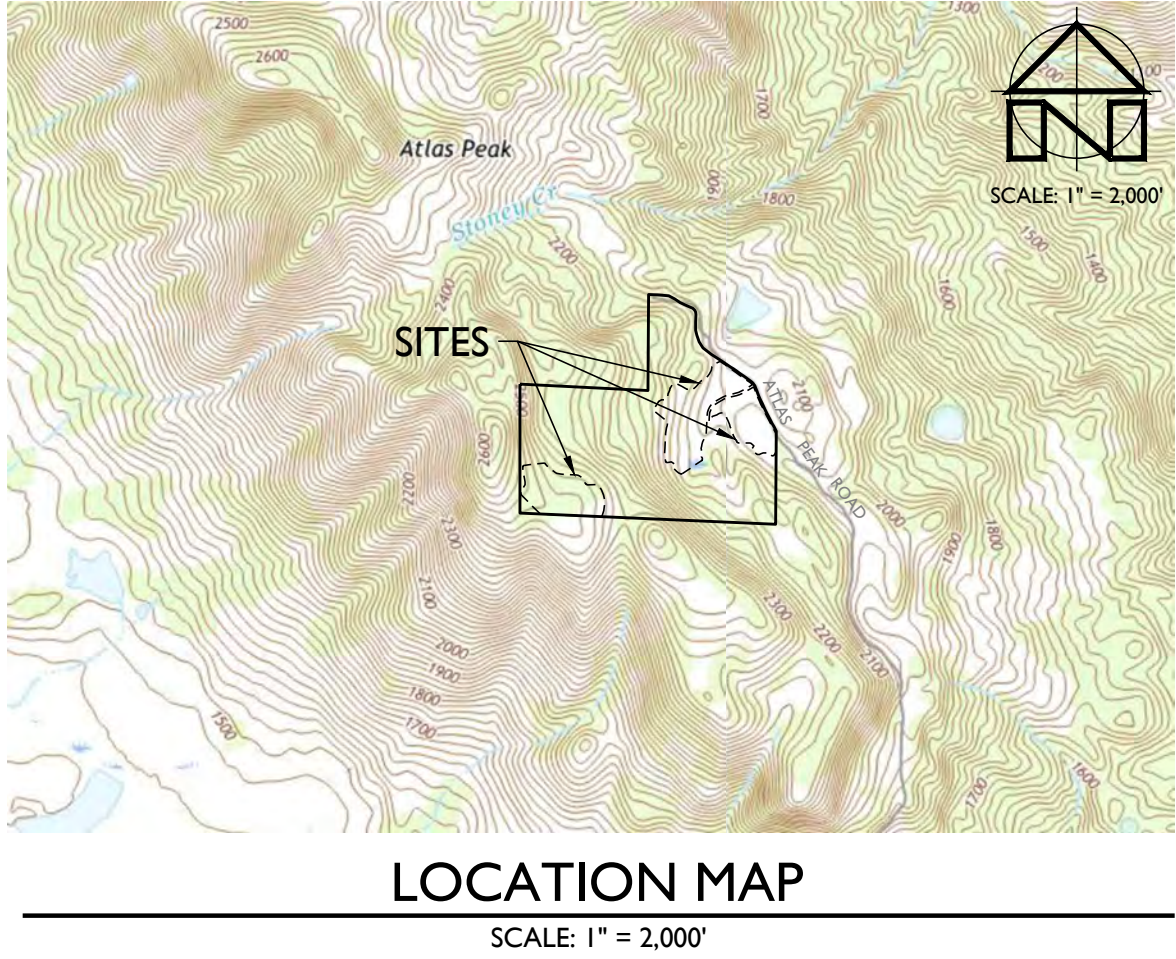


MEKA VINEYARD

VINEYARD DEVELOPMENT EROSION CONTROL PLAN



OVERALL SITE PLAN
SCALE: 1" = 150'



PROJECT INFORMATION:

PROPERTY OWNER & APPLICANT:
MUKTHESWARA RAO MEKA
4473 ATLAS PEAK ROAD
NAPA, CA 94558

SITE ADDRESS:
4473 ATLAS PEAK ROAD
NAPA, CA 94558

ASSESSOR'S PARCEL NUMBER:
032-540-034

PARCEL SIZE:
96.6 ± ACRES

PROJECT SIZE:
26 ± ACRES TOTAL DISTURBED
19.8 ± ACRES TOTAL PLANTED

ZONING:
AGRICULTURAL WATERSHED (AW)

WATER SOURCE:
PRIVATE WELLS

SHEET INDEX:

- | | |
|----|------------------------------|
| C1 | OVERALL SITE PLAN |
| C2 | NOTES & ABBREVIATIONS |
| C3 | SLOPE DETERMINATION SECTIONS |
| C4 | EROSION CONTROL PLAN |
| C5 | DETAILS |

PURPOSE STATEMENT:

THE PURPOSE OF THIS PROJECT IS TO DEVELOP NEW VINEYARDS ON THE SUBJECT PROPERTY.

FLOOD HAZARD NOTE:

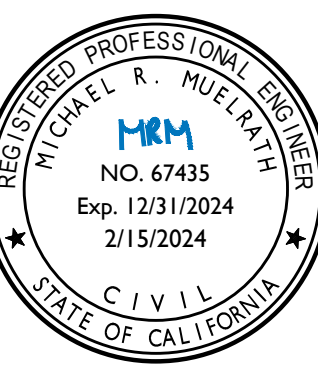
ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) MAP NUMBER 06055C0410E & 06055C0430E, EFFECTIVE SEPTEMBER 26, 2008, THE PROJECT SITE IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA.

SOIL TYPE LEGEND:

- | | |
|-----|---|
| 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 |

SOIL TYPE BOUNDARIES SHOWN ON THIS MAP ARE BASED ON THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATA AND SHOULD BE CONSIDERED APPROXIMATE.

PREPARED UNDER THE
DIRECTION OF:



DRAWN BY:
PowerCAD LLC

CHECKED BY:
MRM

DATE:
FEBRUARY 15, 2024

REVISIONS: BY:
2/15/2024 YMS/KH
PERMIT SUBMITTAL

6/14/2024 KH
RESPONSE TO
COMMENTS

JOB NUMBER:
21-115

FILE:
21-115ECP-OSP.DWG

ORIGINAL SIZE:
24" X 36"

SHEET NUMBER:

C1

OF

GENERAL NOTES:

1.

THESE DRAWINGS WERE DEVELOPED EXCLUSIVELY FOR THIS PROJECT AND ARE NOT TO BE REPRODUCED OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF APPLIED CIVIL ENGINEERING INCORPORATED.
2.

ALL MATERIALS AND WORKMANSHIP FOR THE WORK DESCRIBED ON THESE PLANS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING STANDARDS AS ADOPTED AND AMENDED BY NAPA COUNTY:

A.

CALIFORNIA BUILDING CODE (2022)

B.

CALIFORNIA ELECTRIC CODE (2022)

C.

CALIFORNIA PLUMBING CODE (2022)

D.

CALIFORNIA MECHANICAL CODE (2022)

E.

CALIFORNIA FIRE CODE (2022)

F.

CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND SPECIFICATIONS (2022)

G.

NAPA COUNTY CODE (CURRENT)

CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR BEING FAMILIAR WITH ALL STANDARDS, CODES AND REGULATIONS APPLICABLE TO THIS PROJECT.

3.

CONTRACTOR SHALL BE APPROPRIATELY LICENSED WITH THE STATE OF CALIFORNIA TO PERFORM THE WORK SHOWN ON THESE PLANS.
4.

CONTRACTOR SHALL SUPPLY ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO CONSTRUCT THE IMPROVEMENTS ILLUSTRATED ON THESE PLANS.
5.

CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL MATERIALS AND PRODUCTS TO BE USED FOR THE SITE IMPROVEMENTS TO APPLIED CIVIL ENGINEERING INCORPORATED FOR REVIEW AND APPROVAL.
6.

THE IMPROVEMENTS SHOWN ON THESE PLANS REQUIRE INSPECTION BY THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING ALL INSPECTIONS.
7.

CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH APPLIED CIVIL ENGINEERING INCORPORATED AND NAPA COUNTY AT LEAST ONE WEEK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO REVIEW THE PROJECT PLANS AND SPECIFICATIONS AND NAPA COUNTY REQUIREMENTS.
8.

CONTRACTOR IS RESPONSIBLE FOR SECURING ALL CONSTRUCTION RELATED PERMITS FROM THE GOVERNING AGENCIES AND MAINTAINING A COPY OF THE PERMITS AND THE APPROVED PLANS ON THE JOB SITE AT ALL TIMES.
9.

THE PROPERTY OWNER AND CONTRACTOR ARE RESPONSIBLE FOR OBTAINING ALL APPROPRIATE PERMITS FOR WORK WITHIN ANY RIPARIAN AREA PRIOR TO COMMENCING WORK IN THAT AREA.
10.

CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE CONDITIONS AND THE SAFETY OF PROPERTY AND PEOPLE ON THE JOB SITE AT ALL TIMES. CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A SAFE CONDITION, IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS, AT ALL TIMES, INCLUDING OUTSIDE OF NORMAL WORKING HOURS. CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
11.

CONTRACTOR SHALL PROVIDE AND MAINTAIN BARRICADES TO PROVIDE FOR THE SAFETY OF THE GENERAL PUBLIC TO THE SATISFACTION OF NAPA COUNTY AND THE OWNER.
12.

THESE PLANS ARE INTENDED TO PROVIDE HORIZONTAL AND VERTICAL CONTROL FOR THE PROPOSED SITE IMPROVEMENTS SHOWN HEREON.
13.

ALL DIMENSIONS SHOWN ON THESE PLANS SHOW MEASUREMENTS IN A HORIZONTAL PLANE UNLESS OTHERWISE SPECIFIED.
14.

ALL WRITTEN DIMENSIONS SUPERCEDE ANY SCALED DIMENSIONS. IF AN APPARENT DISCREPANCY IS IDENTIFIED CONTACT APPLIED CIVIL ENGINEERING INCORPORATED IMMEDIATELY FOR A WRITTEN CLARIFICATION.
15.

IF ANY CONTRACTOR, SUBCONTRACTOR, OR SURVEYOR IDENTIFIES ANY OMISSIONS, DEFICIENCIES, CONFLICTS OR ERRORS IN THESE PLANS AND SPECIFICATIONS OR IF THERE IS ANY DOUBT AS TO THEIR MEANING OR INTENT, THEY SHALL CONTACT APPLIED CIVIL ENGINEERING INCORPORATED FOR A WRITTEN ADDENDUM OR CLARIFICATION. CONTRACTOR IS NOT ELIGIBLE FOR ADDITIONAL COMPENSATION IF THEY FAIL TO DO SO BEFORE PROVIDING A PROPOSAL.
16.

CONTRACTOR IS TO PROTECT ALL EXISTING SITE IMPROVEMENTS, UTILITIES, BUILDINGS AND NATURAL FEATURES FROM DAMAGE THROUGHOUT THE DURATION OF CONSTRUCTION. ANY DAMAGE CAUSED BY CONTRACTOR SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
17.

IN THE EVENT THAT ARCHEOLOGICAL ARTIFACTS OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL CEASE IN A 50-FOOT RADIUS SURROUNDING THE AREA OF DISCOVERY. THE PERMITTEE SHALL CONTACT NAPA COUNTY PLANNING BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT AT (707) 253-4417 FOR FURTHER GUIDANCE, WHICH WILL LIKELY INCLUDE THE REQUIREMENT FOR THE PERMITTEE TO HIRE A QUALIFIED PROFESSIONAL TO ANALYZE THE ARTIFACTS ENCOUNTERED AND TO DETERMINE IF ADDITIONAL MEASURES ARE REQUIRED.

IF HUMAN REMAINS ARE ENCOUNTERED DURING THE DEVELOPMENT, ALL WORK IN THE VICINITY MUST BE, BY LAW, HALTED, AND THE NAPA COUNTY CORONER INFORMED, SO THAT THE CORONER CAN DETERMINE IF AN INVESTIGATION OF THE CAUSE OF DEATH IS REQUIRED, AND IF THE REMAINS ARE OF NATIVE AMERICAN ORIGIN. IF THE REMAINS ARE OF NATIVE AMERICAN ORIGIN, THE NEAREST TRIBAL RELATIVES AS DETERMINED BY THE STATE NATIVE AMERICAN HERITAGE COMMISSION SHALL BE CONTACTED BY THE PERMITTEE TO OBTAIN RECOMMENDATIONS FOR TREATING OR REMOVAL OF SUCH REMAINS INCLUDING GRAVE GOODS, WITH APPROPRIATE DIGNITY, AS REQUIRED UNDER PUBLIC RESOURCES CODE SECTION 5097.98.

EXISTING UTILITY NOTES:

1.

THE EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. THEY ARE BASED ON INFORMATION PROVIDED BY THE PROPERTY OWNER, THE SURVEYOR AND THE RESPECTIVE UTILITY COMPANIES. APPLIED CIVIL ENGINEERING INCORPORATED ASSUMES NO LIABILITY REGARDING THE ACCURACY OR THE COMPLETENESS OF THEIR LOCATIONS.
2.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING UTILITY LOCATIONS PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION. IF A DISCREPANCY BETWEEN THE PLANNED AND ACTUAL HORIZONTAL OR VERTICAL LOCATION OF AN EXISTING UTILITY EXISTS, CONTACT APPLIED CIVIL ENGINEERING INCORPORATED FOR AN ALTERNATE DESIGN.
3.

CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITY COMPANIES TWO WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO MARK THE LOCATION OF EXISTING UTILITY LINES. CALL UNDERGROUND SERVICE ALERT (USA) AT (800) 227-2600.
4.

EXISTING UTILITIES ARE TO REMAIN IN SERVICE AT ALL TIMES. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES PER THE REQUIREMENTS OF THE UTILITY OWNER.
5.

CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY RELOCATIONS WITH THE UTILITY OWNER.

SURVEY NOTES:

1.

FADED BACKGROUND REPRESENTS EXISTING TOPOGRAPHIC FEATURES. TOPOGRAPHIC INFORMATION WAS TAKEN FROM ELEVATION DATA DERIVED FROM BARE-EARTH SURFACE DIGITAL ELEVATION MODELS (DEMS) CREATED FROM LIDAR DATA FLOWN IN 2018 IN RESPONSE TO THE WIDESPREAD 2017 FIRES IN NORTHERN CALIFORNIA AS PART OF ONGOING NATIONWIDE 3DEP (U.S. GEOLOGICAL SURVEY 3D ELEVATION PROGRAM) EFFORTS. APPLIED CIVIL ENGINEERING INCORPORATED ASSUMES NO LIABILITY REGARDING THE ACCURACY OR COMPLETENESS OF THE TOPOGRAPHIC INFORMATION.
2.

AERIAL PHOTOGRAPHS ARE NADIR IMAGES CAPTURED BY PICTOMETRY INTERNATIONAL DATED JULY 15, 2021 AND MAY NOT REPRESENT CURRENT CONDITIONS.
3.

CONTOUR INTERVAL: FIVE (5) FEET, HIGHLIGHTED EVERY TWENTY FIVE (25) FEET.
4.

VERTICAL DATUM: NAVD 88
5.

THE PROPERTY LINES SHOWN ON THESE PLANS DO NOT REPRESENT A BOUNDARY SURVEY. THEY ARE APPROXIMATE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
6.

CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS. ANY AT-RISK MONUMENTS SHALL BE IDENTIFIED BY A PRE-CONSTRUCTION CORNER RECORD SUBMITTED TO THE COUNTY SURVEYOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. PRE AND POST CONSTRUCTION CORNER RECORDS SHALL BE PREPARED AS NEEDED TO PERPETUATE LOCATIONS THAT ARE AT RISK DUE TO PROJECT ACTIVITIES. ALL WORK TO BE PERFORMED BY A LICENSED SURVEYOR. MONUMENTS AND MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED SUBJECT TO THE PROVISIONS OUTLINED ABOVE AT THE CONTRACTOR'S EXPENSE.
7.

ALL CONSTRUCTION STAKING SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR.

UTILITY NOTES:

STORM DRAIN PIPING NOTES:

1.

ALL STORM DRAIN PIPE 8" IN DIAMETER AND SMALLER IS TO BE SDR 35 PVC UNLESS OTHERWISE NOTED.
2.

ALL STORM DRAIN PIPE 12" IN DIAMETER AND LARGER IS TO BE ADS N-12 WITH WATER TIGHT JOINTS UNLESS OTHERWISE NOTED.
3.

ALL 4" DIAMETER STORM DRAIN PIPE IS TO BE INSTALLED WITH A MINIMUM SLOPE OF 1% UNLESS OTHERWISE NOTED.
4.

ALL 6" AND LARGER STORM DRAIN PIPE IS TO INSTALLED WITH A MINIMUM SLOPE OF 0.5% UNLESS OTHERWISE NOTED.
5.

ALL STORM DRAIN PIPE WITH LESS THAN ONE FOOT OF COVER (FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF CONCRETE) IS TO BE BACKFILLED WITH LEAN CONCRETE.

EROSION CONTROL NOTES:

1.

ALL EROSION CONTROL WORK WILL BE PERFORMED BY THE VINEYARD MANAGER IN ACCORDANCE WITH THIS APPROVED VINEYARD EROSION CONTROL PLAN.
2.

ALL DISTURBED AREAS MUST BE WINTERIZED BY OCTOBER 15TH OF EACH YEAR THAT THE PROJECT IS UNDER CONSTRUCTION, EXCEPT THE PORTION OF BLOCK C WITHIN THE MILKEN RESERVOIR WATERSHED WHERE GRADING MUST BE COMPLETE BY SEPTEMBER 1ST AND WINTERIZATION COMPLETED BY SEPTEMBER 15TH.
3.

A REQUEST TO ALLOW GRADING TO EXTEND BEYOND SEPTEMBER 1ST/OCTOBER 15TH MAY BE GRANTED BY THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT - CONSERVATION DIVISION IF A MAJORITY OF THE GRADING HAS BEEN COMPLETED AND THERE COULD BE A DETRIMENTAL EFFECT ON THE ENVIRONMENT IF THE REMAINING GRADING REMAINS INCOMPLETE. A REQUEST TO ALLOW GRADING TO EXTEND BEYOND THE WINTERIZATION DEADLINE MUST BE SUBMITTED IN WRITING TO NAPA COUNTY TWO WEEKS BEFORE GRADING DEADLINE. GRADING BEYOND THE WINTERIZATION DEADLINE WILL NOT BE ALLOWED PRIOR TO APPROVAL BY NAPA COUNTY.
4.

ALL PERMANENT DRAINAGE FACILITIES AND SEDIMENT RETENTION STRUCTURES MUST BE INSTALLED BY OCTOBER 1ST, EXCEPT THE PORTION OF BLOCK C WITHIN THE MILKEN RESERVOIR WATERSHED FACILITIES MUST BE INSTALLED BY SEPTEMBER 1ST.
5.

ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (WATER BARS, SILT FENCE & STRAW WATTLES) MUST BE INSTALLED BY OCTOBER 15TH, EXCEPT THE PORTION OF BLOCK C WITHIN THE MILKEN RESERVOIR WATERSHED FACILITIES MUST BE INSTALLED BY SEPTEMBER 15TH.
6.

ALL EROSION CONTROL MEASURES MUST BE INSPECTED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE RAINY SEASON (SEPTEMBER 15TH/OCTOBER 15TH THROUGH APRIL 1ST). INSPECTIONS MUST BE PERFORMED AT LEAST ONCE PER WEEK DURING EXTENDED DRY PERIODS, IMMEDIATELY BEFORE ANTICIPATED RAIN EVENTS, ONCE EVERY 24 HOURS DURING EXTENDED RAIN EVENTS AND IMMEDIATELY FOLLOWING EACH RAIN EVENT.
7.

ALL DISTURBED AREAS ARE TO BE STABILIZED BY PLANTING OF AN EROSION CONTROL COVER CROP PRIOR TO APPLYING THE EROSION CONTROL SEED BLEND, THE SEED BED SHOULD BE PREPARED BY UNIFORMLY SCARIFYING THE GROUND SURFACE TO A DEPTH OF TWO TO FOUR INCHES AND CONDITIONING TO BREAK UP LARGE PEDS.
8.

THE COVER CROP SEED BLEND SHOULD BE BROADCAST OR DRILLED AFTER THE SEED BED HAS BEEN PREPARED.
9.

A TEMPORARY TILLED COVER CROP WILL BE ESTABLISHED IN THE VINEYARD BLOCK AREAS FOR THE FIRST THREE YEARS AFTER PLANTING WHILE THE VINEYARD IS GETTING ESTABLISHED. THE TEMPORARY COVER CROP SEED MIX FOR THE VINEYARD ESTABLISHMENT SHOULD BE THE "SOIL BUILDER" AVAILABLE FROM NAPA VALLEY AG SUPPLY APPLIED AT A MINIMUM RATE OF 75 POUNDS PER ACRE:

COMMON VETCH	10%
CALIFORNIA RED OATS	20%
FIELD PEAS	30%
BELL BEANS	40%
10.

THE PERMANENT COVER CROP SEED MIX FOR ALL NO-TILL VINEYARD BLOCKS AND VINEYARD AVENUES SHOULD BE THE "VINTNER'S BLEND" AVAILABLE FROM NAPA VALLEY AG SUPPLY APPLIED AT A MINIMUM RATE OF 75 POUNDS PER ACRE:

CREEPING RED FESCUE	40%
CHEWING FESCUE	25%
DWARF PERENNIAL RYE	25%
ROSE CLOVER	8%
NEW ZEALAND WHITE CLOVER	2%
11.

ALTERNATE SEED MIX MAY BE USED BY THE VINEYARD MANAGER PROVIDED THAT ATTENTION IS GIVEN TO CHOOSING A COVER CROP THAT IS SUITABLE FOR THE SITE SOIL AND TOPOGRAPHIC CONDITIONS. ANY ALTERNATE SEED MIX MUST BE APPROVED BY THE ENGINEER AND THE NAPA COUNTY RESOURCE CONSERVATION DISTRICT PRIOR TO USE.
12.

ALL SEEDED AREAS ARE TO BE FERTILIZED TO PROMOTE SUCCESSFUL ESTABLISHMENT OF THE COVER CROP. THE RECOMMENDED FERTILIZER IS AMMONIUM PHOSPHATE (16-20-0) APPLIED AT A RATE OF 250 POUNDS PER ACRE.
13.

ADDITIONAL SOIL AMENDMENTS WILL BE ADDED BASED ON FUTURE SOILS TESTING REPORTS BY OTHERS. TYPICAL AMENDMENTS INCLUDE: COMPOSTED ORGANIC MATTER, LIME AND / OR GYPSUM. THE AMENDMENTS SHOULD BE INCORPORATED DURING THE LAND PREPARATION PROCESS TO INCREASE SOIL NUTRIENT CONTENT AND AVAILABILITY, AND TO IMPROVE SOIL STRUCTURE AND WATER HOLDING CAPACITY.
14.

AFTER THE SEED AND FERTILIZER HAVE BEEN PLACED THE SEEDED AREA SHOULD BE RAKED, DRAGGED OR HARROWED TO ENSURE THAT SEEDS ARE PROPERLY BEDDED.
15.

ALL DISTURBED AREAS ARE TO BE MULCHED WITH STRAW AT A RATE OF 3,000 POUNDS PER ACRE TO PROTECT THE BARE SOILS WHILE THE COVER CROP IS GETTING ESTABLISHED.
16.

STRAW SHOULD BE SPREAD BY HAND IN A MANNER THAT PROMOTES FORMATION OF AN INTERWOVEN MATRIX. CRIMPING STRAW INTO THE SOIL IS HIGHLY RECOMMENDED ESPECIALLY ON WINDY SITES AND IS MANDATORY ON SITES WHERE STRAW IS MECHANICALLY CHOPPED AND BLOWN INTO PLACE.
17.

ALL SOIL CUT AND FILL SLOPES THAT ARE STEEPER THAN 4:1 (HORIZONTAL TO VERTICAL) MUST BE COVERED WITH NORTH AMERICAN GREEN C125BN EROSION CONTROL BLANKET AFTER THE EROSION CONTROL SEED AND FERTILIZER HAVE BEEN PLACED.
18.

CONTRACTOR MUST MAINTAIN AN ADEQUATE SUPPLY OF EROSION CONTROL MATERIALS ONSITE TO FACILITATE MAINTENANCE AND REPAIR THROUGHOUT THE RAINY SEASON. TYPICAL MATERIALS THAT SHOULD BE KEPT ONSITE INCLUDE SILT FENCE AND STRAW WATTLE SEDIMENT BARRIERS, GRAVEL BAGS, EROSION CONTROL BLANKETS, STRAW AND EROSION CONTROL SEED MIX.

EROSION CONTROL COVER CROP MANAGEMENT NOTES:

1.

ESTABLISHING AN EFFECTIVE VEGETATIVE COVER CROP WILL BE THE PRIMARY MEANS OF PREVENTING EROSION FROM THE PROPOSED VINEYARD DEVELOPMENT AREA. AFTER THE INITIAL LAND PREPARATION ACTIVITIES ARE COMPLETE A TEMPORARY COVER CROP WILL BE PLANTED AND STRAW MULCH WILL BE APPLIED THROUGHOUT THE CLEARED AREA TO STABILIZE THE PROJECT AREAS THROUGH THE WINTER. A MINIMUM COVERAGE OF 85% IN BLOCKS A AND B, 75% IN BLOCK C IS REQUIRED TO MAINTAIN EROSION RATES AT ACCEPTABLE LEVELS.
2.

THE TEMPORARY COVER CROP WILL BE TILLED IN THE SPRING DURING THE INITIAL VINEYARD ESTABLISHMENT PERIOD (UP TO THE FIRST THREE YEARS). THE TILLED AREAS AND ANY OTHER DISTURBED AREAS OR AREAS WITH LESS THAN ADEQUATE COVER WILL ALSO BE MULCHED EACH YEAR IN THE FALL TO PROTECT THE BARE SOIL WHILE THE COVER CROP IS GETTING ESTABLISHED.
3.

AFTER THE VINEYARD ESTABLISHMENT PERIOD ALL VINEYARD BLOCKS WILL BE CONVERTED TO A NO-TILL REGIME. THE NO-TILL COVER CROP WILL BE MOWED IN THE SPRING AND WILL BE RESEEDED AND MULCHED IN THE FALL AS NECESSARY TO ACHIEVE THE SPECIFIED 85% IN BLOCKS A AND B, 75% IN BLOCK COVER.
4.

ALL VINEYARD AVENUES WILL BE PROTECTED WITH A PERMANENT NO-TILL COVER CROP WITH DENSITIES MAINTAINED AT 85% IN BLOCKS A AND B, 75% IN BLOCK C OR MORE THROUGHOUT THE RAINY SEASON. VINEYARD AVENUES SHALL NOT BE TILLED.
5.

THE COVER CROP SHOULD BE IRRIGATED PRIOR TO THE RAINY SEASON TO ESTABLISH A DENSE COVER PRIOR TO THE ONSET OF HEAVY RAINS. THIS IS ESPECIALLY IMPORTANT IN EROSION PRONE AREAS SUCH AS VINEYARD AVENUES AND MORE STEEPLY SLOPING AREAS. IN ORDER TO EFFECTIVELY ESTABLISH COVER, AT LEAST TWO INCHES OF WATER SHOULD BE APPLIED TO GERMINATE THE SEEDS. WATER SHOULD BE APPLIED BY SPRINKLER OR MICROSPRAYERS AT A RATE THAT DOES NOT CAUSE RUNOFF OR EROSION. ADDITIONAL WATER SHOULD BE APPLIED, AS NECESSARY, TO ACHIEVE THE DESIGN COVER PERCENTAGE AND TO MAINTAIN THE COVER CROP UNTIL SUFFICIENT RAINFALL OCCURS. IF ADEQUATE WATER IS NOT AVAILABLE TO IRRIGATE THE ENTIRE PROJECT AREA THEN 20 FOOT WIDE STRIPS, ORIENTATED ALONG THE CONTOUR, SHOULD BE IRRIGATED. LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

ABBREVIATIONS:

AB	AGGREGATE BASE	MIN	MINIMUM
AC	ASPHALT CONCRETE	(N)	NEW
AD	AREA DRAIN	NO	NUMBER
AP	ANGLE POINT	OC	ON CENTER
BTM	BOTTOM	OD	OUTSIDE DIAMETER
CLR	CLEAR	OG	ORIGINAL GRADE
CONF	CONFORM	(P)	PROPOSED
CP	CONTROL POINT	PC	POINT OF CURVATURE
DCV	DOUBLE CHECK VALVE	PCC	PORTLAND CEMENT CONCRETE
DI	DROP INLET	PIV	POST INDICATOR VALVE
DN	DOCUMENT NUMBER	PL	PROPERTY LINE
DOC	DOCUMENT	PT	POINT OF TANGENCY
DS	DOWN SPOUT	PVC	POLYVINYL CHLORIDE
(E)	EXISTING	PW	PROCESS WASTE
EC	END CURVE	PWCO	PROCESS WASTE CLEANOUT
ELEV	ELEVATION	RSV	RECIRCULATING SPLITTER VALVE
EP	EDGE OF PAVEMENT	SAD	SEE ARCHITECTURAL DRAWINGS
EPB	ELECTRICAL PULL BOX	SD	STORM DRAIN
EOC	EDGE OF CONCRETE	SDCO	STORM DRAIN CLEANOUT
(F)	FUTURE	SDMH	STORM DRAIN MANHOLE
FDC	FIRE DEPARTMENT CONNECTION	SED	SEE ELECTRICAL DRAWINGS
FF	FINISH FLOOR	SF	SQUARE FEET
FG	FINISH GRADE	SHLDR	SHOULDER
FL	FIRE HYDRANT	SLD	SEE LANDSCAPE DRAWINGS
FL	FLOW LINE	SHD	SEE MECHANICAL DRAWINGS
FS	FINISH SURFACE	SPD	SEE PLUMBING DRAWINGS
FSR	FIRE SPRINKLER RISER	SSD	SEE STRUCTURAL DRAWINGS
GB	GRADE BREAK	SS	SANITARY SEWER
GM	GAS METER	SSCO	SANITARY SEWER CLEANOUT
HMA	HOT MIX ASPHALT	SSMH	SANITARY SEWER MANHOLE
HP	HIGH POINT	TC	TOP FACE OF CURB
INV	INVERT	TD	TERRACE DRAIN
IPS	IRON PIPE SIZE	TW	TOP OF WALL
IRR	IRRIGATION	TY	TYPICAL
LF	LINEAR FEET	WM	WATER METER
LP	LOW POINT	WV	WATER VALVE
MAX	MAXIMUM	XFMR	TRANSFORMER

PREPARED UNDER THE DIRECTION OF:



DRAWN BY:
PowerCAD LLC

CHECKED BY:
MRM

DATE:
FEBRUARY 15, 2024

REVISIONS: BY:
2/15/2024 YMS/KH
PERMIT SUBMITTAL

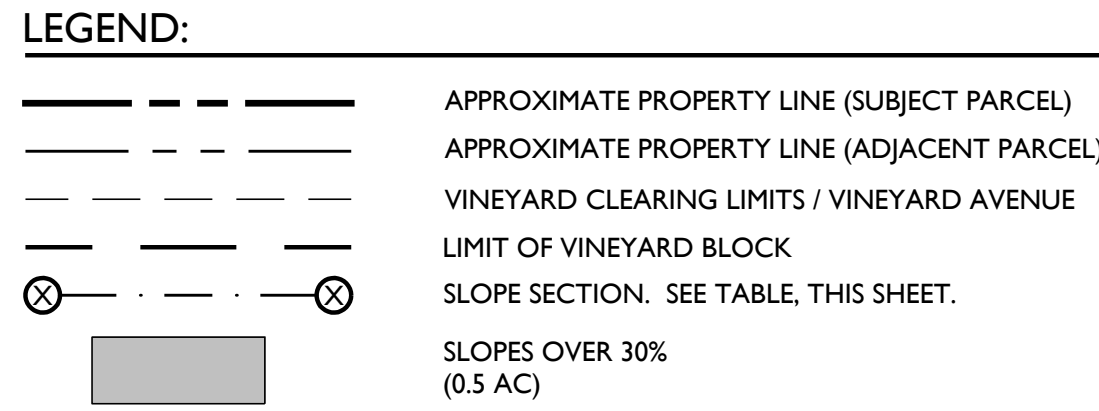
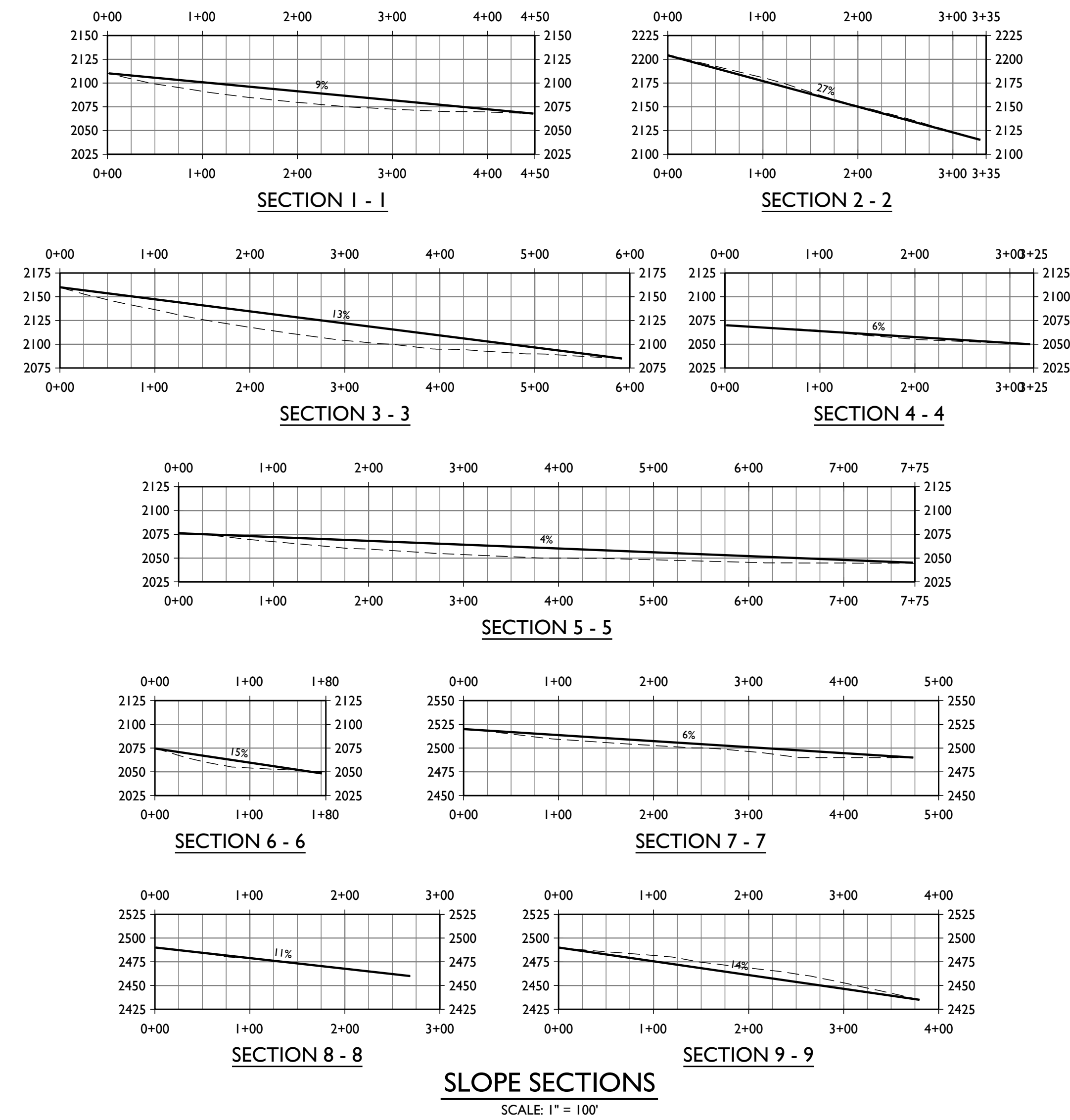
6/14/2024 KH
RESPONSE TO COMMENTS

JOB NUMBER:
21-115

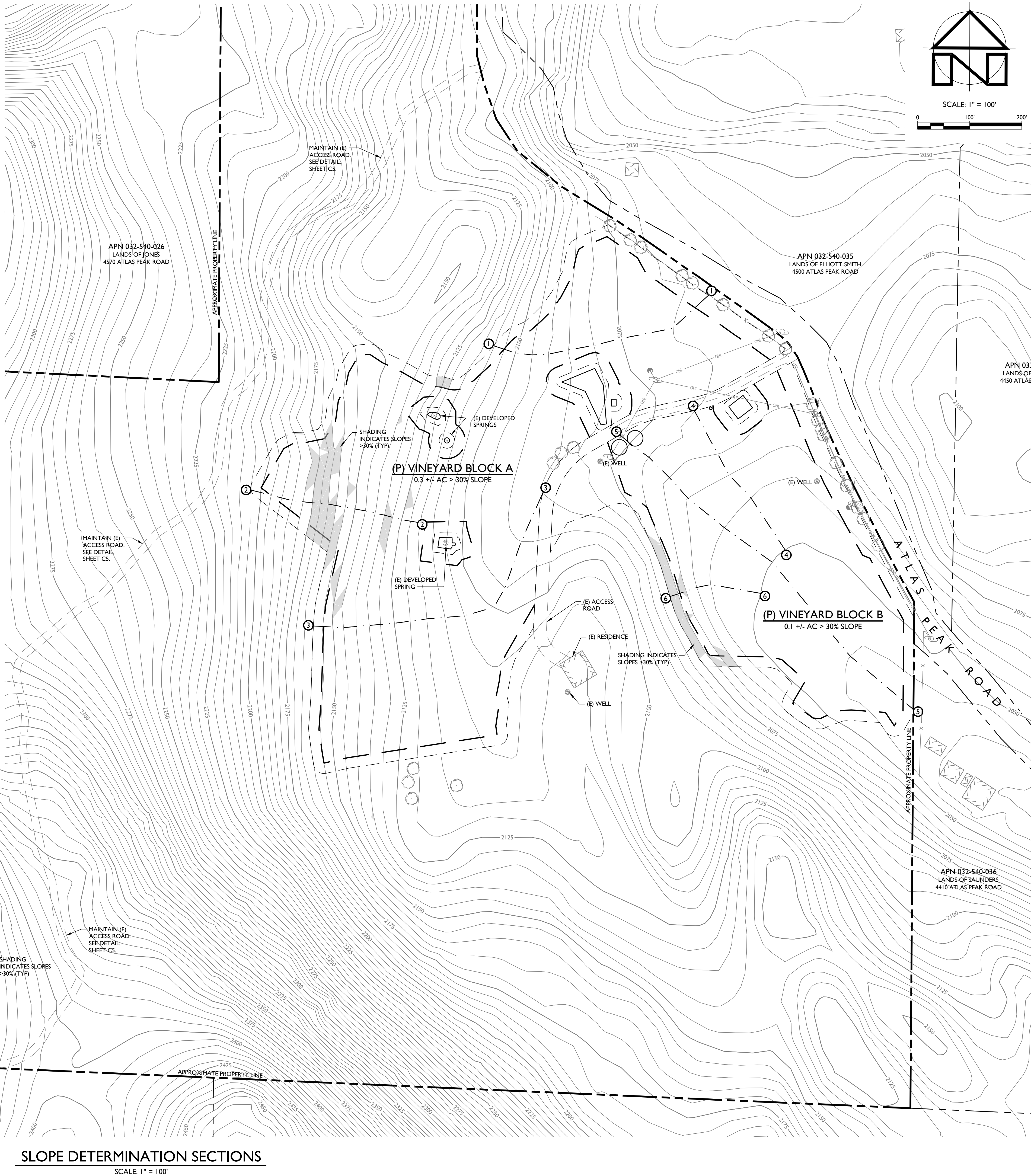
FILE:
21-115ECP-NOTES.DWG

ORIGINAL SIZE:
24" X 36"

SHEET NUMBER:



VINEYARD SLOPE SECTIONS		
BLOCK A		
1 - 1	9%	
2 - 2	27%	
3 - 3	13%	
BLOCK B		
4 - 4	6%	
5 - 5	4%	
6 - 6	15%	
BLOCK C		
7 - 7	6%	
8 - 8	11%	
9 - 9	14%	
AVERAGE	12%	



SLOPE DETERMINATION SECTIONS
SCALE: 1" = 100'

MEKA VINEYARD

VINEYARD DEVELOPMENT EROSION CONTROL PLAN

SLOPE DETERMINATION PLAN

PREPARED UNDER THE
DIRECTION OF:



DRAWN BY:
PowerCAD LLC

CHECKED BY:
MRM

DATE:
FEBRUARY 15, 2024

REVISIONS: BY:
2/15/2024 YMS/KH
PERMIT SUBMITTAL

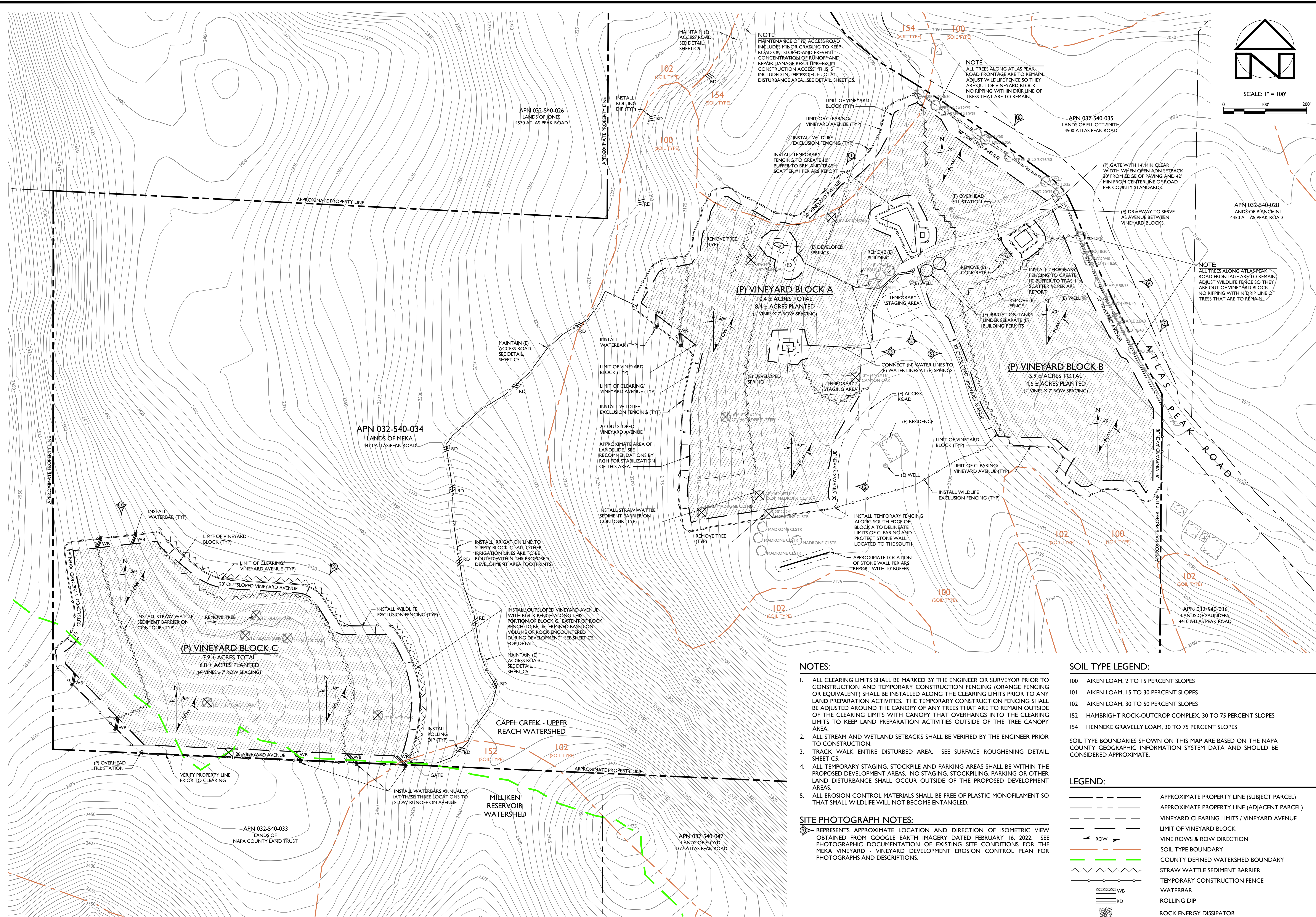
6/14/2024 KH
RESPONSE TO
COMMENTS

JOB NUMBER:
21-115

FILE:
21-115ECP-PLAN.DWG

ORIGINAL SIZE:
24" X 36"

SHEET NUMBER:



EROSION CONTROL PLAN
SCALE: 1" = 100'

NOTES:

- ALL CLEARING LIMITS SHALL BE MARKED BY THE ENGINEER OR SURVEYOR PRIOR TO CONSTRUCTION AND TEMPORARY CONSTRUCTION FENCING (ORANGE FENCING OR EQUIVALENT) SHALL BE INSTALLED ALONG THE CLEARING LIMITS PRIOR TO ANY LAND PREPARATION ACTIVITIES. THE TEMPORARY CONSTRUCTION FENCING SHALL BE ADJUSTED AROUND THE CANOPY OF ANY TREES THAT ARE TO REMAIN OUTSIDE OF THE CLEARING LIMITS WITH CANOPY THAT OVERHANGS INTO THE CLEARING LIMITS TO KEEP LAND PREPARATION ACTIVITIES OUTSIDE OF THE TREE CANOPY AREA.
- ALL STREAM AND WETLAND SETBACKS SHALL BE VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- TRACK WALK ENTIRE DISTURBED AREA. SEE SURFACE ROUGHENING DETAIL, SHEET C5.
- ALL TEMPORARY STAGING, STOCKPILE AND PARKING AREAS SHALL BE WITHIN THE PROPOSED DEVELOPMENT AREAS. NO STAGING, STOCKPILING, PARKING OR OTHER LAND DISTURBANCE SHALL OCCUR OUTSIDE OF THE PROPOSED DEVELOPMENT AREAS.
- ALL EROSION CONTROL MATERIALS SHALL BE FREE OF PLASTIC MONOFILAMENT SO THAT SMALL WILDLIFE WILL NOT BECOME ENTANGLED.

SITE PHOTOGRAPH NOTES:

REPRESENTS APPROXIMATE LOCATION AND DIRECTION OF ISOMETRIC VIEW OBTAINED FROM GOOGLE EARTH IMAGERY DATED FEBRUARY 16, 2022. SEE PHOTOGRAPHIC DOCUMENTATION OF EXISTING SITE CONDITIONS FOR THE MEKA VINEYARD - VINEYARD DEVELOPMENT EROSION CONTROL PLAN FOR PHOTOGRAPHS AND DESCRIPTIONS.

SOIL TYPE LEGEND:

- | | |
|-----|---|
| 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 |

SOIL TYPE BOUNDARIES SHOWN ON THIS MAP ARE BASED ON THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATA AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND:

- | | |
|-----|---|
| --- | APPROXIMATE PROPERTY LINE (SUBJECT PARCEL) |
| --- | APPROXIMATE PROPERTY LINE (ADJACENT PARCEL) |
| --- | VINEYARD CLEARING LIMITS / VINEYARD AVENUE |
| --- | LIMIT OF VINEYARD BLOCK |
| --- | VINE ROWS & ROW DIRECTION |
| --- | SOIL TYPE BOUNDARY |
| --- | COUNTY DEFINED WATERSHED BOUNDARY |
| --- | STRAW WATTLE SEDIMENT BARRIER |
| --- | TEMPORARY CONSTRUCTION FENCE |
| --- | WATERBAR |
| --- | ROLLING DIP |
| --- | ROCK ENERGY DISSIPATOR |
| --- | PHOTO LOCATION AND DIRECTION |

MEKA VINEYARD
VINEYARD DEVELOPMENT EROSION CONTROL PLAN
EROSION CONTROL PLAN

PREPARED UNDER THE
DIRECTION OF:



DRAWN BY:
PowerCAD LLC

CHECKED BY:
MRM

DATE:
FEBRUARY 15, 2024

REVISIONS: BY:
2/15/2024 YMS/KH
PERMIT SUBMITTAL

6/14/2024 KH
RESPONSE TO
COMMENTS

JOB NUMBER:
21-115

FILE:
21-115ECP-PLAN.DWG

ORIGINAL SIZE:
24" X 36"

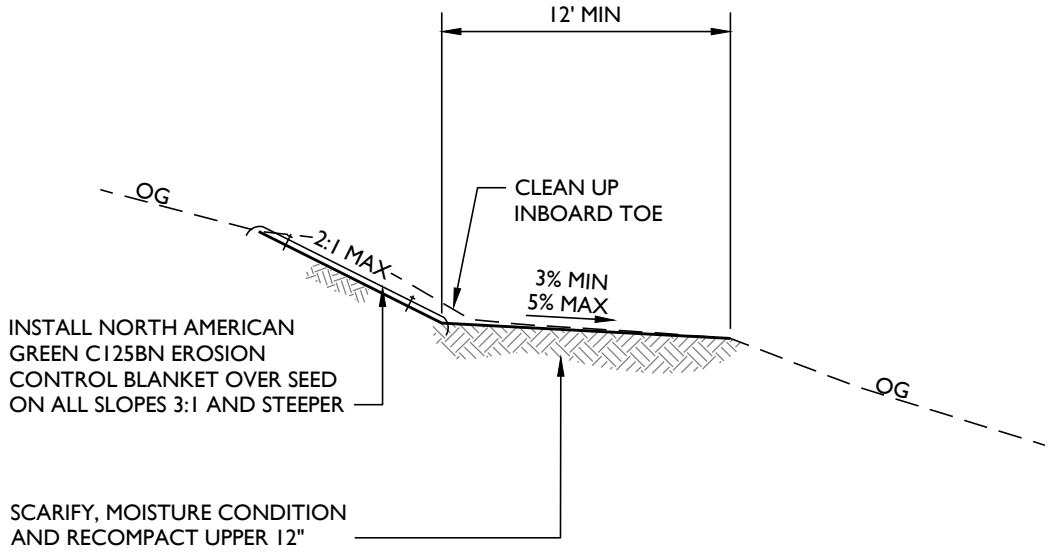
SHEET NUMBER:

C4

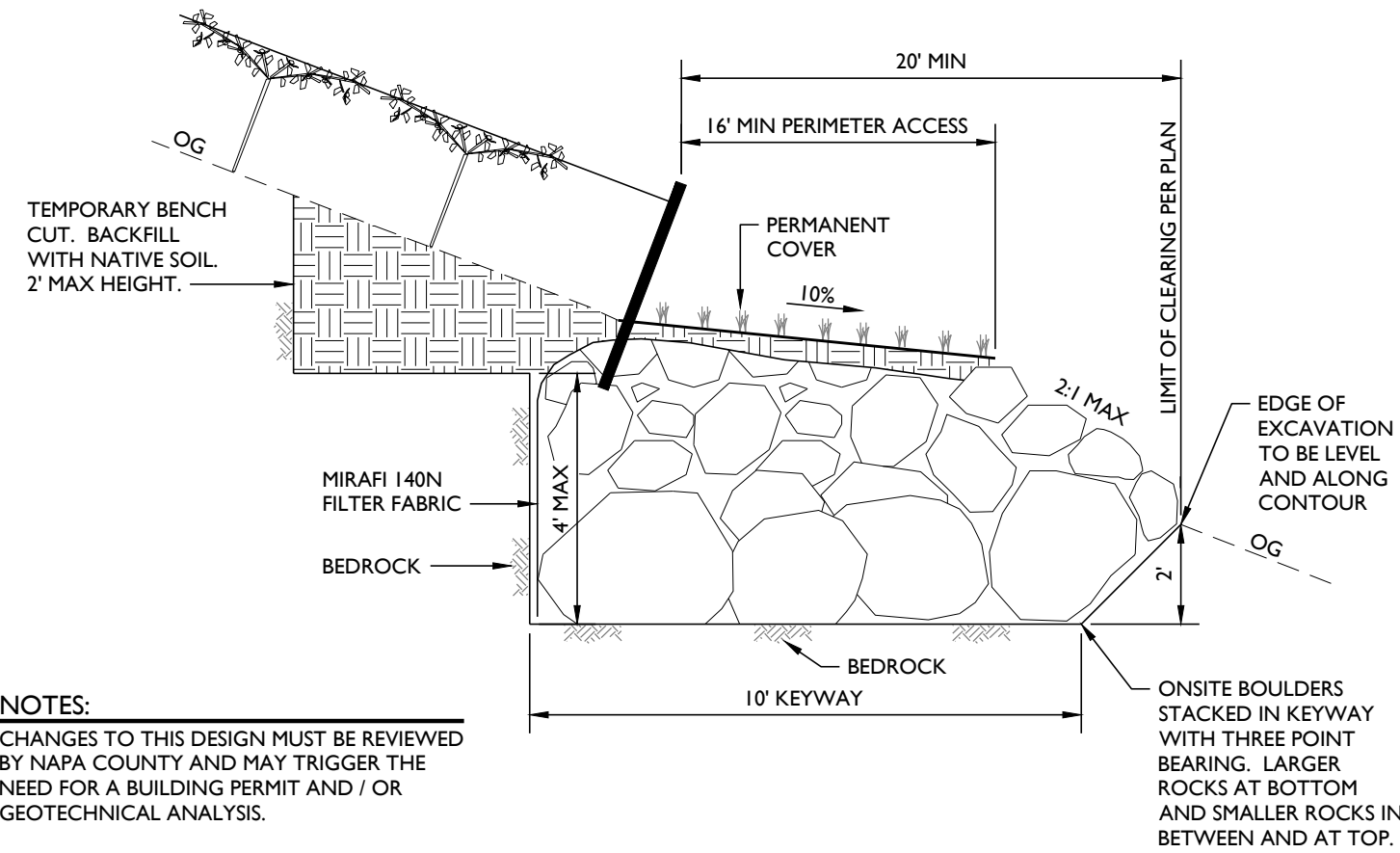
OF

NOTES:

1. EXCESS SOIL FROM INBOARD TOE CLEAN UP SHALL BE SPREAD IN A THIN LAYER IN THE VINEYARD FOOTPRINT.
2. WIDTH MY BE REDUCED TO 10' MINIMUM IN AREAS NEEDED TO ACCOMMODATE TOPOGRAPHIC CONSTRAINTS.
3. INTENT IS TO KEEP ALL WORK WITHIN EXISTING ROAD PRISM. NO TREE REMOVAL OR SIGNIFICANT GRADING IS PLANNED.



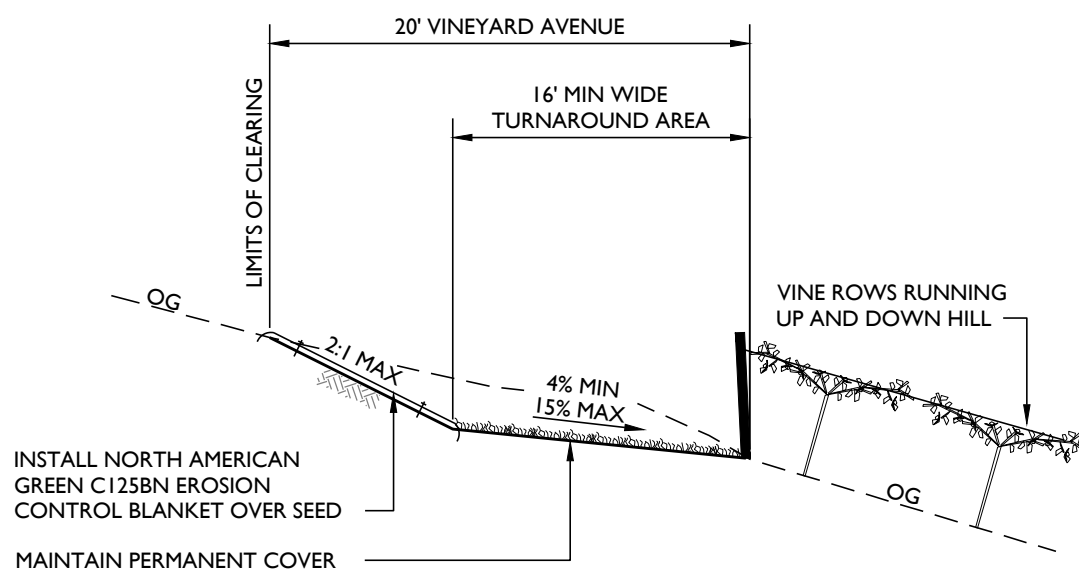
TYPICAL ACCESS ROAD
MAINTENANCE DETAIL



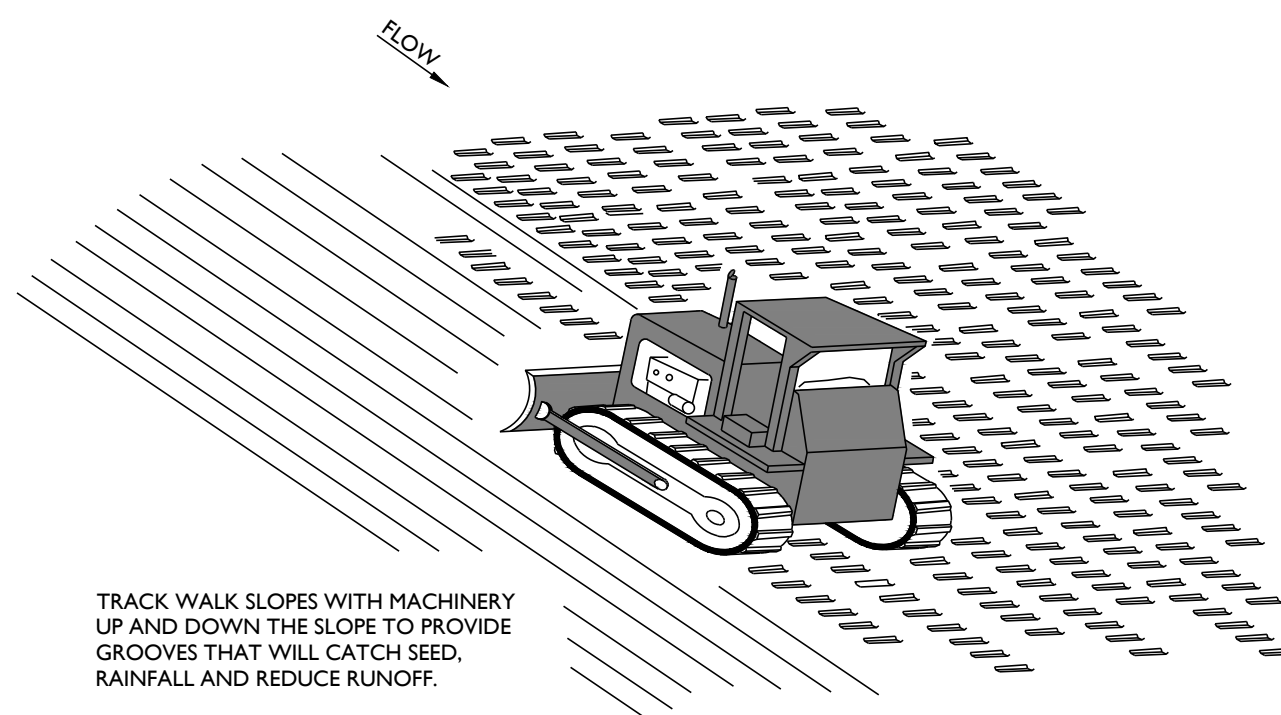
NOTES:

- CHANGES TO THIS DESIGN MUST BE REVIEWED BY NAPA COUNTY AND MAY TRIGGER THE NEED FOR A BUILDING PERMIT AND / OR GEOTECHNICAL ANALYSIS.

OUTSLOPED VINEYARD AVENUE
AT BOTTOM OF BLOCK WITH ROCK BENCH DETAIL



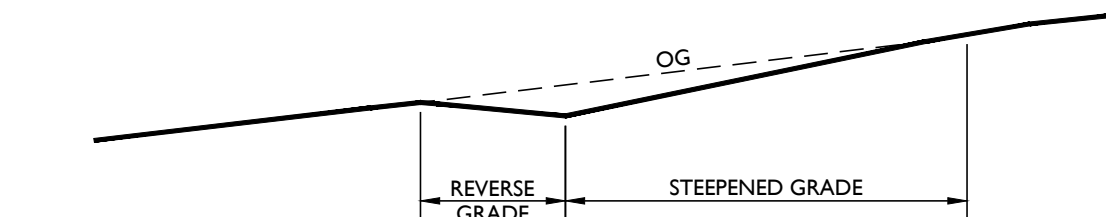
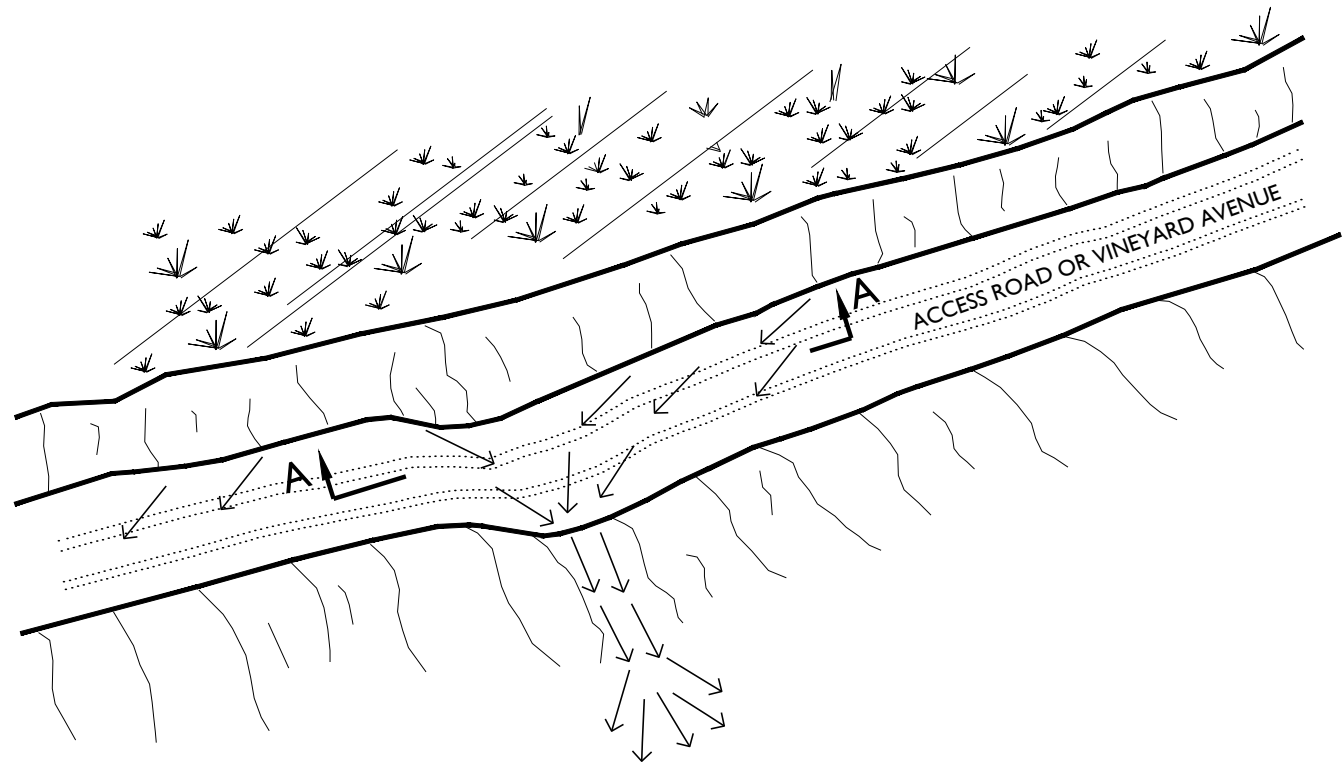
OUTSLOPED VINEYARD AVENUE
AT TOP OF BLOCK DETAIL



SURFACE ROUGHENING DETAIL

NOTES:

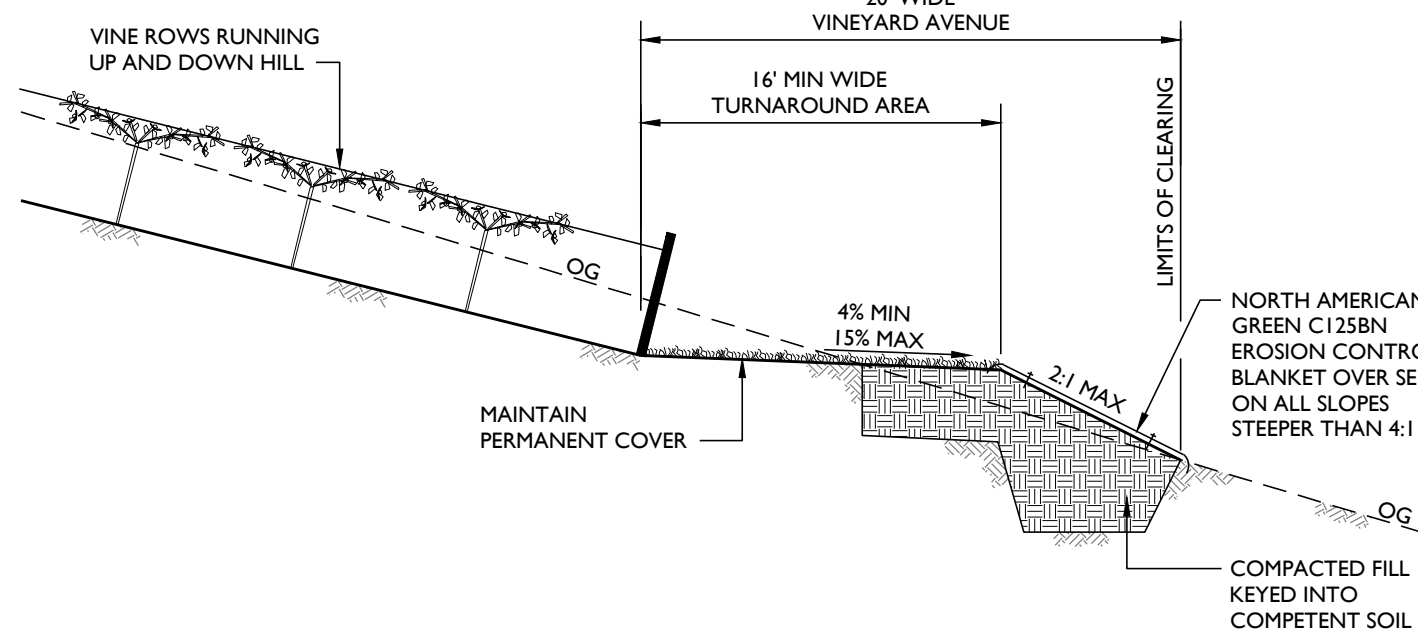
1. ROLLING DIPS WILL BE INSTALLED IN THE ROADBED AS NEEDED TO DRAIN THE ROAD SURFACE.
2. ROLLING DIPS WILL BE SLOPED EITHER INTO THE DITCH OR TO THE OUTSIDE OF THE ROAD EDGE AS REQUIRED TO PROPERLY DRAIN THE ROAD.
3. ROLLING DIPS ARE USUALLY BUILT AT 30 TO 45 DEGREE ANGLES TO THE ROAD ALIGNMENT WITH CROSS ROAD GRADE OF AT LEAST 1% GREATER THAN THE GRADE OF THE ROAD.
4. EXCAVATION FOR THE DIPS WILL BE DONE WITH A MEDIUM-SIZE BULLDOZER OR SIMILAR EQUIPMENT.
5. EXCAVATION OF THE DIPS WILL BEGIN 50 TO 100 FEET UP ROAD FROM WHERE THE AXIS OF THE DIP IS PLANNED AS PER GUIDELINES ESTABLISHED IN THE ROLLING DIP DIMENSIONS TABLE.
6. MATERIAL WILL BE PROGRESSIVELY EXCAVATED FROM THE ROADBED, STEEPENING THE GRADE UNTIL THE AXIS IS REACHED.
7. THE DEPTH OF THE DIP WILL BE DETERMINED BY THE GRADE OF THE ROAD (SEE TABLE B LOW).
8. ON THE DOWN ROAD SIDE OF THE ROLLING DIP AXIS, A GRADE CHANGE WILL BE INSTALLED TO PREVENT THE RUNOFF FROM CONTINUING DOWN THE ROAD (SEE FIGURE BELOW).
9. THE RISE IN THE REVERSE GRADE WILL BE CARRIED FOR ABOUT 10 TO 20 FEET AND THEN RETURN TO THE ORIGINAL SLOPE.
10. THE TRANSITION FROM AXIS TO BOTTOM, THROUGH RISING GRADE TO FALLING GRADE, WILL BE IN A ROAD DISTANCE OF AT LEAST 15 TO 30 FEET.



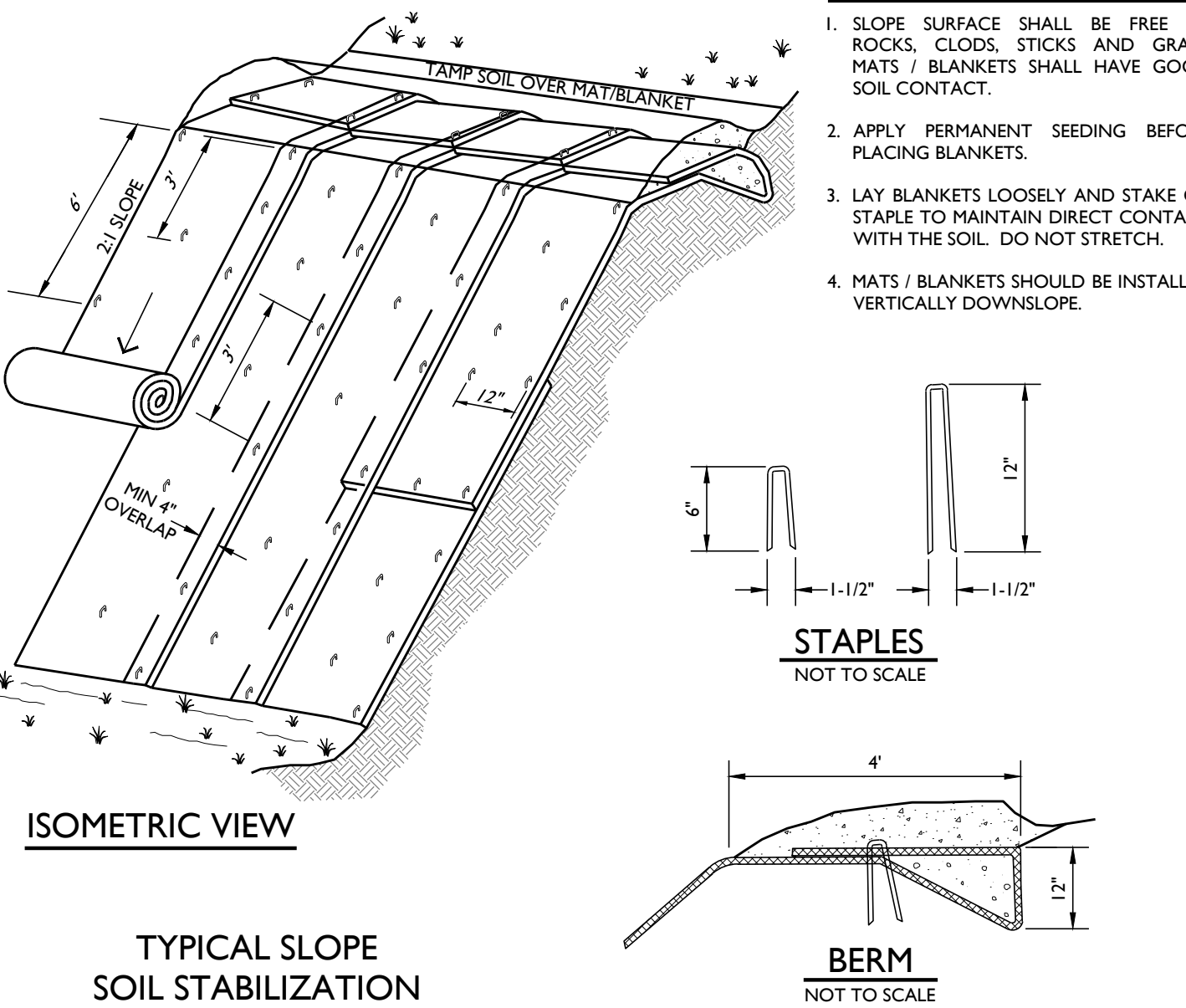
SECTION

TABLE OF ROLLING DIP DIMENSIONS BY ROAD GRADE				
ROAD GRADE	UPSLOPE APPROACH DISTANCE (FROM UP ROAD START TO TROUGH)	REVERSE GRADE DISTANCE (FROM TROUGH TO CREST)	DEPTH AT TROUGH OUTLET (BELOW AVERAGE ROAD GRADE)	DEPTH AT TROUGH INLET (BELOW AVERAGE ROAD GRADE)
<6 %	55 FT	15 - 20 FT	0.9 FT	0.9 FT
8 %	65 FT	15 - 20 FT	1.0 FT	1.0 FT
10 %	75 FT	15 - 20 FT	1.1 FT	1.1 FT
12 %	85 FT	20 - 25 FT	1.2 FT	1.2 FT
≥12 %	100 FT	20 - 25 FT	1.3 FT	1.3 FT

ROLLING DIP DETAIL



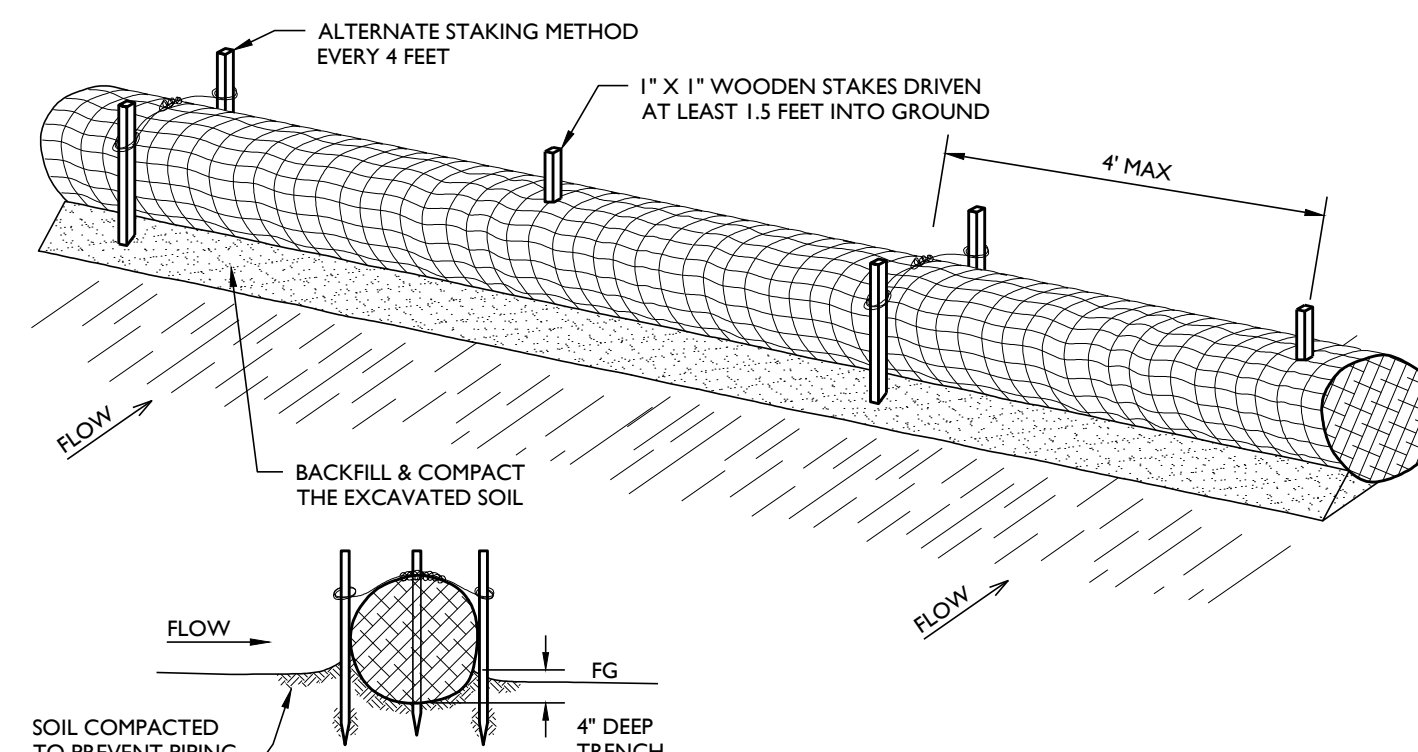
OUTSLOPED VINEYARD AVENUE
AT BOTTOM OF BLOCK DETAIL



TYPICAL SLOPE
SOIL STABILIZATION

EROSION CONTROL BLANKET DETAIL

- NOTES:
1. PREPARE SMOOTH SLOPE BEFORE THE WATTLING PROCEDURE IS STARTED. SHALLOW GULLIES SHOULD BE SMOOTHED AS WORK PROGRESSES.
 2. DIG SMALL TRENCHES ACROSS THE SLOPE ON CONTOUR, TO PLACE ROLLS IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE ONE THIRD TO ONE HALF THE THICKNESS OF THE ROLL. WHEN THE SOIL IS LOOSE AND UNCOMPACTED, THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE ROLL 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE.
 3. IT IS CRITICAL THAT ROLLS ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT. PARALLEL TO THE SLOPE CONTOUR. A HAND LEVEL, LASER LEVEL OR EQUIVALENT TYPE OF INSTRUMENT SHOULD BE USED TO ENSURE LEVEL INSTALLATION. START DIGGING TRENCHES AND INSTALL ROLLS FROM THE BOTTOM OF THE SLOPE AND WORK UP.
 4. LAY THE ROLL ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.
 5. USE A STRAIGHT BAR TO DRIVE CLEAN HOLES THROUGH THE WATTLE AND INTO THE SOIL. DRIVE THE STAKE THROUGH PREPARED HOLE INTO SOIL. LEAVE ONLY 1 OR 2 INCHES OF STAKE EXPOSED ABOVE ROLL.
 6. INSTALL STAKES AT 4 FEET MAX INTERVALS.
 7. USE EXCAVATED MATERIAL TO CREATE COMPACTED BERM ON UPSLOPE SIDE OF ROLL TO PREVENT WATER FROM PIPING UNDER ROLL AND FORCE IT TO FILTER THROUGHOUT THE ROLL.
 8. ENDS OF ROLLS SHOULD BE OVERLAPPED 1' AND SHOULD BE SECURELY STAKED TO PREVENT WATER PASSAGE THROUGH THE JOINT.
 9. WATTLES WITH PLASTIC NETTING MUST BE REMOVED AFTER THE WET SEASON HAS ENDED.



FIBER ROLL / WATTLE SEDIMENT BARRIER DETAIL

PREPARED UNDER THE
DIRECTION OF:



DRAWN BY:
PowerCAD LLC

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