

**DOOLEY VINEYARD
4285 EAST THIRD AVENUE**

**EROSION CONTROL PLAN
REVISED OCTOBER 2020**



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**DOOLEY VINEYARD
4285 EAST THIRD AVENUE**

EROSION CONTROL PLAN



**REVISED OCTOBER 2020
ORIGINAL SUBMITTAL MAY 2020**

PREPARED BY:

**PPI ENGINEERING
2800 JEFFERSON STREET
NAPA, CALIFORNIA 94558
(707) 253-1806**

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**DOOLEY VINEYARD
4285 EAST THIRD AVENUE**

EROSION CONTROL PLAN

NARRATIVE

1. The nature and purpose of the land disturbing activity and the amount of grading involved.

- a) This ECP addresses a total of approximately 1.1 net acres (1.3 gross acres), of which 0.9 net acre (1.1 gross acre) is a proposed new vineyard block on the property located at 4285 East Third Avenue in Napa. Of the total area covered under this ECP, 0.2 net acre (0.3 gross acre) is an existing vineyard block that was presumed to be less than 5 percent slope and was developed without benefit of an Erosion Control Plan. The project is located on APN 052-460-020 which consists of approximately 2 acres per the Napa County Assessor's Office.
- b) Activities to be accomplished include removing brush within the proposed clearing limits, ripping, rock removal, cultivating the soil to prepare for planting, seeding cover crop, mulching, trenching for irrigation pipelines, installing trellis system, laying out the vine rows, and installing erosion control measures.

2. General description of existing site conditions, including topography, vegetation and soils.

- a) The site is located in the Tulucay Creek Watershed.
- b) The elevations in the vineyard area range from approximately 216 to 256 feet above mean sea level per topographic mapping. Ground slopes within the project boundary range between 5 and 17 percent.
- c) Topographic mapping was provided by PPI Engineering completed in June 2019. Supplemental topographic mapping was provided by Napa County.
- d) Existing vegetation consists of vineyard, grass, and brush. Please see the biological report prepared by WRA dated February 18, 2020.
- e) Please see Figure 1 in Appendix C for the 2016 County Vegetation Mapping for the parcel. There is no tree canopy on the parcel and no trees will be removed by the future vineyard conversion (Block 1). The existing vineyard (Block 2) was planted in 2018 and therefore the 2016 County vegetation mapping assumes pre-vineyard conditions across the entire parcel. No trees were removed for the existing vineyard Block 2. Therefore, the project is in compliance with the requirement to retain 70% of the tree canopy and preserve trees at a 3:1 ratio.

- f) There are structures on the property. Please see the cultural resources report prepared by Flaherty Cultural Resource Services dated November 8, 2019.
 - g) The property is currently deer fenced. Please see the Site Plan for the location. No additional deer fence is proposed.
 - h) A site visit of the property was performed by Matt Bueno and Jennifer Johnson of PPI Engineering on Tuesday, November 19, 2019 to evaluate the vineyard development area and to collect photographic documentation. Photographs of pre-project conditions can be found in Appendix A.
- 3. Natural and man-made features onsite including streams, lakes, reservoirs, roads, drainage, and other areas that may be affected by the proposed activity.**
- a) No natural or man-made features are expected to be adversely affected by this project. A tributary to Tulucay Creek is in the vicinity but will not be affected by the project. The existing reservoir in the vicinity will also not be affected by the project.
 - b) There is an existing road that provides access to the property. The existing road is sufficient for access to proposed vineyard block.
- 4. Location and source of water for irrigation or other uses.**
- a) The proposed water source is trucked in recycled water. Please see the Site Plan for the location of the portable water tank.
- 5. Soil types/soil series identified in the Soil Conservation Service (SCS) Napa County Soil Survey.**
- a) The USDA – SCS Napa County Soil Survey maps the soil within the project boundary as Forward silt loam with 5 to 39 percent slopes.
- 6. Critical areas, if any, within the development site that have serious erosion potential or problems.**
- a) There are no areas with serious erosion potential or problems.
- 7. Erosion calculations**
- a) Universal Soil Loss Equation (USLE) spreadsheets for this project are in Appendix B of this report.

- b) Please see the revised pre-project versus post-project soil loss analysis prepared by PPI Engineering dated October 2020.

8. Proposed erosion control methods including:

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.

1. The final pass with disking equipment shall be performed across slopes to prevent channeling water downhill the first winter after development.
2. Straw wattles shall be installed the year of construction in the approximate locations shown on the Site Plan. Additional temporary erosion control measures shall be installed as needed.

b) Proposed vegetative erosion control measures including location, type and quantity of seed, mulch, fertilizer and irrigation, timing and methods of planting, mulching and maintenance of plant material and slopes until a specified percentage of plant coverage is uniformly established.

1. Disturbed areas shall be seeded as described below. Straw mulch shall be applied to all disturbed areas at a rate of 3,000 lbs/acre prior to October 15 of the year of construction.
2. A permanent cover crop strategy will be utilized. The permanent cover crop will be generated the first year by seeding with the following mix: Dwarf Barley at 50 lbs/acre, Blando Brome at 8 lbs/acre, Zorro Fescue at 12 lbs/acre, and Crimson Clover at 6 lbs/acre. A pre-approved alternative seed mix may be allowed.

The permanent cover crop will be managed each year such that any areas which have less than 90% vegetative cover will be reseeded and mulched until adequate coverage is achieved. The permanent cover crop shall be mowed only and not disked.

3. The owner has the option of using a Dwarf Barley cover crop in the first three years that the block is planted to aid with vineyard establishment. If this option is used, seed shall be applied at a rate of 120 lbs/acre if broadcast or at a rate of 60 lbs/acre if drilled. The cover crop within the vineyard may be disked each spring after April 1 for the first three years. An alternative cover crop seed mix may be used upon prior approval. Each year the owner chooses to disk, the area shall be straw mulched at a rate of 3,000 lbs/acre and straw wattles installed prior to October 15. The permanent seed mix will be seeded prior to October 15 of the fourth (or earlier) year.

4. No pre-emergent herbicides will be used for weed management. No strip spraying shall be performed in the blocks requiring 90% vegetative cover. Spot spraying of contact or systemic herbicides in spring (no earlier than February 15) will be allowed provided the 90% vegetative cover is achieved in the blocks. If the owner chooses to farm without herbicide, an alternative will be to hand-hoe around the base of the vine only, or other methods that do not result in a continuous bare strip.
5. Fertilizer shall be applied as necessary by vineyard management personnel for both the vineyard and to ensure specified percent vegetative cover crop is achieved. Site-specific soil analysis should be performed.
6. The vineyard avenues shall be mowed only and shall not be disked. Unless otherwise noted, all avenues shall conform to the natural grade. Vineyard avenues shall be seeded and mulched prior to October 15 of the year of construction and in subsequent years in bare or disturbed areas. The cover crop will be managed each year such that any avenues that have less than 90% vegetative cover will be reseeded and mulched until adequate coverage is achieved. Seeding and mulching is not required on avenues and roads properly surfaced with gravel.
7. The proposed vine by row spacing is expected to be 5' by 6', however in areas where cross-slope exceeds 15% the owner shall increase the row spacing as needed to ensure there is adequate room for equipment. Width of tillage equipment shall be no more than 75% of row width to allow for bench formation and to minimize erosion.
8. The owner has the freedom to further subdivide vineyard blocks within the footprint of the proposed vineyard for irrigation and viticulture purposes. The proposed vinerow directions shall not be altered without an approved modification from Napa County.
9. Irrigation pipelines shall be located within existing roadways, vineyards and vineyard avenues, and/or within proposed clearing limits. Regardless of pipeline location, pipeline trenches located on ground slopes greater than 15% shall be backfilled using imported or select native granular material to a depth of 6 inches above the pipelines such that voids do not form below haunches of pipe. Backfill shall be wheel rolled or otherwise compacted to reduce settlement. Final grading over trenches shall be mounded and water-barred such that water is directed away from trenches.
10. As stated in the Napa County Protocol for Re-Planting/Renewal of Approved Non-Tilled Vineyard Cover Crops dated March 23, 2004, when it becomes necessary, either by routine or emergency, to re-establish or renew vineyard cover crop the following measures should be followed:
 - Seek professional consultation, including soil nutrient analysis, to determine the reasons for the original cover crop's failure. Adjust soil fertility, irrigation and seed selection accordingly.

- When tillage is necessary, alternate rows should be tilled, seeded, and straw-mulched to effectively accomplish the re-establishment/renewal process over a two-year period.
- Tillage and re-seeding should be conducted in the following manner:
 - In year 1, till to prepare seed bed and sow desired cover crop in every other row (“the evens”), leaving the alternate rows (“the odds”) untilled and mowed only.
 - Mulch all tilled rows having an up and down hill (perpendicular to contour) row direction with 3,000 lbs./acre of loose straw, or approved equivalent, after seeding.
 - Tilled rows with cross-slope (parallel to contour) row direction and slope gradients less than 15% may not require straw mulch.
 - In year 2, till to prepare seed bed and sow desired cover crop in “odd” rows.
 - In year 2, leave “even” rows untilled and mowed only.
 - Mulch rows tilled in year 2 as specified above.
 - Put all re-establishment measures in place by October 15
 - In year 3, return all rows to non-tilled culture.

9. Stormwater stabilization measures, if the development of the site will result in increased peak rates of runoff that may cause flooding or channel degradation downstream.

- No significant increase in quantity or rate of runoff is expected as a result of this project.
- Please see the revised hydrology report prepared by PPI Engineering dated October 2020.

10. An implementation schedule showing the following:

a) The proposed clearing, grading, and/or construction schedule.

DATE	DESCRIPTION
April 1:	Commence clearing and tillage operations.
October 1:	All tillage and erosion control completed.
October 15:	All winterization complete, including seeding, straw mulching, and straw wattle installation.

- b) The proposed schedule for winterizing the site (generally by October 15 of each year the permit is in effect.)**

The site shall be winterized and all necessary erosion control measures described in the Erosion Control Plan shall be installed by October 15.

- c) The proposed schedule of installation of all interim erosion and sediment control measures, including the stage of completion of such devices at the end of the grading season (generally October 15) of each year the permit will be in effect.**

See Item 10a).

- d) The schedule for installation of permanent erosion and sediment control devices where required.**

See Item 10a).

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

Typical costs for installing erosion control measures as described in this plan range from \$500 to \$1,000 per acre.

**DOOLEY VINEYARD
4285 EAST THIRD AVENUE**

EROSION CONTROL PLAN

STANDARD PROVISIONS

SECTION 1 - SCOPE OF WORK

These specifications cover the construction of the erosion control measures for approximately 1.1 acres of vineyard to be developed by Cornelius Patrick Dooley & Susanne Hoffman-Dooley.

The drawing numbered 11911801B and these Specifications describe in detail the construction of the complete erosion control system. Requests for further information or clarification of the work to be done can be made to Jim Bushey or Matt Bueno at the Napa office of PPI Engineering, phone (707) 253-1806.

All costs for the complete construction of the erosion control system must be included in the bid items, since no other payment will be made outside of the bid items. This includes all costs for moving onto and off of the job site, all equipment, tools, materials, labor, fuel, taxes, and incidentals for furnishing and installing the erosion control system.

Surveying adequate for construction will be provided by the Owner, at the Owner's expense. The Contractor will be responsible for preserving construction survey stakes and markers for the duration of their intended use. Any restaking costs or additional survey work requested by the Contractor shall be deducted from the final payment to the Contractor. The Owner does not guarantee that the project being bid will be awarded. The Owner also reserves the right to change the quantities of actual work performed as needed with payment made according to the new quantities at the unit price bid.

SECTION 2 - AUTHORITY OF OWNER AND ENGINEER

The property is owned by Cornelius Patrick Dooley & Susanne Hoffman-Dooley. The Owners or the appointed representative shall have the final say in the event of a dispute with the Contractor.

The Owner shall appoint PPI Engineering as the Engineer to perform periodic review of the work. PPI Engineering shall report any unsatisfactory work to the Owner. The Contractor shall be responsible for any engineering fees or repair costs associated with bringing the unsatisfactory work into compliance with the Plans and Specifications.

SECTION 3 - CHANGES IN WORK

Materials and the manner of performance of the work performed in this contract shall be according to the Plans and Specifications. Modifications to the Plans or Specifications shall be agreed upon in writing by the Contractor, Owner, and Engineer before the work in question is performed. Materials and construction methods shall be as specified on the Plans and Specifications. The burden of proof that a given material or method constitutes an equivalent to the one specified will rest with the Contractor.

SECTION 4 - UTILITIES

At least two working days prior to beginning any excavation on the project, the Contractor shall contact Underground Service Alert (USA) at 1-800-642-2444 and request field location of all existing utilities.

Certain facilities at the site are existing. The Contractor shall be careful to avoid damaging existing facilities and shall notify the Owner immediately if any damage does occur. The cost of repairing any damage shall be the sole responsibility of the Contractor.

SECTION 5 - PROSECUTION OF THE WORK

Unless otherwise provided, the contract time shall commence upon issuance of a Notice to Proceed by the Owner. The work shall start within ten days thereafter and be diligently prosecuted to completion within the time specified in the Contractor's bid. If weather conditions prevent completion of the project within the specified amount of time, the Owner may extend the completion date of the project.

SECTION 6 - RESPONSIBILITIES OF THE CONTRACTOR

The Contractor agrees that in accordance with generally accepted construction practices, Contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including the safety of all persons and property. This requirement shall be made to apply continuously and not be limited to normal working hours. Contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of the work on this project, excepting liability arising from the sole negligence of design professional.

The Contractor shall be responsible for controlling dust and mud generated from construction activities. The Contractor shall not allow dust or mud to obstruct vehicular traffic on County roads or State Highways. The Contractor shall be responsible for cleaning all vehicles prior to leaving the site as required by the California Highway Patrol. The Contractor, at their own expense, shall provide adequate dust control and prevention of mud tracking on roads, and take other preventative measures as directed by the Owner.

The Contractor shall be responsible for following all safety laws that may be applicable. Of particular concern are the trench safety regulations issued by CAL-OSHA. The Contractor alone shall be responsible for the safety of their equipment and methods and for any damage or injury which may result from their failure, improper construction, maintenance, or operation.

The Contractor shall be responsible for installing necessary sediment retention measures to keep sediment from leaving the site if construction activities continue beyond October 1.

The Contractor shall keep the work site clean and free of rubbish and debris throughout the project. Materials and equipment shall be removed from the site as soon as they are no longer necessary or the project is completed.

The Contractor shall also be responsible for ensuring that all permits which are necessary for construction have been obtained and that copies of these permits are maintained onsite at all times.

The Contractor shall, at their own expense, furnish all necessary light, power, pumps, and water necessary for the work.

SECTION 7 - MEASUREMENT AND PAYMENT

Payment shall be made at the unit prices bid according to the actual quantities installed. Measurement of the final quantities shall be the responsibility of the Owner's Engineer.

The Engineer shall periodically observe the project during construction and upon completion of the project any unfinished or unacceptable work observed will be brought to the Contractor's attention verbally and in writing. Final payment will be made upon satisfactory completion of all work items required by these Plans and Specifications.

SECTION 8 - GUARANTEE

In addition to the guarantees from suppliers, the Contractor shall guarantee the work he performs for a period of two years. Any repairs needed to the system within two years of completion due to faulty workmanship or materials shall be promptly repaired at no expense to the Owner. Any costs incurred by the Owner and/or Engineer within two years of completion due to rubbish or debris placed in a trench or other excavation shall be paid by the Contractor.

Unless otherwise provided in writing, payment by the Owner to the Contractor for installation of this system shall constitute acceptance of all provisions in this document by the Contractor.

**DOOLEY VINEYARD
4285 EAST THIRD AVENUE**

EROSION CONTROL PLAN

SPECIAL PROVISIONS

SECTION 1 - TEMPORARY MEASURES

1.1 GENERAL:

Temporary erosion control measures shall be constructed by the Owner. These measures can include water bars, straw wattles, straw mulching, straw bale dikes, and other practices as needed. The measures shall be constructed in conformance with the detail drawings and maintained in a functional condition throughout the rainy season.

SECTION 2 - MAINTENANCE

2.1 GENERAL:

The erosion control measures described in these Specifications and shown on the Plans and Details require regular maintenance in order to function as intended. Vineyard management personnel shall assure that the erosion control measures are monitored throughout the rainy season each year and necessary repairs and/or maintenance are performed immediately. Maintenance operations shall include, but not be limited to the following activities.

2.2 STRAW WATTLES:

Straw wattles shall be monitored and repaired as needed to ensure water does not run under the wattle or between adjacent wattles. Should excessive erosion cause the wattle to fill with sediment, this material shall be removed to a protected location and the source of the sediment located and protected as needed.

APPENDIX A

PHOTOGRAPHIC DOCUMENTATION



Photo 1

11/19/2019



Photo 2

11/19/2019

APPENDIX B

USLE CALCULATIONS

PPI Engineering

Napa County
Maximum Length of Slope
for a soil loss of 5 tons per acre

NAME: Dooley Vineyard

DATE: 6/14/19

Cover Type: Permanent Cover Crop

Soil Unit No. (100-182)--- 139

Soil Name Forward

-K= 0.17

-R= 45

-T= 3

Percent Cover		65% Up & Down Hill	70% Up & Down Hill	75% Up & Down Hill	80% Up & Down Hill	85% Up & Down Hill	90% Up & Down Hill
		C= 0.058 P= 1.0	C= 0.046 P= 1.0	C= 0.034 P= 1.0	C= 0.022 P= 1.0	C= 0.015 P= 1.0	C= 0.010 P= 1.0
PERCENT SLOPE	2	67,771,983	146,763,163	401,987,925	1,715,535,982	6,149,465,219	23,757,876,809
	4	422,106	753,523	1,604,331	4,763,593	12,409,754	34,197,261
	6	28,155	44,761	81,933	195,692	420,956	947,150
	8	12,965	20,612	37,729	90,114	193,845	436,151
	10	6,917	10,996	20,129	48,076	103,416	232,686
	12	4,186	6,655	12,181	29,094	62,584	140,815
	14	2,745	4,364	7,988	19,080	41,043	92,346
	16	1,910	3,036	5,558	13,275	28,556	64,251
	18	1,391	2,211	4,047	9,666	20,793	46,785
	20	1,050	1,669	3,055	7,298	15,698	35,321
	22	816	1,298	2,376	5,675	12,207	27,465
	24	651	1,034	1,893	4,522	9,727	21,887
	26	529	842	1,540	3,679	7,915	17,808
	28	438	697	1,276	3,048	6,556	14,750
	30	369	586	1,073	2,564	5,515	12,409
	32	315	500	915	2,186	4,703	10,582
	34	272	432	790	1,887	4,060	9,134
	36	237	377	689	1,647	3,542	7,970
	38	209	332	607	1,451	3,121	7,022
	40	186	295	540	1,289	2,774	6,241
	42	166	264	484	1,155	2,485	5,591
	44	150	238	436	1,043	2,243	5,046
	46	136	217	397	947	2,037	4,584
	48	125	198	362	866	1,862	4,190
	50	114	182	333	796	1,712	3,851

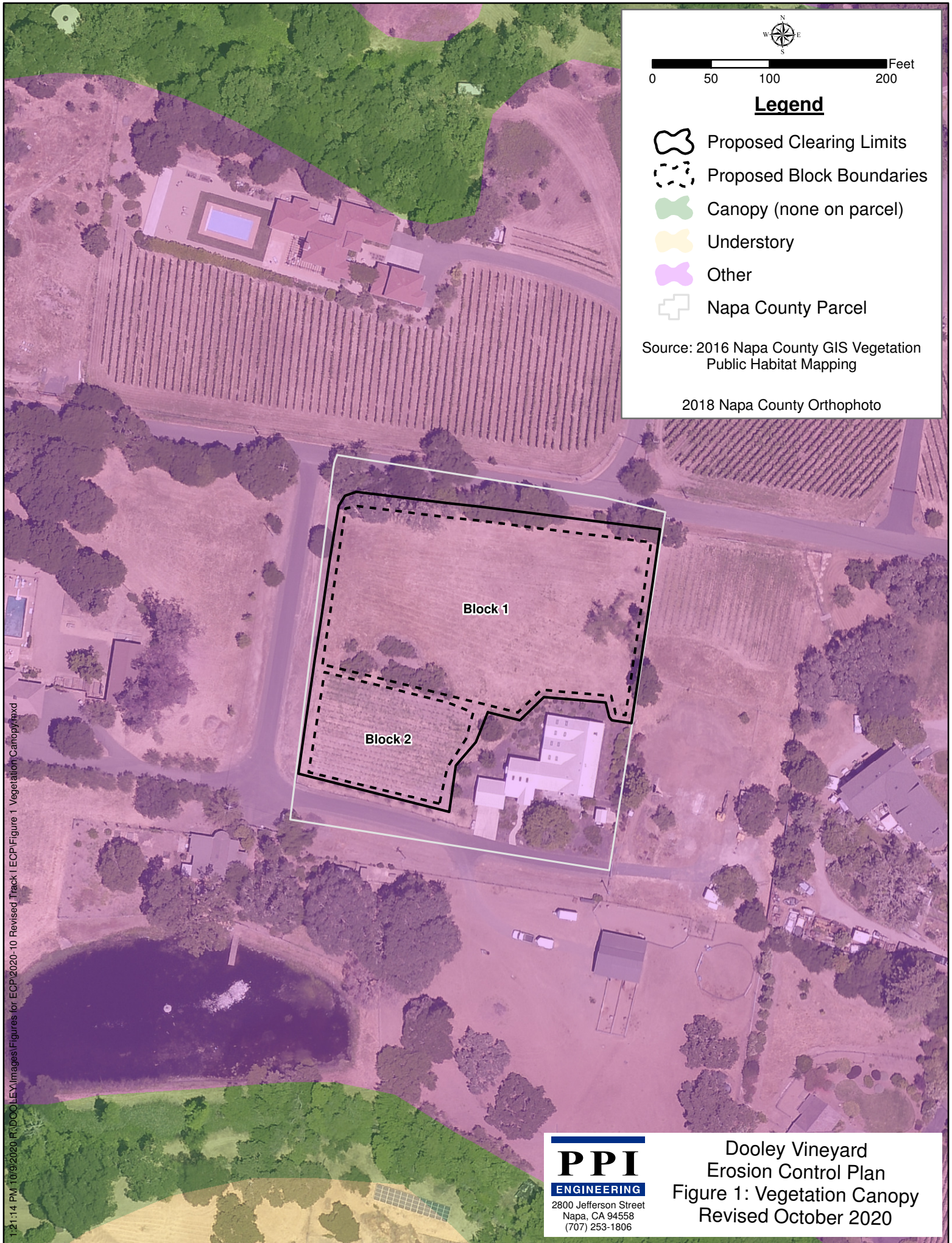
NOTES:

C=Cover and Management Factor

P=Practice Factor

APPENDIX C

SUPPORTING FIGURES





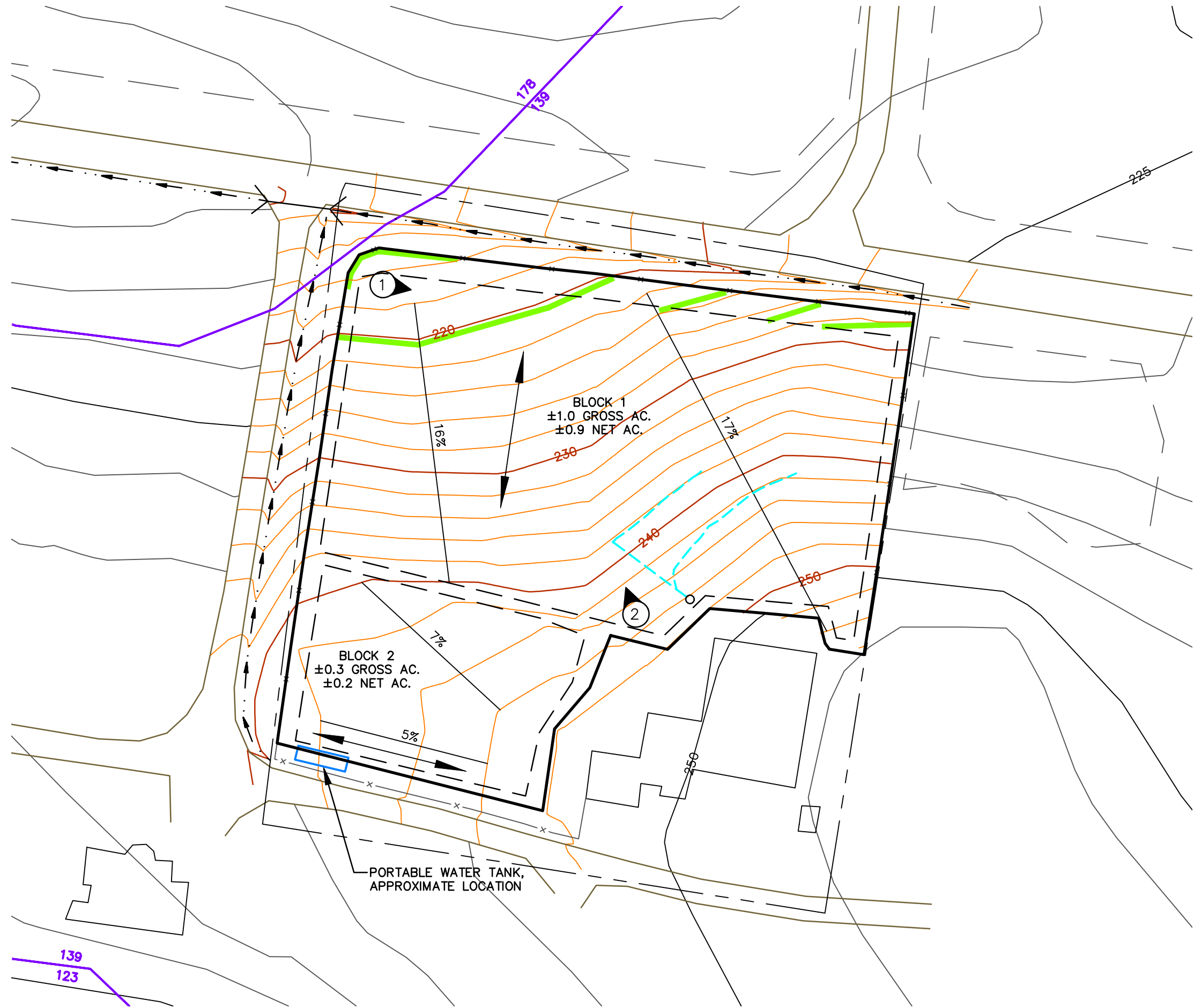
APPENDIX D

SLOPE CALCULATIONS

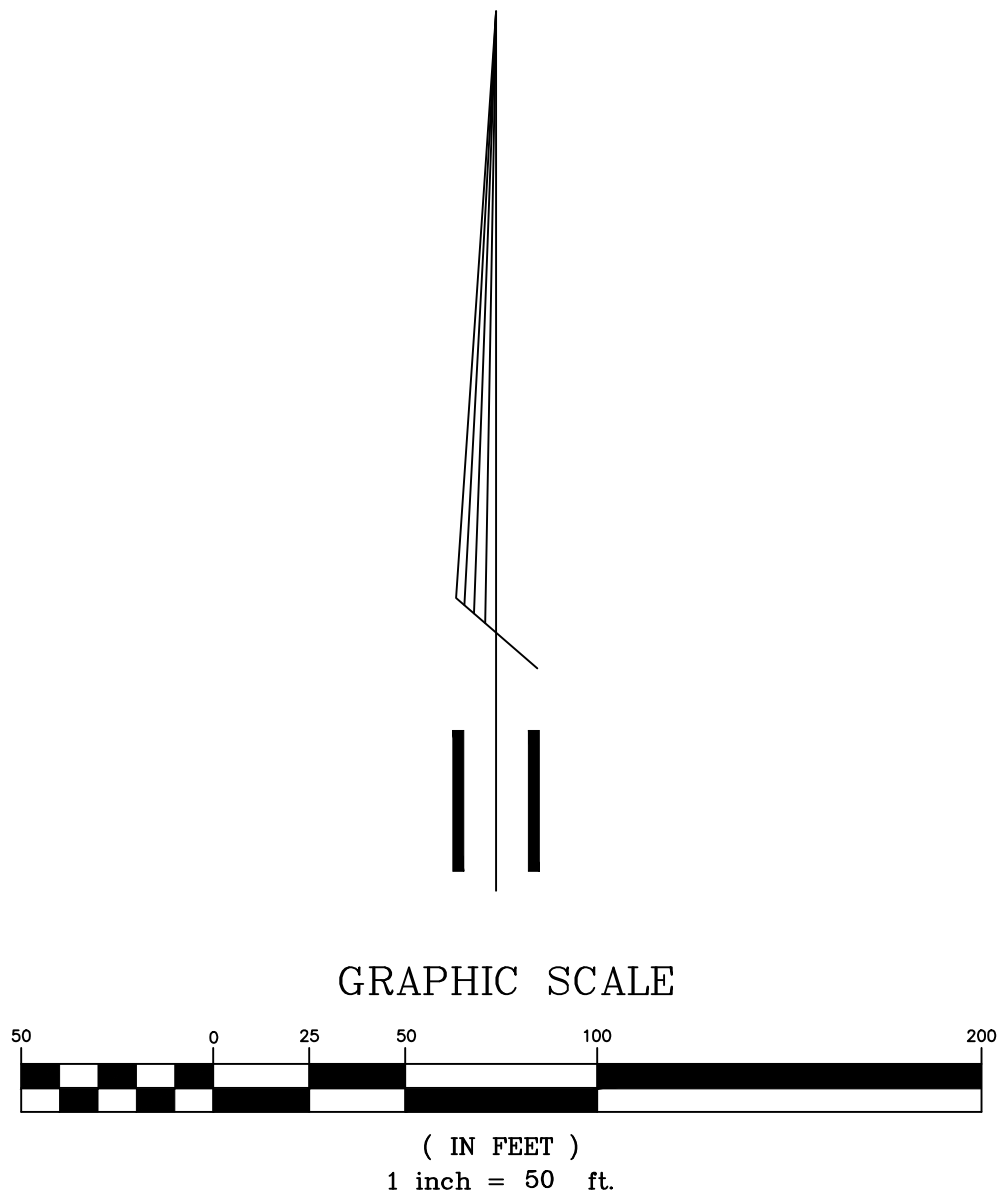
**DOOLEY VINEYARD
4285 EAST THIRD AVENUE**

Average Slope Of Proposed Vineyard Blocks

Block	Gross Acres	Net Acres	Slope #1	Slope #2	Average slope
1	1.0	0.9	16%	17%	17%
2	0.3	0.2	5%	7%	6%
Total	1.3	1.1			11 %



TOPOGRAPHIC MAPPING SOURCE: PPI ENGINEERING, 2' CONTOUR INTERVAL, JUNE 2019
NAPA COUNTY LIDAR-GENERATED CONTOURS, 5' CONTOUR INTERVAL, 2003



LEGEND

	PPI ENGINEERING 10' INDEX CONTOUR
	PPI ENGINEERING 2' INTERMEDIATE CONTOUR
	NAPA COUNTY 25' INDEX CONTOUR
	NAPA COUNTY 5' INTERMEDIATE CONTOUR
	APPROXIMATE PROPERTY LINE LOCATION
	EXISTING VINEYARD AREA, NOT A PART OF THIS PLAN
	EXISTING ROAD
	EXISTING FENCE
	EXISTING BUILDING
	EXISTING DITCH, APPROXIMATE LOCATION
	EXISTING CULVERT
	EXISTING LEACH LINE, APPROXIMATE LOCATION
	EXISTING SEPTIC SYSTEM DISTRIBUTION BOX, APPROXIMATE LOCATION
	PROPOSED VINEYARD CLEARING LIMITS
	PROPOSED VINEYARD BLOCK BOUNDARY
	PROPOSED STRAW WATTLE (SEE DETAIL 1, THIS SHEET)
	PROPOSED VINEROW DIRECTION
	PHOTO POINT NUMBER & LOCATION (SEE APPENDIX A)
	AVERAGE SURFACE SLOPE
	SOIL TYPE BOUNDARY

USDA SOIL CLASSIFICATIONS:

123	COOMBS GRAVELLY LOAM, 2-5% SLOPES
139	FORWARD SILT LOAM, 5-39% SLOPES, MLRA 15
178	SOBRANTE LOAM, 5-30% SLOPES



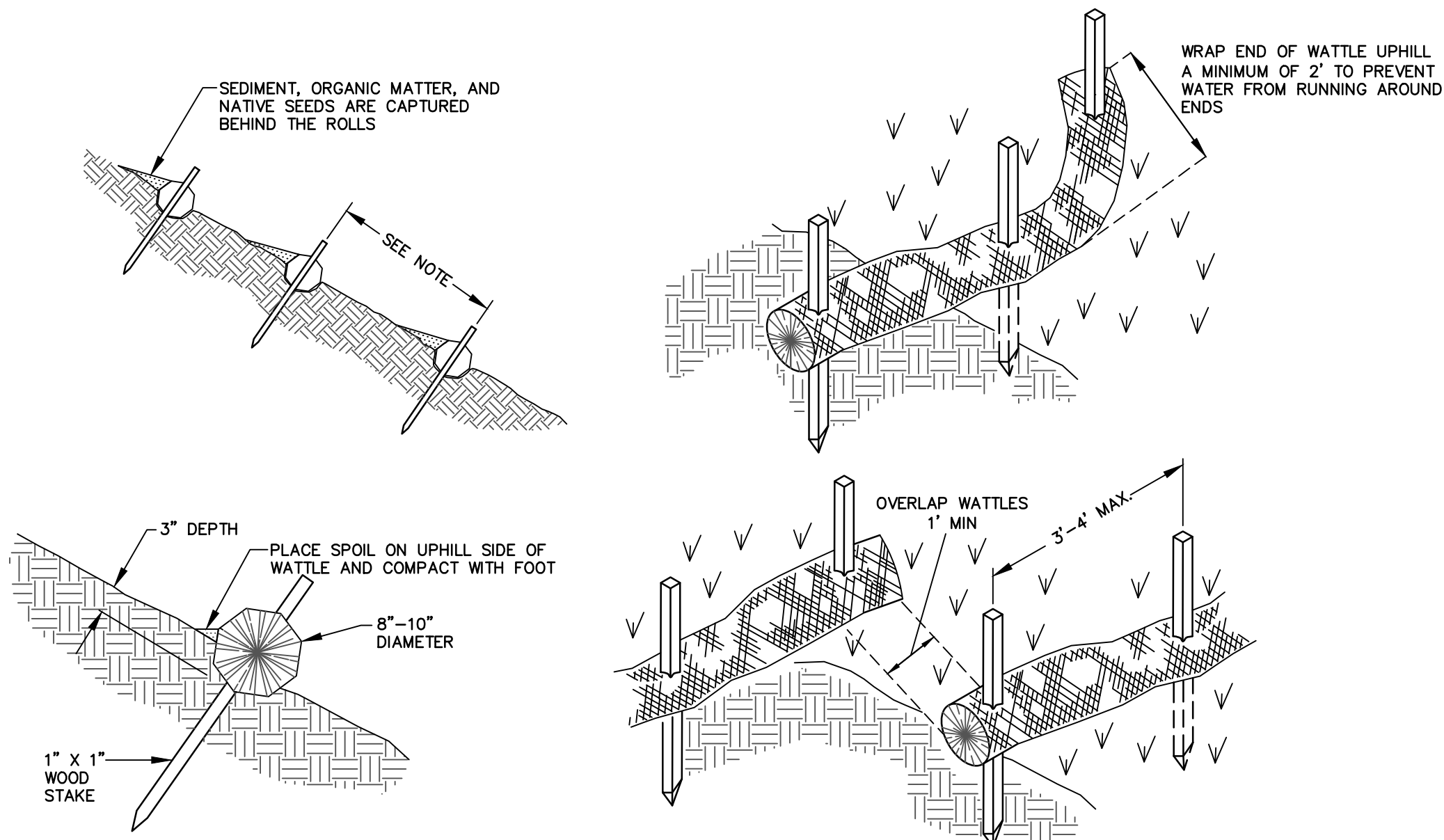
VICINITY MAP
USGS MT. GEORGE QUADRANGLE
TOWNSHIP 5 N., RANGE 3 W.
SCALE: 1" = ±2000'

NOTES:

- OWNER: CORNELIUS PATRICK DOOLEY & SUSANNE HOFFMAN-DOOLEY
SITE ADDRESS: 4285 EAST THIRD AVENUE, NAPA
APN: 052-460-020
- ACCESS TO PROJECT IS FROM EAST THIRD AVENUE. THE SITE IS GATED AND LOCKED. ADMITTANCE IS AVAILABLE UPON REQUEST.
- EXISTING VEGETATION CONSISTS OF VINEYARD, GRASS, AND BRUSH.
- DISTURBED AREAS SHALL BE SEEDED AS DESCRIBED BELOW. STRAW MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS AT A RATE OF 3,000 LBS/ACRE PRIOR TO OCTOBER 15 OF THE YEAR OF CONSTRUCTION.
- PERMANENT COVER CROP (NO-TILL):
A PERMANENT COVER CROP STRATEGY WILL BE UTILIZED. THE PERMANENT COVER CROP WILL BE GENERATED THE FIRST YEAR BY SEEDING WITH THE FOLLOWING MIX:

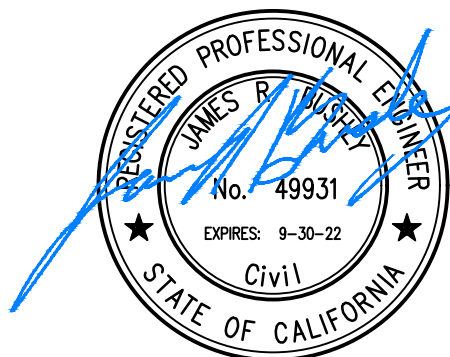
VARIETY	RATE (LBS/ACRE)
DWARF BARLEY	50
BLANDO BROME	8
ZORRO FESCUE	12
CRIMSON CLOVER	6

A PRE-APPROVED ALTERNATIVE SEED MIX MAY BE ALLOWED.
THE PERMANENT COVER CROP WILL BE MANAGED EACH YEAR SUCH THAT ANY AREAS WHICH HAVE LESS THAN 90% VEGETATIVE COVER WILL BE RESEEDED AND MULCHED UNTIL ADEQUATE COVERAGE IS ACHIEVED. THE PERMANENT COVER CROP SHALL BE MOWED ONLY AND NOT DISKED.
- THE OWNER HAS THE OPTION OF USING A DWARF BARLEY COVER CROP IN THE FIRST THREE YEARS THAT THE BLOCK IS PLANTED TO AID WITH VINEYARD ESTABLISHMENT. IF THIS OPTION IS USED, SEED SHALL BE APPLIED AT A RATE OF 120 LBS/ACRE IF BROADCAST OR AT A RATE OF 60 LBS/ACRE IF DRILLED. THE COVER CROP WITHIN THE VINEYARD MAY BE DISKED EACH SPRING AFTER APRIL 1 FOR THE FIRST THREE YEARS. AN ALTERNATIVE COVER CROP SEED MIX MAY BE USED UPON PRIOR APPROVAL. EACH YEAR THE OWNER CHOOSES TO DISK, THE AREA SHALL BE STRAW MULCHED AT A RATE OF 3,000 LBS/ACRE AND STRAW WATTLES SHALL BE INSTALLED PRIOR TO OCTOBER 15. THE PERMANENT SEED MIX WILL BE SEEDED PRIOR TO OCTOBER 15 OF THE FOURTH (OR EARLIER) YEAR.
- NO PRE-EMERGENT HERBICIDES WILL BE USED FOR WEED MANAGEMENT. NO STRIP SPRAYING SHALL BE PERFORMED IN THE BLOCKS REQUIRING 90% VEGETATIVE COVER. SPOT SPRAYING OF CONTACT OR SYSTEMIC HERBICIDES IN SPRING (NO EARLIER THAN FEBRUARY 15) WILL BE ALLOWED PROVIDED THE 90% VEGETATIVE COVER IS ACHIEVED IN THE BLOCKS. IF THE OWNER CHOOSES TO FARM WITHOUT HERBICIDE, AN ALTERNATIVE WILL BE TO HAND-HOE AROUND THE BASE OF THE VINE ONLY, OR OTHER METHODS THAT DO NOT RESULT IN A CONTINUOUS BARE STRIP.
- FERTILIZER SHALL BE APPLIED AS NECESSARY BY VINEYARD MANAGEMENT PERSONNEL FOR BOTH THE VINEYARD AND TO ENSURE SPECIFIED PERCENT VEGETATIVE COVER CROP IS ACHIEVED. SITE-SPECIFIC SOIL ANALYSIS SHOULD BE PERFORMED.
- THE VINEYARD AVENUES SHALL BE MOWED ONLY AND SHALL NOT BE DISKED. UNLESS OTHERWISE NOTED, ALL AVENUES SHALL CONFORM TO THE NATURAL GRADE. VINEYARD AVENUES SHALL BE SEEDED AND MULCHED PRIOR TO OCTOBER 15 OF THE YEAR OF CONSTRUCTION AND IN SUBSEQUENT YEARS IN BARE OR DISTURBED AREAS. THE COVER CROP WILL BE MANAGED EACH YEAR SUCH THAT ANY AVENUES WHICH HAVE LESS THAN 90% VEGETATIVE COVER WILL BE RESEEDED AND MULCHED UNTIL ADEQUATE COVERAGE IS ACHIEVED. SEEDING AND MULCHING IS NOT REQUIRED ON AVENUES AND ROADS PROPERLY SURFACED WITH GRAVEL.
- THE PROPOSED VINE BY ROW SPACING IS EXPECTED TO BE 5' BY 6'. HOWEVER IN AREAS WHERE CROSS-SLOPE EXCEEDS 15% THE OWNER SHALL INCREASE THE ROW SPACING AS NEEDED TO ENSURE THERE IS ADEQUATE ROOM FOR EQUIPMENT. WIDTH OF TILLAGE EQUIPMENT SHALL BE NO MORE THAN 75% OF ROW WIDTH TO ALLOW FOR BENCH FORMATION AND TO MINIMIZE EROSION.
- THE OWNER HAS THE FREEDOM TO FURTHER SUBDIVIDE VINEYARD BLOCKS WITHIN THE FOOTPRINT OF THE PROPOSED VINEYARD FOR IRRIGATION AND VITICULTURE PURPOSES. THE PROPOSED VINE ROW DIRECTIONS SHALL NOT BE ALTERED WITHOUT AN APPROVED MODIFICATION FROM NAPA COUNTY.
- THE PROPOSED WATER SOURCE IS TRUCKED IN RECYCLED WATER. THE LOCATION OF THE PORTABLE STORAGE TANK IS SHOWN ON THE SITE PLAN.
- THE PROJECT IS CURRENTLY DEER FENCED. NO ADDITIONAL DEER FENCE IS NEEDED FOR THE PROPOSED VINEYARD.
- REQUESTS FOR FURTHER INFORMATION, CLARIFICATION OF WORK TO BE DONE, OR INSPECTION INFORMATION CAN BE MADE TO JIM BUSHEY OR MATT BUENO AT PPI ENGINEERING IN NAPA, (707) 253-1806.
- PROPERTY LINES AS SHOWN ARE APPROXIMATE. OWNER SHALL BE RESPONSIBLE FOR SURVEYING PROPERTY LINE(S) AS NECESSARY PRIOR TO ANY SITE DISTURBANCE.
- THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
- AT LEAST 48 HOURS PRIOR TO EXCAVATING, THE CONTRACTOR SHALL CALL UNDERGROUND SERVICES ALERT (U.S.A.) AT 1-800-642-2444 IN ORDER TO LOCATE EXISTING UTILITIES. IT IS THE OWNER'S RESPONSIBILITY TO LOCATE ANY ADDITIONAL UNDERGROUND UTILITIES THAT MAY HAVE BEEN INSTALLED "IN-HOUSE" OR BY PRIVATE CONTRACTORS AND THEREFORE MAY NOT BE LOCATED THROUGH UNDERGROUND SERVICE ALERT.
- IT IS THE OWNER'S RESPONSIBILITY TO INSTALL ALL STRUCTURAL MEASURES AS SHOWN ON THE SITE PLAN AND DETAILS AND AS DESCRIBED IN THE SPECIFICATIONS WITHIN THE TIME FRAMES SPECIFIED FOR THIS PROJECT. ANY DEVIATION FROM THESE PLANS MUST BE REVIEWED AND APPROVED BY NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT. IT IS THE OWNER'S RESPONSIBILITY TO INITIATE THIS MODIFICATION PROCESS. PPI ENGINEERING MUST BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION IN ORDER TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE OWNER/MANAGER AND CONTRACTOR(S). FOR ONGOING MULTI-YEAR PROJECTS PPI ENGINEERING MUST BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF RESUMING CONSTRUCTION EACH YEAR.



NOTE: VERTICAL SPACING FOR SLOPE INSTALLATION SHALL BE DETERMINED BY SITE CONDITIONS. WATTLE SPACING AND LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

1 STRAW WATTLE INSTALLATION N.T.S.



DOOLEY VINEYARD 4285 EAST THIRD AVENUE EROSION CONTROL PLAN SITE PLAN

DESIGN ENGINEER:	J. BUSHEY, M. BUENO
SCALE:	AS SHOWN
DRAWN BY:	SM, JCJ
DATE:	10-7-20
SHEET:	1
OF:	1

REV. NO.	DESCRIPTION	BY	DATE
1	THIS DRAWING SUPERSEDES DRAWING 11911801A. DELETED NOTE 13 AND RENUMBERED REMAINING NOTES. BLOCK 2 WAS ADDED.	JCJ	10-05-20

PPI
ENGINEERING
2800 JEFFERSON STREET
NAPA, CA 94558
707/253-1806 FAX 707/253-1804
JOB NO: 11911801
DWG. NO: 11911801B