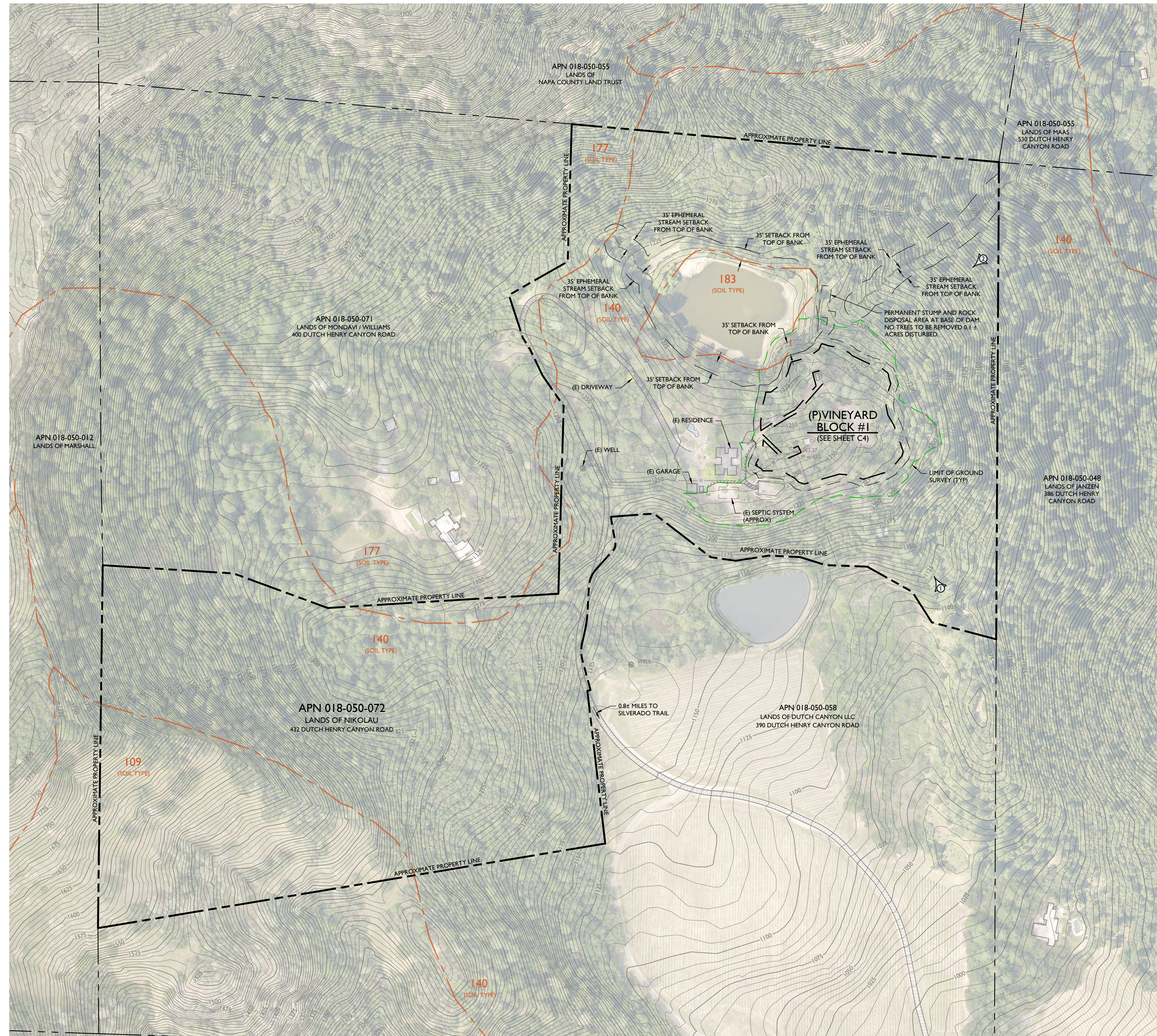
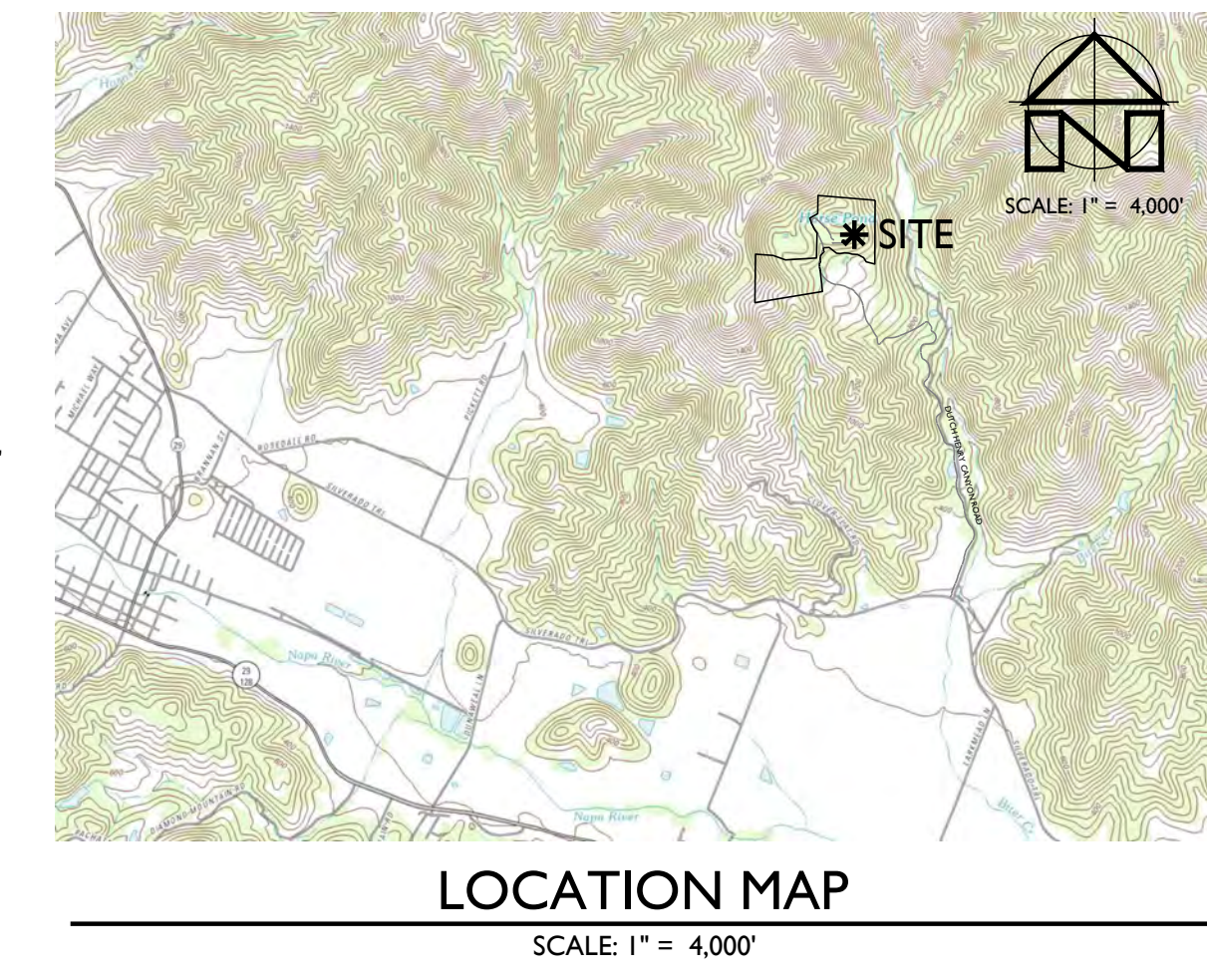
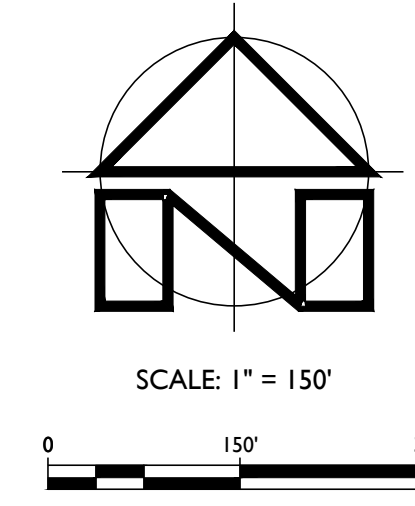


NIKOLAU VINEYARDS

VINEYARD DEVELOPMENT EROSION CONTROL PLAN



OVERALL SITE PLAN
SCALE: 1" = 150'



PROJECT INFORMATION:
PROPERTY OWNER & APPLICANT:
 PAUL AND JOYCE NIKOLAU
 3382 GILBERT DRIVE
 HUNTINGTON BEACH, CA 92649
SITE ADDRESS:
 432 DUTCH HENRY CANYON ROAD
 CALISTOGA, CA 94515
ASSESSOR'S PARCEL NUMBER:
 018-050-072
PARCEL SIZE:
 60 ± ACRES
PROJECT SIZE:
 3.4 ± ACRES TOTAL DISTURBED AREA
 2.5 ± ACRES PLANTED
ZONING:
 AGRICULTURAL WATERSHED (AW)
DOMESTIC AND IRRIGATION WATER SOURCE:
 PRIVATE WELL

SHEET INDEX:
 C1 OVERALL SITE PLAN
 C2 NOTES, ABBREVIATIONS AND LEGEND
 C3 SLOPE DETERMINATION SECTIONS AND TREE REMOVAL PLAN
 C4 EROSION CONTROL PLAN
 C5 DETAILS

FLOOD HAZARD NOTE:
 ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 06055C0235E, EFFECTIVE SEPTEMBER 26, 2008, THE PROJECT SITE IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA.

LEGEND:

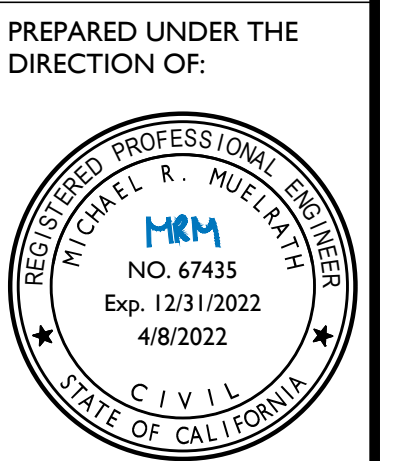
- APPROXIMATE PROPERTY LINE
- - - PROPOSED VINEYARD AVENUE
- - - PROPOSED VINEYARD BLOCK
- - - SOIL TYPE BOUNDARY
- ⊙ PHOTOGRAPH DIRECTION

SOIL TYPE LEGEND:

- 109 BOOMER GRAVELLY LOAM, 30 TO 50 PERCENT SLOPES
- 140 FORWARD GRAVELLY LOAM, 30 TO 75 PERCENT SLOPES
- 177 ROCK OUTCROP-KIDD COMPLEX, 50 TO 75 PERCENT SLOPES
- 183 WATER

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

SITE PHOTOGRAPH NOTES:
 ⊙ REPRESENTS APPROXIMATE LOCATION AND DIRECTION OF ISOMETRIC VIEW OBTAINED FROM GOOGLE EARTH IMAGERY DATED SEPTEMBER 10, 2021. SEE PHOTOGRAPHIC DOCUMENTATION OF EXISTING SITE CONDITIONS FOR THE NIKOLAU VINEYARDS VINEYARD DEVELOPMENT EROSION CONTROL PLAN FOR PHOTOGRAPHS AND DESCRIPTIONS.



PREPARED UNDER THE DIRECTION OF:

DRAWN BY:	PowerCAD LLC
CHECKED BY:	MRM
DATE:	APRIL 5, 2022
REVISIONS:	BY:
12/23/2021	YMS
PERMIT SUBMITTAL	
4/8/2022	YMS
REVISION #1	

JOB NUMBER:	20-138
FILE:	20-138ECP-OSP.DWG
ORIGINAL SIZE:	24" X 36"
SHEET NUMBER:	

GENERAL NOTES:

- 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.
- 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:
 - CALIFORNIA BUILDING CODE (2019)
 - CALIFORNIA ELECTRIC CODE (2019)
 - CALIFORNIA PLUMBING CODE (2019)
 - CALIFORNIA MECHANICAL CODE (2019)
 - CALIFORNIA FIRE CODE (2019)
 - CALIFORNIA DEPARTMENT OF TRANSPORTATION (2018)
 - NAPA COUNTY CODE (CURRENT)
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR BEING FAMILIAR WITH ALL STANDARDS, CODES AND REGULATIONS APPLICABLE TO THIS PROJECT.
- CONTRACTOR SHALL BE APPROPRIATELY LICENSED WITH THE STATE OF CALIFORNIA TO PERFORM THE WORK SHOWN ON THESE PLANS.
- CONTRACTOR SHALL SUPPLY ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO CONSTRUCT THE IMPROVEMENTS ILLUSTRATED ON THESE PLANS.
- 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.
- 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.
- 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.
- 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.
- CONTRACTOR SHALL CONTACT THE NAPA COUNTY PUBLIC WORKS, FIRE AND SHERIFF DEPARTMENTS TO PROVIDE EMERGENCY TELEPHONE NUMBERS AND KEEP THE DEPARTMENTS INFORMED DAILY OF ANY STREETS THAT ARE UNDER CONSTRUCTION AND DETOURS. DETOURS ARE NOT PERMITTED UNLESS APPROVED IN ADVANCE IN WRITING BY THE NAPA COUNTY PUBLIC WORKS DEPARTMENT.
- 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.
- 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.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN BARRICADES TO PROVIDE FOR THE SAFETY OF THE GENERAL PUBLIC TO THE SATISFACTION OF NAPA COUNTY AND THE OWNER.
- THESE PLANS ARE INTENDED TO PROVIDE HORIZONTAL AND VERTICAL CONTROL FOR THE PROPOSED SITE IMPROVEMENTS SHOWN HEREON.
- ALL DIMENSIONS SHOWN ON THESE PLANS SHOW MEASUREMENTS IN A HORIZONTAL PLANE UNLESS OTHERWISE SPECIFIED.
- ALL WRITTEN DIMENSIONS SUPERCEDE ANY SCALED DIMENSIONS. IF AN APPARENT DISCREPANCY IS IDENTIFIED CONTACT APPLIED CIVIL ENGINEERING INCORPORATED IMMEDIATELY FOR A WRITTEN CLARIFICATION.
- 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.
- 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.
- 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.

SURVEY NOTES:

- FADED BACKGROUND REPRESENTS EXISTING TOPOGRAPHIC FEATURES. TOPOGRAPHIC INFORMATION WAS TAKEN FROM THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATABASE AND THE "MAP OF TOPOGRAPHY OF A PORTION OF THE LANDS OF NIKOLAOU" PREPARED BY ALBION SURVEYS, INC., DATED MARCH 2, 2021. APPLIED CIVIL ENGINEERING INCORPORATED ASSUMES NO LIABILITY REGARDING THE ACCURACY OR COMPLETENESS OF THE TOPOGRAPHIC INFORMATION.
- AERIAL PHOTOGRAPHS WERE OBTAINED FROM THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE, TAKEN APRIL TO JUNE 2018 AND MAY NOT REPRESENT CURRENT CONDITIONS.
- CONTOUR INTERVAL: FIVE (5) FEET, HIGHLIGHTED EVERY TWENTY FIVE (25) FEET.
- BENCHMARK: NAVD 88
- THE PROPERTY LINES SHOWN ON THESE PLANS DO NOT REPRESENT A BOUNDARY SURVEY. THEY ARE APPROXIMATE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
- CONTRACTOR SHALL PRESERVE ALL EXISTING MONUMENTS THROUGHOUT THE DURATION OF CONSTRUCTION OR HAVE THEM REPLACED AT THEIR OWN EXPENSE. IF MONUMENTS ARE DISTURBED THEY NEED TO BE RE-SET BY A LICENSED LAND SURVEYOR AND A CORNER RECORD MUST BE FILED.
- ALL CONSTRUCTION STAKING SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR.

GRADING NOTES:

- ALL EARTHWORK IS TO CONFORM TO THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE, NAPA COUNTY CONSERVATION REGULATIONS AND THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT - ENGINEERING DIVISION STANDARDS.
- ALL CUT AND FILL SLOPES SHALL BE NO STEEPER THAN 2:1 UNLESS OTHERWISE APPROVED BY A GEOTECHNICAL ENGINEER.
- ALL DEBRIS GENERATED DURING DEMOLITION, SITE STRIPPING AND GRADING ACTIVITIES IS TO BE DISPOSED OR PROPERLY OFFSITE BY THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR IMPORTING AND / OR EXPORTING MATERIALS AS NECESSARY TO ACHIEVE THE FINISH GRADES ILLUSTRATED ON THESE PLANS.
- CONTRACTOR SHALL CONDUCT ALL GRADING OPERATIONS IN A MANNER THAT PREVENTS WIND BLOWN DIRT AND DUST AND RELATED DAMAGE TO NEIGHBORING PROPERTIES.
- CONTRACTOR SHALL CONFORM TO EXISTING IMPROVEMENTS WITH A SMOOTH TRANSITION TO AVOID ABRUPT CHANGES IN GRADE, LOW SPOTS OR OTHER HAZARDOUS CONDITIONS.
- PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTAINING ALL FINISH GRADED SLOPES AFTER THE COMPLETION OF CONSTRUCTION AND REPAIRING ANY EROSION DAMAGE.

EXISTING UTILITY NOTES:

- 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.
- 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.
- 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.
- EXISTING UTILITIES ARE TO REMAIN IN SERVICE AT ALL TIMES. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES PER THE REQUIREMENTS OF THE UTILITY OWNER.
- CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY RELOCATIONS WITH THE UTILITY OWNER.

EROSION CONTROL NOTES:

- ALL EROSION CONTROL WORK WILL BE PERFORMED BY THE VINEYARD MANAGER IN ACCORDANCE WITH THIS APPROVED VINEYARD EROSION CONTROL PLAN.
- ALL DISTURBED AREAS MUST BE WINTERIZED BY OCTOBER 15TH OF EACH YEAR THAT THE PROJECT IS UNDER CONSTRUCTION.
- A REQUEST TO ALLOW GRADING TO EXTEND BEYOND 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 OCTOBER 15TH MUST BE SUBMITTED IN WRITING TO NAPA COUNTY NO LATER THAN OCTOBER 1ST. GRADING BEYOND THE WINTERIZATION DEADLINE WILL NOT BE ALLOWED PRIOR TO APPROVAL BY NAPA COUNTY.
- ALL PERMANENT DRAINAGE FACILITIES AND SEDIMENT RETENTION STRUCTURES MUST BE INSTALLED BY OCTOBER 1ST.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (WATER BARS, SILT FENCE & STRAW WATTLES) MUST BE INSTALLED BY OCTOBER 15TH.
- ALL EROSION CONTROL MEASURES MUST BE INSPECTED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE RAINY SEASON (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.
- 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.
- THE COVER CROP SEED BLEND SHOULD BE BROADCAST OR DRILLED AFTER THE SEED BED HAS BEEN PREPARED.
- 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%
- THE PERMANENT COVER CROP SEED MIX FOR ALL NO-TILL VINEYARD BLOCKS AND VINEYARD AVENUES SHOULD BE THE "WINTER 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%
- 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.
- 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.
- 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.
- AFTER THE SEED AND FERTILIZER HAVE BEEN PLACED THE SEEDED AREA SHOULD BE RAKED, DRAGGED OR HARROWED TO ENSURE THAT SEEDS ARE PROPERLY BEDDED.
- 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.
- 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.
- 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.
- 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:

- 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% IS REQUIRED TO MAINTAIN EROSION RATES AT ACCEPTABLE LEVELS.
- 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.
- 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 RESEED AND MULCHED IN THE FALL AS NECESSARY TO ACHIEVE THE SPECIFIED 85% COVER.
- ALL VINEYARD AVENUES WILL BE PROTECTED WITH A PERMANENT NO-TILL COVER CROP WITH DENSITIES MAINTAINED AT 85% OR MORE THROUGHOUT THE RAINY SEASON. VINEYARD AVENUES SHALL NOT BE TILLED.

ABBREVIATIONS:

AB	AGGREGATE BASE	MIN	MINIMUM
AC	ASPHALT CONCRETE	OC	ON-CENTER
AD	AREA DRAIN	OD	OUTSIDE DIAMETER
AP	ANGLE POINT	OG	ORIGINAL GRADE
BTM	BOTTOM	(P)	PROPOSED
CLR	CLEAR	PC	POINT OF CURVATURE
CONF	CONFORM	PCC	PORTLAND CEMENT CONCRETE
CP	CONTROL POINT	PL	PROPERTY LINE
DCV	DOUBLE CHECK VALVE	PT	POINT OF TANGENCY
DI	DROP INLET	PVC	POLYVINYL CHLORIDE
DS	DOWN SPOUT	PW	PROCESS WASTE
(E)	EXISTING	PWCO	PROCESS WASTE CLEANOUT
EC	END CURVE	RSV	RECIRCULATING SPLITTER VALVE
ELEV	ELEVATION	SAD	SEE ARCHITECTURAL DRAWINGS
EP	EDGE OF PAVEMENT	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
FH	FIRE HYDRANT	SMD	SEE LANDSCAPE DRAWINGS
FL	FLOW LINE	SME	SEE MECHANICAL DRAWINGS
FS	FINISH SURFACE	SPD	SEE PLUMBING DRAWINGS
FSR	FIRE SPRINKLER RISER	SSD	SEE STRUCTURAL DRAWINGS
GB	GRADE BREAK	SSO	SANITARY SEWER
GM	GAZE METER	SSCO	SANITARY SEWER CLEANOUT
HMA	HOT MIX ASPHALT	SSMH	SANITARY SEWER MANHOLE
HP	HIGH POINT	TC	TOP FACE OF CURB
INV	INVERT	TW	TOP OF WALL
IPS	IRON PIPE SIZE	TYP	TYPICAL
IRR	IRRIGATION	WM	WATER METER
LF	LINEAR FEET	WV	WATER VALVE
LP	LOW POINT	XFMR	TRANSFORMER
MAX	MAXIMUM		

LEGEND:

	APPROXIMATE PROPERTY BOUNDARY (SUBJECT PARCEL)
	APPROXIMATE PROPERTY BOUNDARY (ADJACENT PARCEL)
	APPROXIMATE PROPERTY LINE
	SOIL TYPE BOUNDARY
	EXISTING EDGE OF PAVEMENT
	EXISTING EDGE OF DIRT / GRAVEL ROAD
	EXISTING GRADE BREAK / TOP OF BANK
	EXISTING BUILDING
	VINEYARD AVENUE / LIMIT OF GRADING
	VINEYARD BLOCK / LIMIT OF RIPPING
	VINE ROWS & ROW DIRECTION
	SLOPE SECTION. SEE TABLE, SHEET C3.
	> 30% SLOPES (0.5 ± ACRES TOTAL)
	EXISTING TREE (AS NOTED)
	EXISTING TREE TO BE REMOVED
	TEMPORARY CONSTRUCTION FENCING
	STRAW WATTLE SEDIMENT BARRIER
	WATERBAR
	ROCK ENERGY DISSIPATOR

NIKOLAOU VINEYARDS

**VINEYARD DEVELOPMENT EROSION CONTROL PLAN
NOTES, ABBREVIATIONS AND LEGEND**

PREPARED UNDER THE DIRECTION OF:



DRAWN BY:
Power/CAD LLC

CHECKED BY:
MRM

DATE:
APRIL 5, 2022

REVISIONS: BY:
12/23/2021 YMS
PERMIT SUBMITTAL

4/8/2022 YMS
REVISION #1

JOB NUMBER:
20-138

FILE:
20-138ECP-NOTES.DWG

ORIGINAL SIZE:
24" X 36"

SHEET NUMBER:

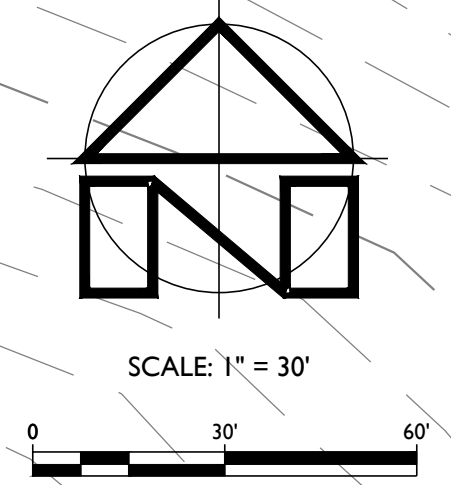
C2

OF

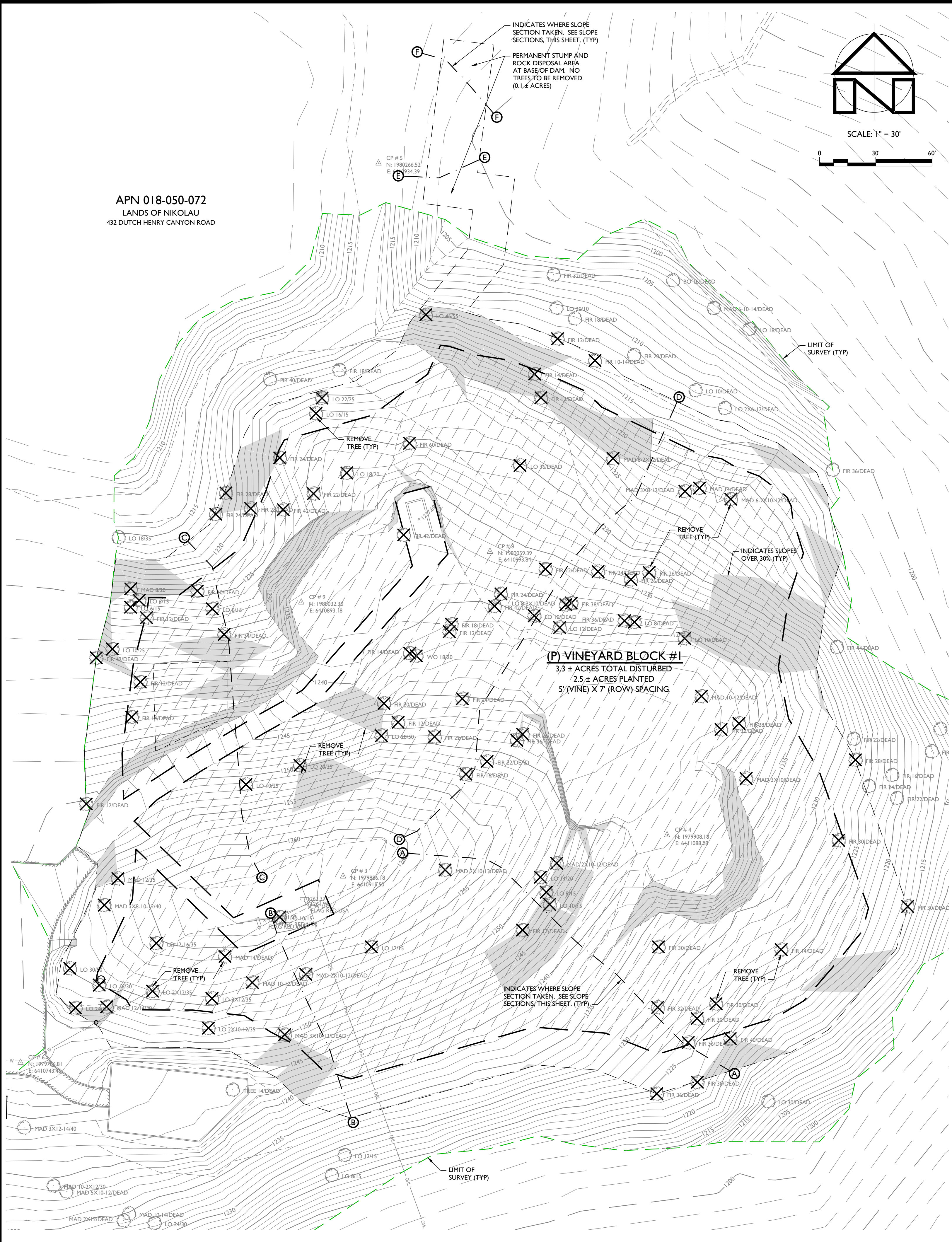
5

APN 018-050-072
LANDS OF NIKOLAOU
432 DUTCH HENRY CANYON ROAD

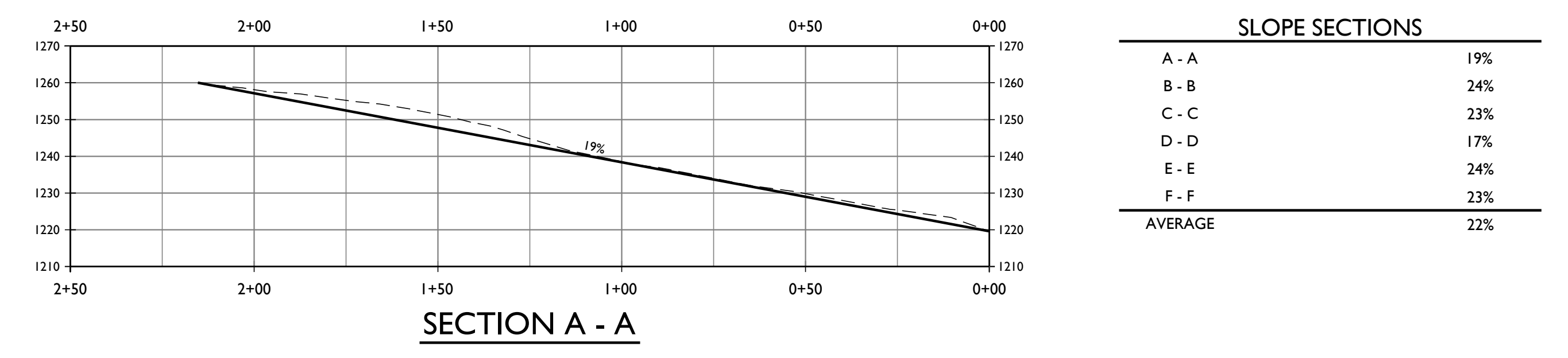
INDICATES WHERE SLOPE SECTION TAKEN. SEE SLOPE SECTIONS, THIS SHEET, (TYP)
PERMANENT STUMP AND ROCK DISPOSAL AREA AT BASE OF DAM. NO TREES TO BE REMOVED. (0.1 ± ACRES)



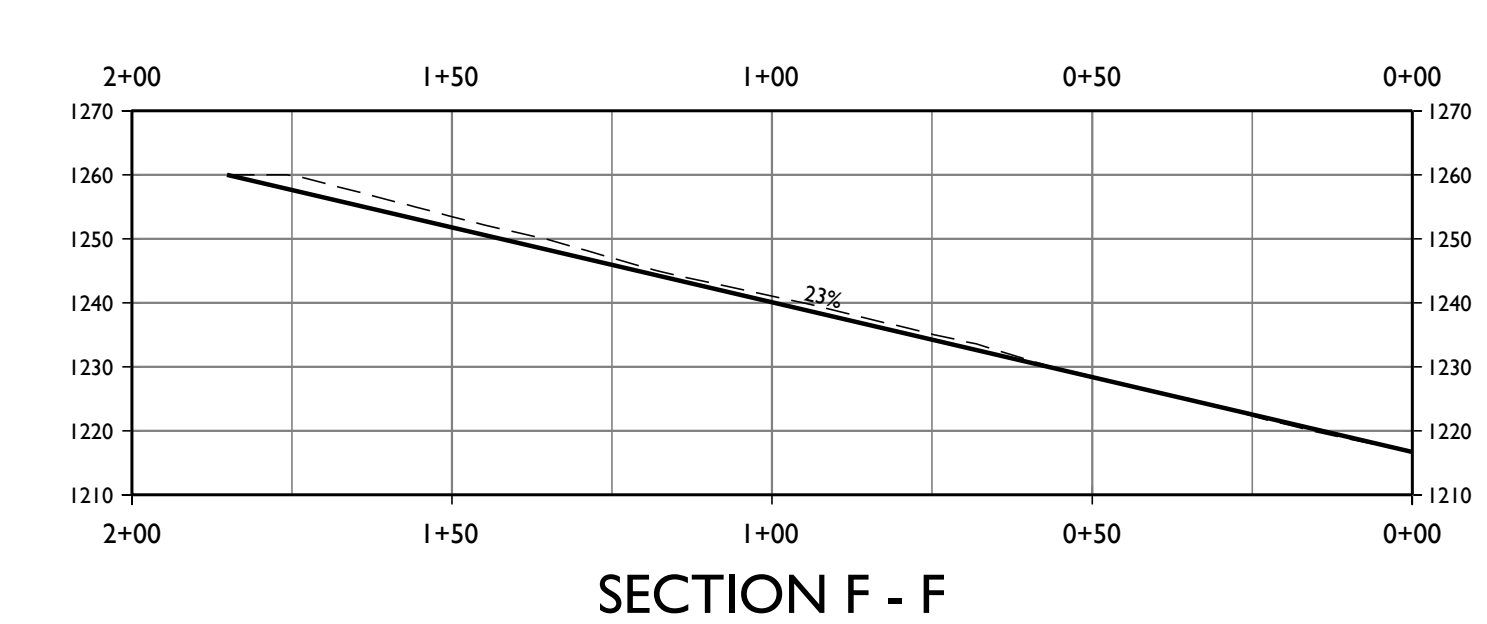
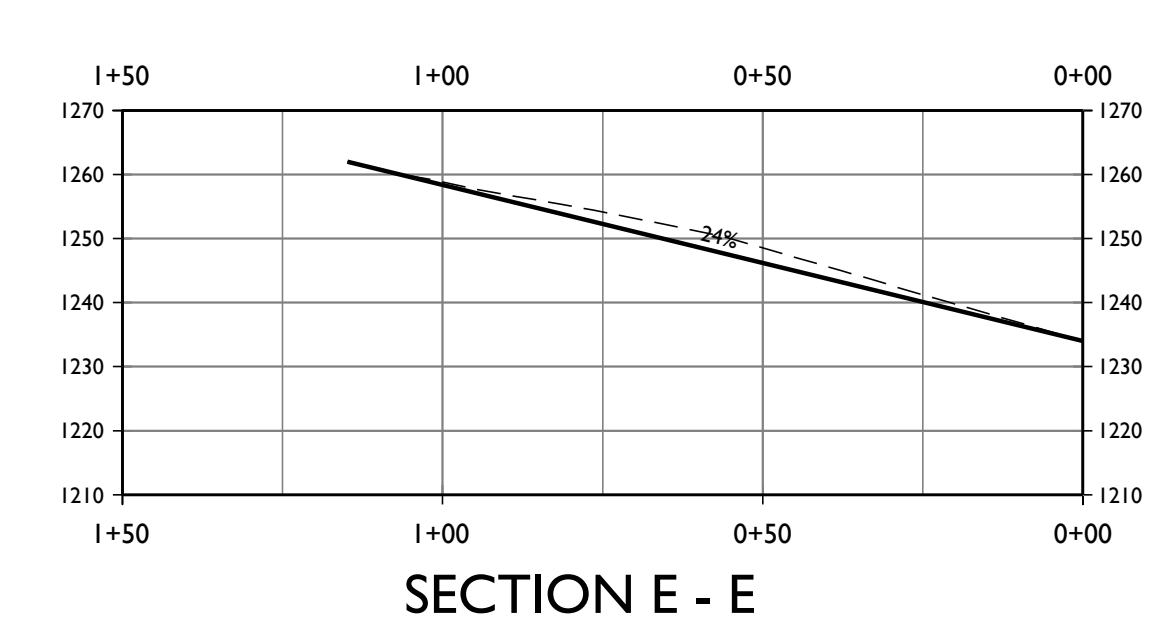
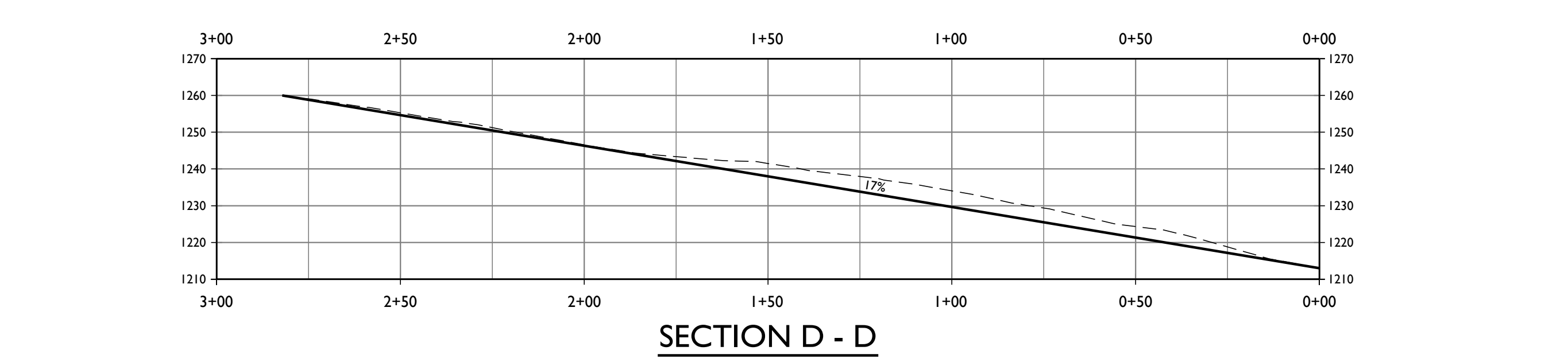
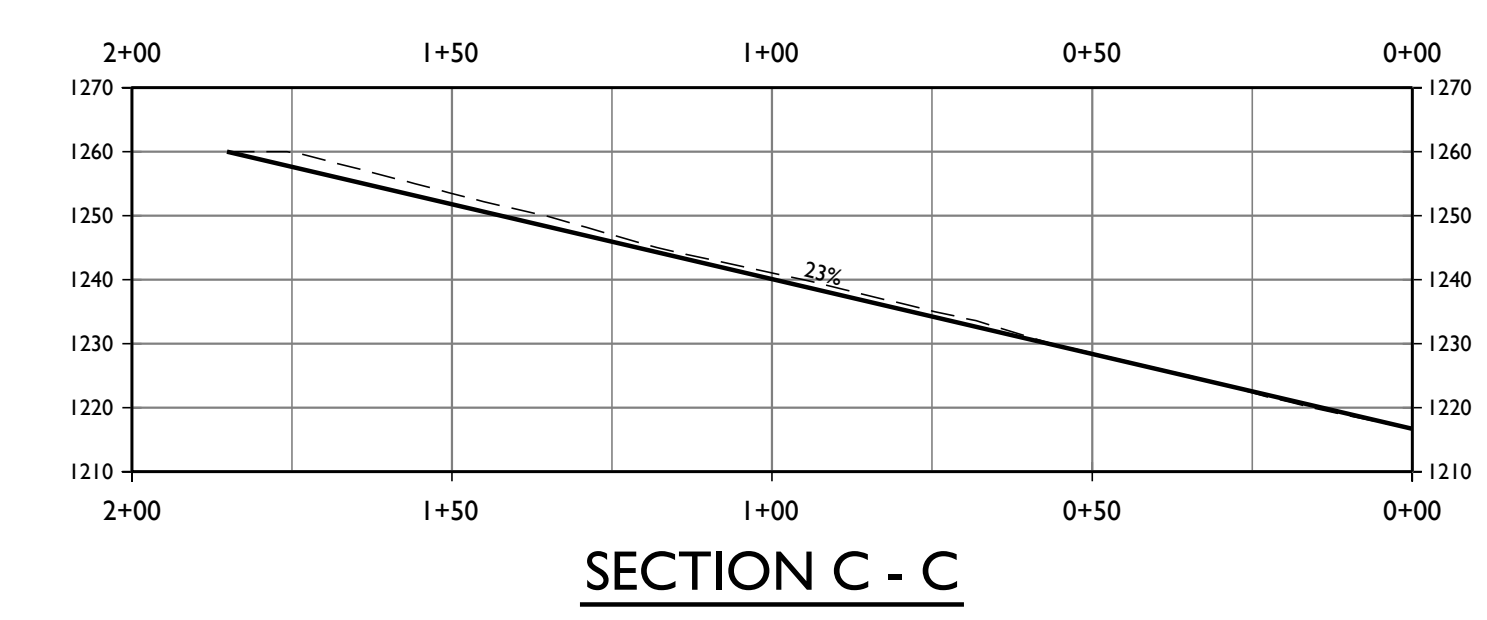
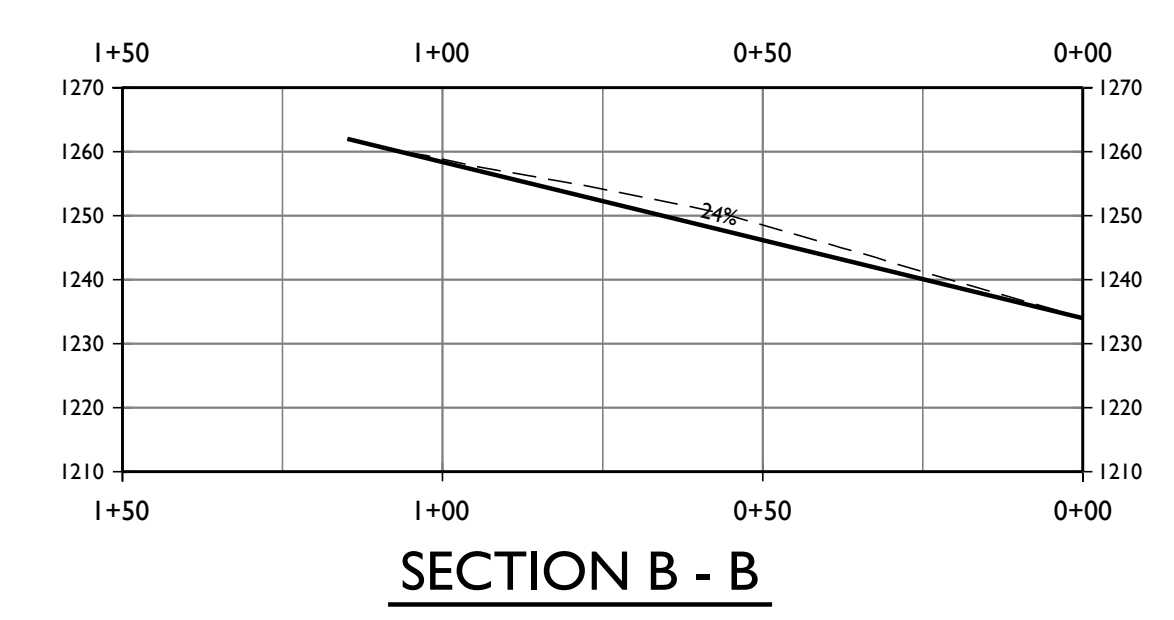
- LEGEND:**
- APPROXIMATE PROPERTY LINE
 - - - VINEYARD AVENUE / LIMIT OF GRADING
 - - - VINEYARD BLOCK / LIMIT OF RIPPING
 - - - VINE ROWS
 - ⊗ SLOPE SECTION. SEE TABLE, THIS SHEET.
 - ▨ > 30% SLOPES (0.5 ± ACRES TOTAL)



SLOPE DETERMINATION SECTIONS AND TREE REMOVAL PLAN
SCALE: 1" = 30'



SLOPE SECTIONS	
A - A	19%
B - B	24%
C - C	23%
D - D	17%
E - E	24%
F - F	23%
AVERAGE	22%



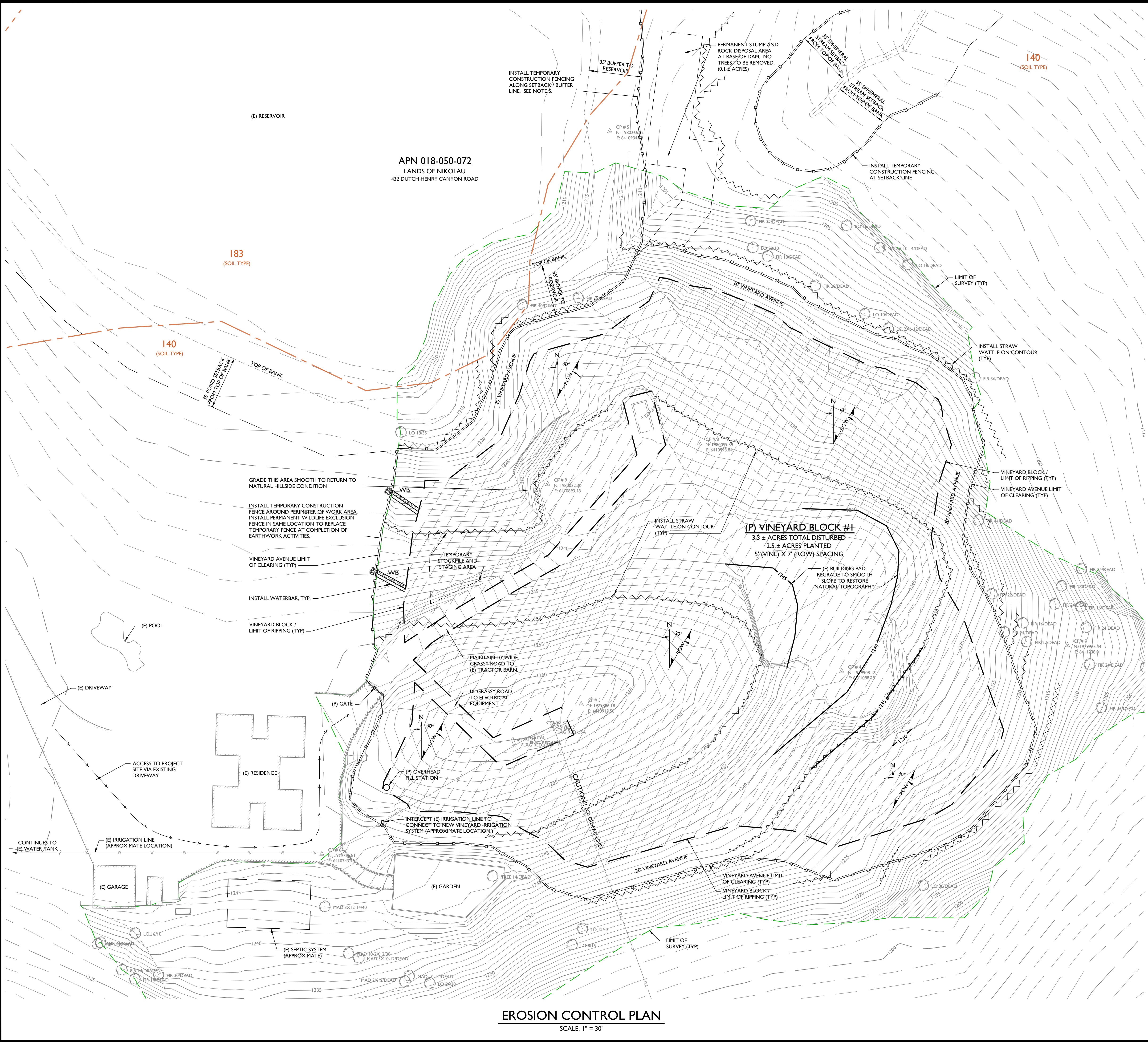
SLOPE DETERMINATION SECTIONS
SCALE: 1" = 30'

NIKOLAOU VINEYARDS
VINEYARD DEVELOPMENT EROSION CONTROL PLAN
SLOPE DETERMINATION SECTIONS AND TREE REMOVAL PLAN

PREPARED UNDER THE DIRECTION OF:

DRAWN BY: PowerCAD LLC
CHECKED BY: MRM
DATE: APRIL 5, 2022
REVISIONS: BY: YMS
12/23/2021 PERMIT SUBMITTAL
4/8/2022 REVISION #1

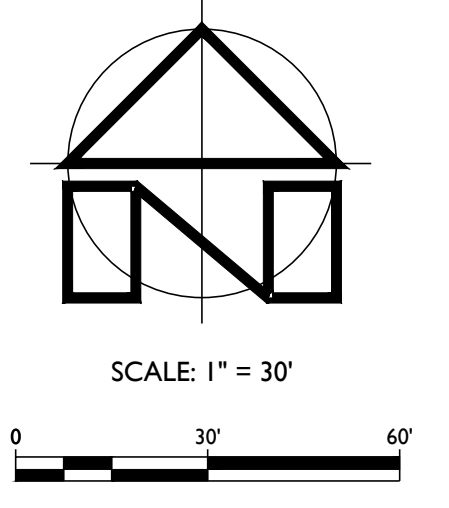
JOB NUMBER: 20-138
FILE: 20-138ECP-PLAN.DWG
ORIGINAL SIZE: 24" X 36"
SHEET NUMBER:



APN 018-050-072
LANDS OF NIKOLAOU
432 DUTCH HENRY CANYON ROAD

(P) VINYARD BLOCK #1
3.3 ± ACRES TOTAL DISTURBED
2.5 ± ACRES PLANTED
5' (VINE) X 7' (ROW) SPACING

EROSION CONTROL PLAN
SCALE: 1" = 30'



LEGEND:

	APPROXIMATE PROPERTY LINE
	VINEYARD AVENUE / LIMIT OF GRADING
	VINEYARD BLOCK / LIMIT OF RIPPING
	VINE ROWS & ROW DIRECTION
	SOIL TYPE BOUNDARY
	STRAW WATTLE SEDIMENT BARRIER
	TEMPORARY CONSTRUCTION FENCING
	WATERBAR
	ROCK ENERGY DISSIPATOR

SOILS TYPE LEGEND:

TYPE	DESCRIPTION
140	FORWARD GRAVELLY LOAM, 30 TO 75 PERCENT SLOPES
183	WATER

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

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 SETBACKS SHALL BE VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- TRACK WALK ENTIRE DISTURBED AREA. SEE SURFACE ROUGHENING DETAIL SHEET CS.
- 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.
- THE PORTION OF FENCING THAT COINCIDES WITH THE 35' BUFFER FROM THE RESERVOIR ALONG THE NORTHWEST EDGE OF THE VINYARD BLOCK AND THE WEST EDGE OF THE STUMP / ROCK DISPOSAL AREA SHALL BE OF A TYPE TO PREVENT MIGRATION OF TURTLES INTO THE PROJECT AREA. TIMING OF INSTALLATION AND MATERIAL TYPE SHALL PER THE RECOMMENDATIONS DATED IN THE BIOLOGICAL RESOURCES RECONNAISSANCE SURVEY BY WRA DATED MARCH 2022 (PAGE 25).

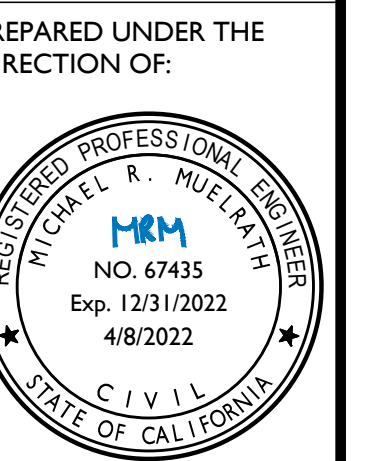
NIKOLAOU VINYARDS
VINEYARD DEVELOPMENT EROSION CONTROL PLAN
EROSION CONTROL PLAN

PREPARED UNDER THE DIRECTION OF:



DRAWN BY:	Power/CAD LLC
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12/23/2021	YMS
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4/8/2022	YMS
REVISION #1	

JOB NUMBER:	20-138
FILE:	20-138ECP-PLAN.DWG
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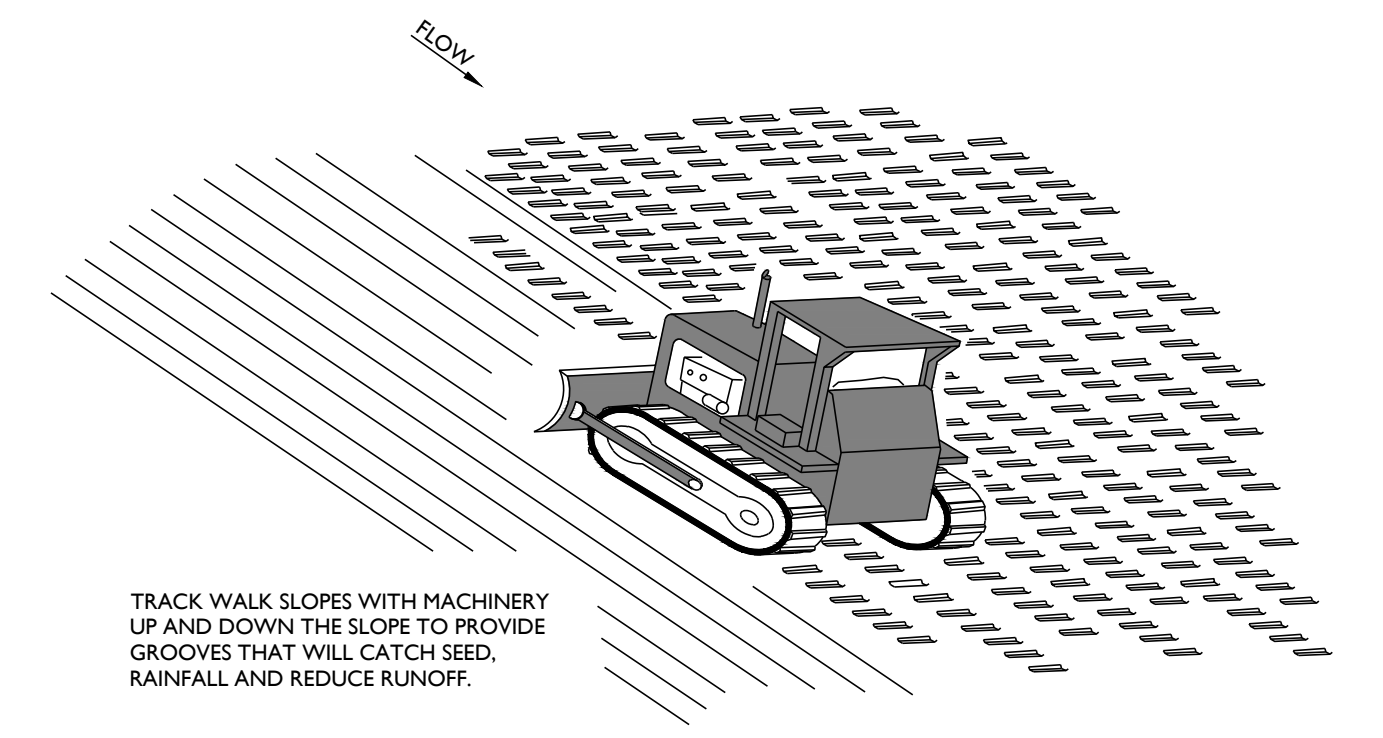


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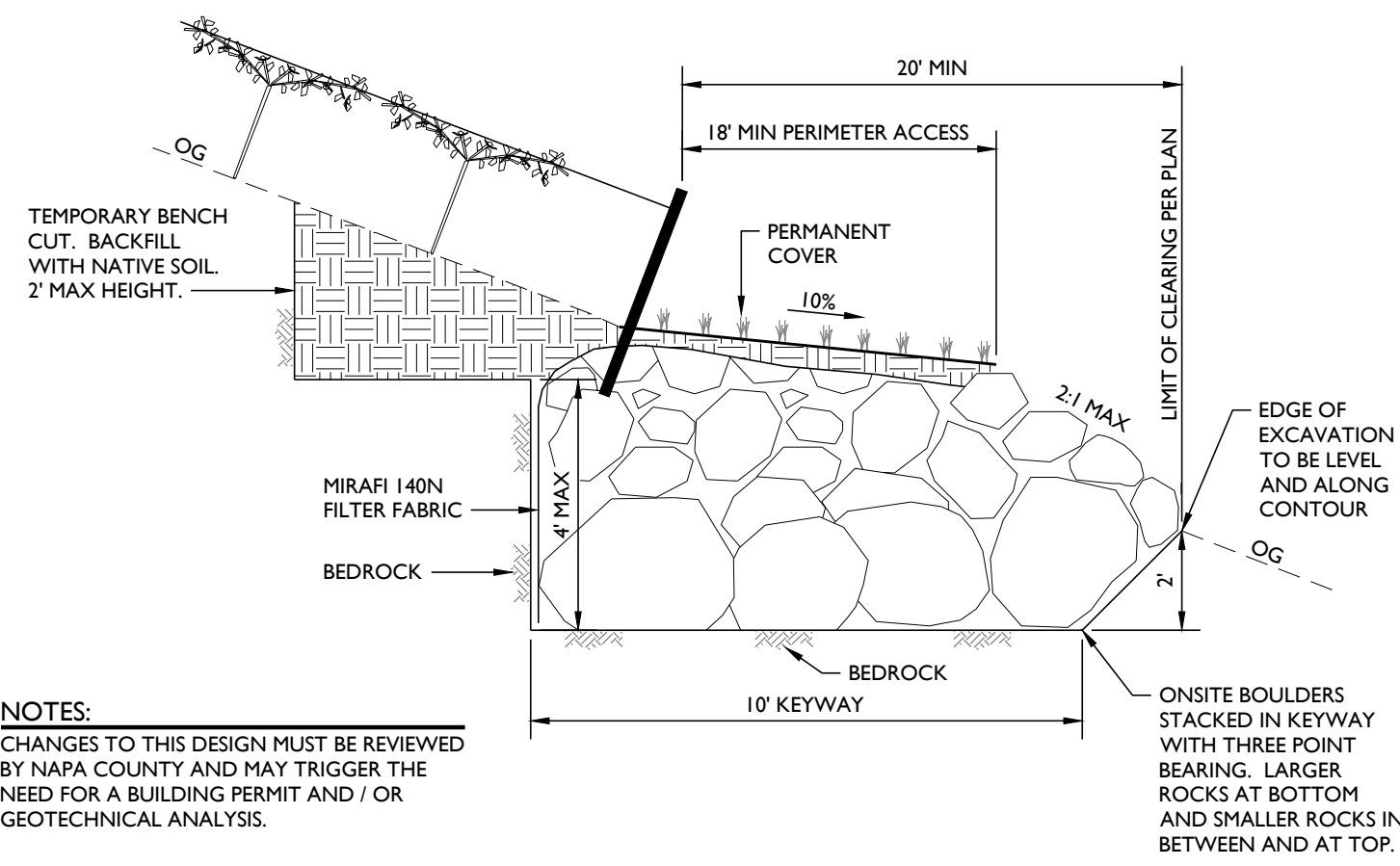
REVISIONS: BY:
12/23/2021 YMS PERMIT SUBMITTAL
4/8/2022 YMS REVISION #1

JOB NUMBER: 20-138
FILE: 20-138ECP-DETAILS.DWG
ORIGINAL SIZE: 24" X 36"

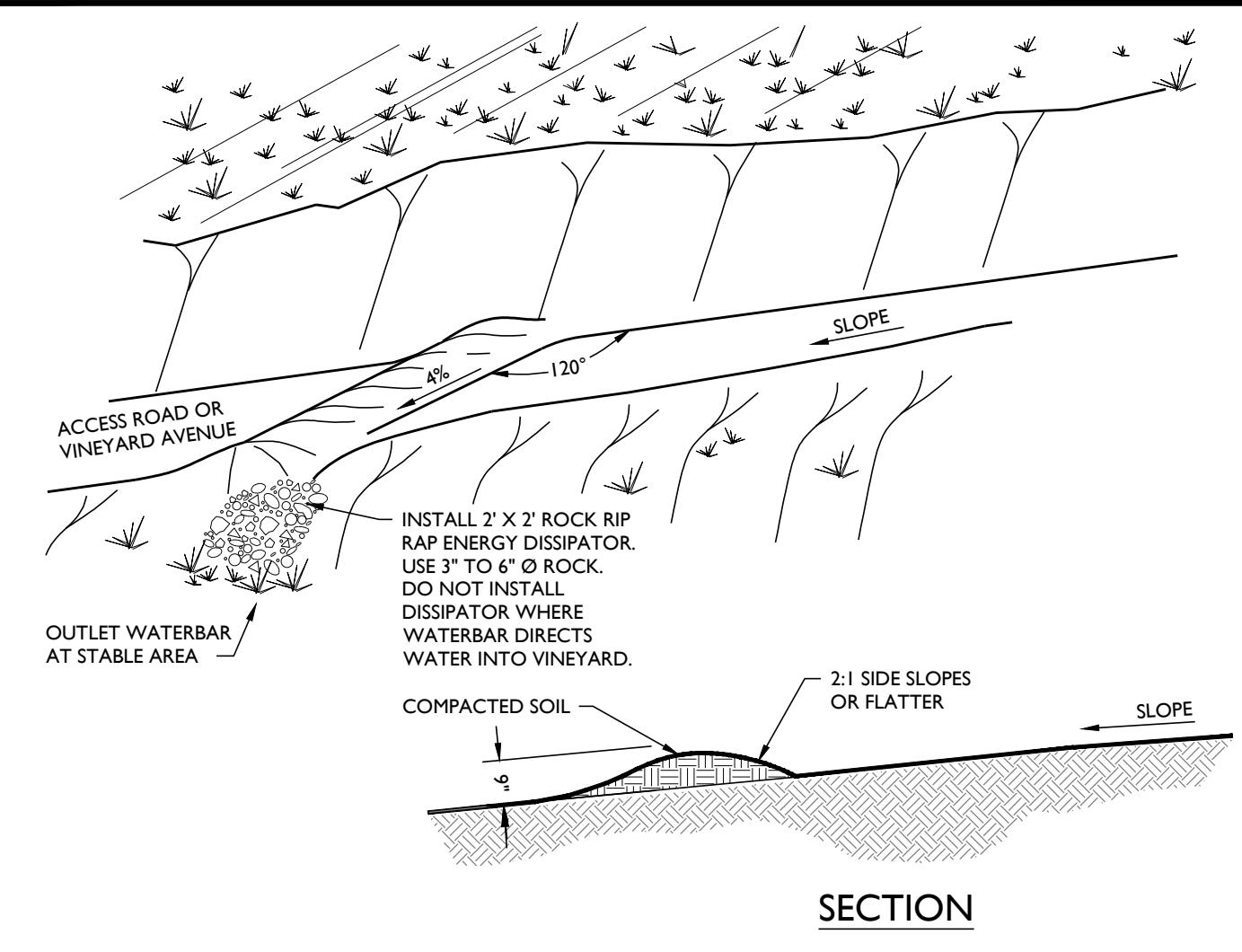
SHEET NUMBER: **C5** OF **5**



SURFACE ROUGHENING DETAIL



OUTSLOPED VINEYARD AVENUE AT BOTTOM OF BLOCK WITH ROCK BENCH DETAIL



MAXIMUM DISTANCE BETWEEN WATERBARS

EROSION HAZARD	SLOPE ALONG ROAD			
	<10%	11% - 25%	26% - 50%	>50%
EXTREME	100'	75'	50'	50'
HIGH	150'	100'	75'	50'
MODERATE	200'	150'	100'	75'
LOW	300'	200'	150'	100'

WATERBAR DETAIL

