJC Associates. The report included repair specifications for the landslide and concluded that the land is suitable for vineyard development as planned [4]. A grading plan prepared by Applied Civil Engineering is included as part of this project.

7. Erosion Calculations

See Soil Loss Analysis included with this application [6]. See Site Plan – Aerial Map for soil boundaries and flow lines used in soil loss analysis.

8. Erosion Control Methods

Silt fencing will be used along the downslope side of all vineyard blocks as noted on the site plan. Fiber rolls will be placed every 50-75 ft along topographic contours to distribute concentrated flow and break up slope lengths. Disturbed areas will be straw mulched at a rate of 2 tons per acre. Rolling dips are specified to breakup flow path along vineyard avenues. Rock benches are noted along the north and northeast perimeter of Block O and may be used for rock storage areas, which will also reduce the run-off and erosion potential from the vineyard block.

Vegetative erosion control areas are designated on the Site Plan: Topo Map and ECP Detail. Post-cover conditions will establish an 80% cover crop throughout. Cover is specified to be a permanent, no-till cover crop as noted on the plans. Cover crop will be fertilized with 16-20-0 at a rate of 100 lbs/acre the first year and as needed in future years. 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 and mulched annually until adequate cover is reached. As an alternative, annual cover crop of Dwarf Barley at 80#/acre may be used in the first three years. In the first three years, cover may be disked or otherwise cultivated after April 1st; after three years a permanent, no-till cover shall be established.

9. Storm Water Stabilization Measures

One watershed was defined for the project area. There will be no increase or a slight decrease in peak flow at the site as a result of vineyard development. See Hydrology Report included with this application [5].

10. Implementation Schedule

The following is the proposed implementation schedule. Drainage improvements specified in the ECP (including rolling dips, diversion ditches, drainage improvements, fiber rolls, silt fence, rock benches etc.) must be installed prior to or concurrent with site clearing. Unless prior approval has been obtained, construction must occur within the grading season (April 1 – October 15) of any given year. Schedule may shift due to permit approval timeline.

DATE	ACTIVITY
Apr 1, 2021	Clear and prepare planting area
to	Install erosion control, drainage improvements, rolling dips, etc.
	Install trellis and plant
Oct 15, 2021	Seed cover crop and straw mulch disturbed areas

Construction schedule must also account for the potential presence of wildlife species with sensitive regulatory status [1]:

- Raptors/birds/bats: Avoid breeding and roosting seasons by clearing trees between September 15 and February 1. Otherwise, have a qualified biologist conduct a tree survey within 2 weeks of clearing trees to identify if any special status species are present.

BMP installation must be complete prior to October 15 of any given year. The following inspections will be conducted by the plan preparer and verified by Napa County Resource Conservation District (RCD) as required in Napa County Code Chapter 18.108.135 - Oversight and Operation:

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

Winterization inspection are required for three years following planting of the vineyard. If tilling or discing is permitted 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).

11. Estimated Cost

The estimated cost of implementing the erosion and sediment control measures defined in this plan is about $6,000 - $8,000 per acre and does not include landslide repair cost. Costs are based on estimates outlined in the CA Stormwater BMP Handbook [10] 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 7 ½ 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 Survey and Delineation of Waters of the U.S. for Komes Ranch Vineyard Project, APN 027-100-037, Napa County, CA*, prepared by Northwest Biosurvey, September 27, 2018.
2. Attachment D, *Phase I Water Availability Analysis*, form
3. Attachment E, *Cultural Resources Study for the Komes Ranch Project 1889 W. Zinfandel Lane, St Helena, CA, Napa County, California*, prepared by Tom Origer and Associates, November 11, 2019
4. Attachment F, *Stability Report & Landslide Repair, Proposed Vineyard, 1889 W. Zinfandel Lane, St Helena, CA*, prepared by PJC & Associates, Job No. 9479.01, December 12, 2019
5. Attachment G, *REVISED Hydrology Report – Komes Vineyard, WinTR55 Modeling*, prepared by LincolnAE LLC, November 30, 2020
6. Attachment H, *Soil Loss Analysis – Komes Vineyard, USLE Calculations*, prepared by LincolnAE LLC, December 20, 2019
7. Butler, Scott (RFP), *Review of Komes Ranch, definition of Commercial Timberland*, March 13, 2019

8. *Custom Soil Resource Report for Napa County, California, Komes Ranch Vineyard*, from USDA NRCS Web Soil Survey, January 2019
9. Lambert, G., Kashiwagi, J. et al., *Soil Survey of Napa County, California*, USDA in cooperation with UC Agricultural Experiment Station, August 1978
10. *Stormwater Best Management Practice Handbook Portal: Construction*, California Stormwater Quality Association, November 2009