

# COVER SHEET - Bar X Ranch GRADING PLANS

APN: 014-250-(07 and 14)  
18655 S STATE HIGHWAY 29, MIDDLETOWN, CA

Notes in "red" on these plans correspond with project revisions dated December 2022

## PROPERTY OWNER

Name: LAKE COUNTY NATURAL HEALTH  
Address: 8430 ROVANA CIRCLE  
SACRAMENTO, CA 95828  
Phone: (510) 560-6010  
Email: CPRICE@GREENMATTER.COM

## APPLICANT

Name: BAR X FARMS LLC  
Address: 20333 S. STATE STREET  
MIDDLETOWN, CA 95461  
Email: JMORIS@GREENMATTER.COM

## SITE PLAN DATA

A.P.N.	014-250-07	014-250-14
ADDRESS	19395 S STATE HWY 29	20333 S STATE HWY 29
AREA OF PROPERTY	564.9 ACRES	515.9 ACRES
AREA OF CANOPY	N/A	40 ACRES
ZONING	RL / A	RL / A

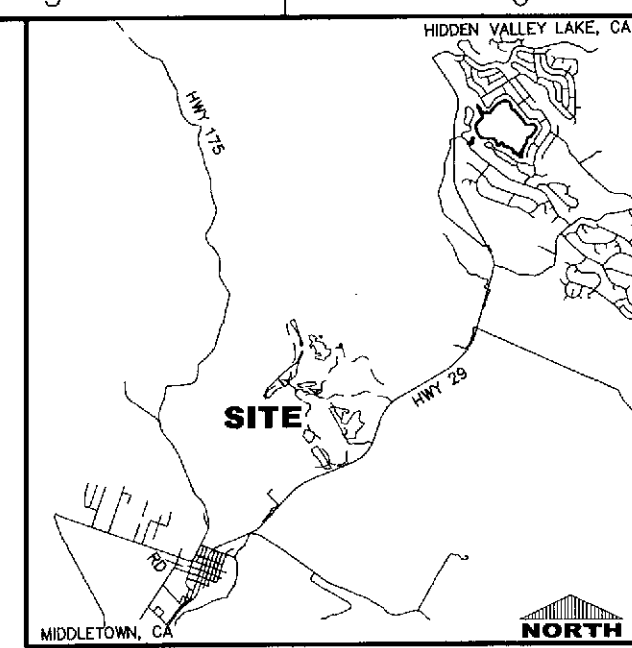
## WELL LOCATIONS

	LATITUDE	LONGITUDE
WELL #1	38°46'05.23" N	122°35'28.41" W
WELL #2	38°46'09.56" N	122°35'49.25" W

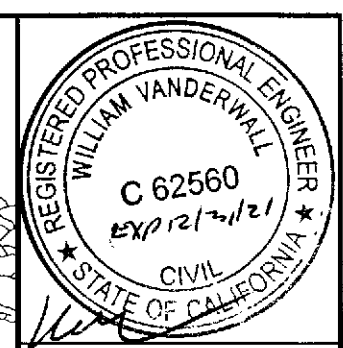
## STORMWATER BMPS LEGEND\*

- FR — FR — FIBER ROLLS (SE-5)
- CHEM CHEMICAL HANDLING BMP (WM-1,2,3,4,5,6)
- ▨ SURFACE STABILIZATION (LC-2,6,7,8,15,16)
- SWALE SWALE MGT (EC-9, SE-6,8,9)
- SF — SF — SILT FENCE (SE-1)
- WASTE WASTE MANAGEMENT (WM-5,6,7, SC-3,4)
- ROAD ROAD/PARKING LOT MGT (SC-40,43,44)
- SED SEDIMENT TRAP/BASEIN (SE-2,3)
- PILE STOCK PILE MGT (WE-1, WM-1,3)
- WATER QUALITY MONITORING LOCATION

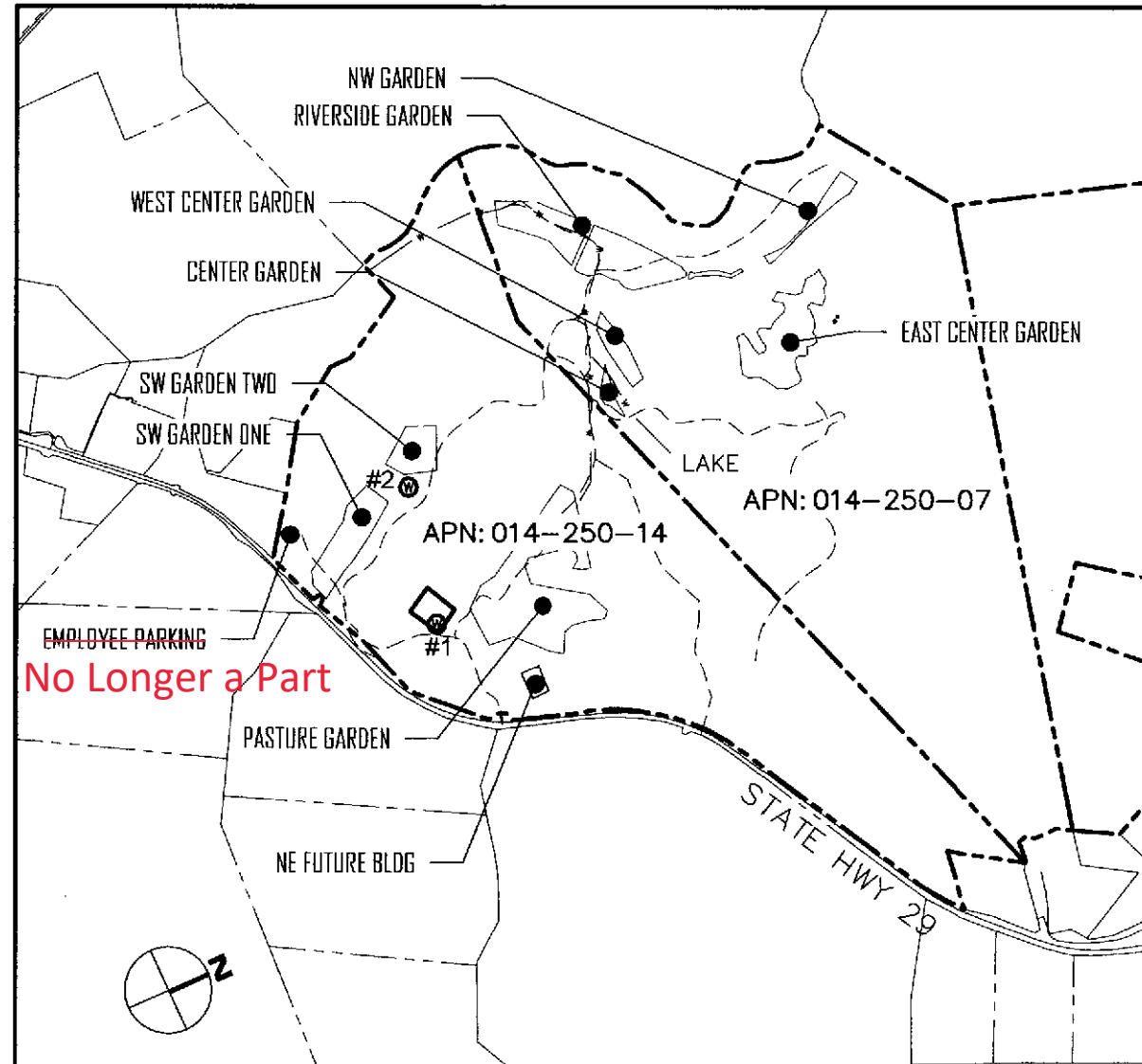
\* ALL STORMWATER BMPS SHALL BE INSTALLED AND MAINTAINED AS PER CALIFORNIA STORMWATER BMP HANDBOOK.



LOCATION MAP



SUBMITTED TO:  
LAKE COUNTY  
COMMUNITY DEVELOPMENT DEPT  
COUNTY OF LAKE  
LAKEPORT, CA



## ABBREVIATIONS

APPROX.	APPROXIMATE
CL	CENTER LINE
(E)	EXISTING
EP	EDGE OF PAVEMENT
ELEV	ELEVATION
FL	FLOWLINE
(F)	FUTURE
HORZ	HORIZONTAL
INV	INVERT ELEVATION
LF	LINEAL FEET
PT	POINT OF TANGENT LINE
POC	POINT OF CURVATURE
P/L	PROPERTY LINE
(P)	PROPOSED
TYP	TYPICAL
VERT	VERTICAL

## QUANTITIES TABLE

Farm	Area (Acres)	Cut (cy)	Fill (cy)	Total (cy)
NE Future Building	2.7	5200	4100	1100 (Cut)
Employee parking	1.54	2490	2490	0
Southwest 1# Garden	6.88	5500	5500	0
Southwest 2# Garden	5.87	4700	4700	0
Center Garden	1.4	1100	1100	0
West Center Garden	3.89	3100	3100	0
Riverside Garden	22.6	18000	18000	0
Northwest Garden	3.65	2900	2900	0
Pasture Garden	27.3	22000	22000	0
East Center Garden	11.44	9200	9200	0
Water Tank Farm	0.10	130	0	130 (Cut)
<b>total</b>	<b>87.37</b>	<b>74320</b>	<b>73090</b>	<b>1230 (Cut)</b>

## LEGEND

- — — — — PROPERTY LINE
- - - - - CREEKS
- - - - - DITCH (P)
- - - - - SETBACK LINE
- x x x x x CATTLE FENCE
- - - - - ACCESS ROAD/DRIVEWAY
- ~ ~ ~ ~ ~ OAK TREE LINE
- - - - - IRRIGATION PIPE (P)
- ⊙ WELL
- ⊙ UTILITY POLE (P)
- TREE (E)

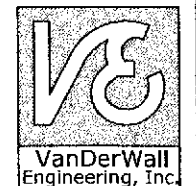
## SITE PLAN INDEX

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PO BOX 431  
KELSEYVILLE, CA 95451  
707-279-4867

VanderWall  
Engineering, Inc.

COVER SHEET  
APN: 014-250-(07, 14)  
BAR X RANCH CULTIVATION  
MIDDLETOWN, CALIFORNIA



VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE MAY 2021

PROJ 21-25

DWG

SHEET 1

SCOPE OF WORK

THESE PLANS CONSIST OF EROSION AND SEDIMENTATION CONTROL AND CLEARING AND GRUBBING FOR EIGHT FUTURE CULTIVATION SITES, PROPOSED EMPLOYEE PARKING AREA, AND WATER TANK FARM. IN ADDITION, THESE PLANS INCLUDE AN IRRIGATION LINE INSTALLATION AND PRELIMINARY GRADING PLAN FOR A FUTURE BUILDING FOR CANNABIS PROCESSING.

NOTES

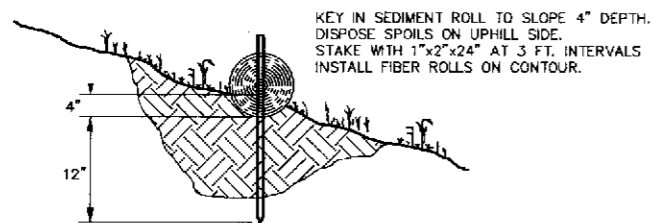
1. NO WORK SHALL BE PERFORMED OR AFFECT THE COUNTY ROAD RIGHT-OF-WAY,
2. THE CONTRACTOR SHALL OBTAIN REQUIRED PERMITS FROM ALL AGENCIES AND PAY ALL AGENCY FEES PRIOR TO COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL CONFORM WITH ZONING CODES, BUILDING CODES, AND ALL OTHER REQUIREMENTS ADMINISTERED BY THE COUNTY OF LAKE.
3. THE CONTRACTOR SHALL GIVE THE COUNTY OF LAKE BUILDING DEPARTMENT 72 HOURS NOTICE BEFORE STARTING WORK. A PRE-CONSTRUCTION MEETING MAY BE REQUIRED.
4. WORK HOURS ARE LIMITED TO MONDAY THROUGH FRIDAY, 7:00 AM TO 6:00 PM.
6. ANY DISCREPANCY DISCOVERED BY THE CONTRACTOR IN THESE PLANS OR ANY FIELD CONDITIONS DISCOVERED BY THE CONTRACTOR THAT MAY DELAY OR OBSTRUCT THE PROPER COMPLETION OF THE WORK PER THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD, THE COUNTY COMMUNITY DEVELOPMENT DEPARTMENT (CDD), OR THE OWNER IMMEDIATELY UPON DISCOVERY. NOTIFICATION SHALL BE IN WRITING.
7. THE CONTRACTOR SHALL MAINTAIN A NEAT APPEARANCE TO THE WORK IN ANY AREA VISIBLE TO THE PUBLIC.

GRADING NOTES

1. CONTRACTOR SHALL COMPLY WITH ANY AND ALL GRADING PERMIT REQUIREMENTS ADMINISTERED BY THE COUNTY OF LAKE CDD.
2. AS A MINIMUM ALL GRADED AREAS SHALL BE SEEDED FOR EROSION CONTROL BY THE CONTRACTOR. SEED AND FERTILIZER WILL BE APPLIED HYDRAULICALLY OR BY HAND AT THE RATES SPECIFIED BELOW. STRAW WILL BE APPLIED BY BLOWER OR BY HAND AND ANCHORED IN PLACE BY PUNCHING. ALL CRITICAL EARTHWORK OPERATIONS SHALL BE PERFORMED DURING THE DRY WEATHER SEASON, FROM APRIL 15TH TO OCTOBER 15TH OR AS OTHERWISE APPROVED BY THE LAKE COUNTY CDD. THE CLEARING OF EXISTING VEGETATION SHALL BE CONFINED WITHIN THE LIMITS OF ACTUAL EARTHWORK.

ITEM	POUNDS PER ACRE
"BLANDO BROME".....	30
ANNUAL RYE GRASS.....	20
FERTILIZER (16-20-0 & 15% SULPHUR).....	500
STRAW MULCH.....	2000

3. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE DUST CONTROL MEASURES TO THE SATISFACTION OF THE COUNTY CDD AND AIR QUALITY MANAGEMENT DISTRICT AS APPLICABLE.
4. THIS PROJECT IS AGRICULTURAL EXEMPT AND WILL NOT REQUIRE A CONSTRUCTION GENERAL PERMIT AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THROUGH THE APPROPRIATE REGIONAL WATER QUALITY CONTROL BOARD.



**SEDIMENT ROLL INSTALLATION**  
NTS

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UNDERGROUND SERVICE ALERT (U.S.A.), TOLL FREE AT 1-800-642-2444, AT LEAST TWO WORKING DAYS BUT NOT MORE THAN 14 CALENDAR DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL UNCOVER RELEVANT UTILITIES TO VERIFY THEIR LOCATION AND ELEVATION. IF UNEXPECTED OR CONFLICTING UTILITIES ARE ENCOUNTERED DURING EXCAVATION, NOTIFY U.S.A, THE UTILITY OWNER, AND/OR THE ENGINEER OF RECORD IMMEDIATELY. UTILITIES INCLUDE BUT ARE NOT LIMITED TO WATER, SEWER, ELECTRICAL, GAS, TELEPHONE, AND CABLE/TV. IF PRACTICAL, THE EXCAVATOR SHALL DELINEATE WITH WHITE PAINT OR OTHER SUITABLE MARKINGS THE AREA TO BE EXCAVATED.

6. IN THE EVENT CULTURAL RESOURCES (I.E., HISTORICAL, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES, AND HUMAN REMAINS) ARE DISCOVERED DURING GRADING OR OTHER CONSTRUCTION ACTIVITIES, WORK SHALL IMMEDIATELY BE HALTED WITHIN THE VICINITY OF THE FIND. THE LAKE COUNTY COMMUNITY DEVELOPMENT DEPARTMENT SHALL BE CONTACTED AT (707) 263-2221. A QUALIFIED ARCHEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION. ADDITIONAL MITIGATION MAY BE REQUIRED BY THE COUNTY PER THE ARCHEOLOGISTS RECOMMENDATION.

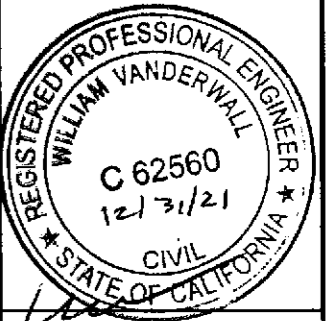
7. ALL DISTURBED AREAS SHALL BE SMOOTHED OVER TO THE NATURAL GROUND ELEVATION WITH TRACKED MACHINERY. THE FINAL SURFACE SHALL BE 'ROUGHENED' WITH TRACKED MACHINERY UP AND DOWN THE SLOPE TO LEAVE A HORIZONTAL DEPRESSIONS IN THE SOIL. DO NOT BACK-BLADE DURING THE FINAL GRADING OPERATION. SEED AND MULCH ROUGHED AREAS AS SOON AS POSSIBLE TO OBTAIN OPTIMUM SEED GERMINATION AND GROWTH.

8. INSTALL FIBER ROLL PER DETAIL IN LOCATIONS SHOWN ON SHEET 2. SILT FENCING SHALL REMAIN ON-SITE AND MAINTAINED BY OWNER UNTIL THE GROUND IS STABILIZED WITH GROUND COVER.

PRESERVATION OF SURVEY MONUMENTS

1. CONTRACTOR IS RESPONSIBLE FOR PRESERVATION AND/OR PERPETUATION OF ALL EXISTING MONUMENTS WHICH CONTROL SUBDIVISIONS, TRACTS, BOUNDARIES, STREETS, HIGHWAYS, OR OTHER RIGHT-OF-WAY, EASEMENTS, OR PROVIDE SURVEY CONTROL WHICH WILL BE DISTURBED OR REMOVED DUE TO CONTRACTOR'S WORK. CONTRACTOR SHALL PROVIDE A MINIMUM OF 10 WORKING DAYS NOTICE TO CIVIL ENGINEER OR SURVEYOR IN RESPONSIBLE CHARGE OF THE WORK PRIOR TO DISTURBANCE OR REMOVAL OF EXISTING MONUMENTS. CIVIL ENGINEER OR SURVEYOR IN RESPONSIBLE CHARGE OF THE WORK SHALL COORDINATE WITH CONTRACTOR TO RESET MONUMENTS OR PROVIDE PERMANENT WITNESS MONUMENTS AND FILE THE REQUIRED DOCUMENTATION WITH THE COUNTY SURVEYOR PURSUANT TO BUSINESS AND PROFESSIONS CODE SECTION 8771.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST TO RESET ANY SURVEY MONUMENTS DAMAGED BY CONTRACTOR'S PERSONNEL.



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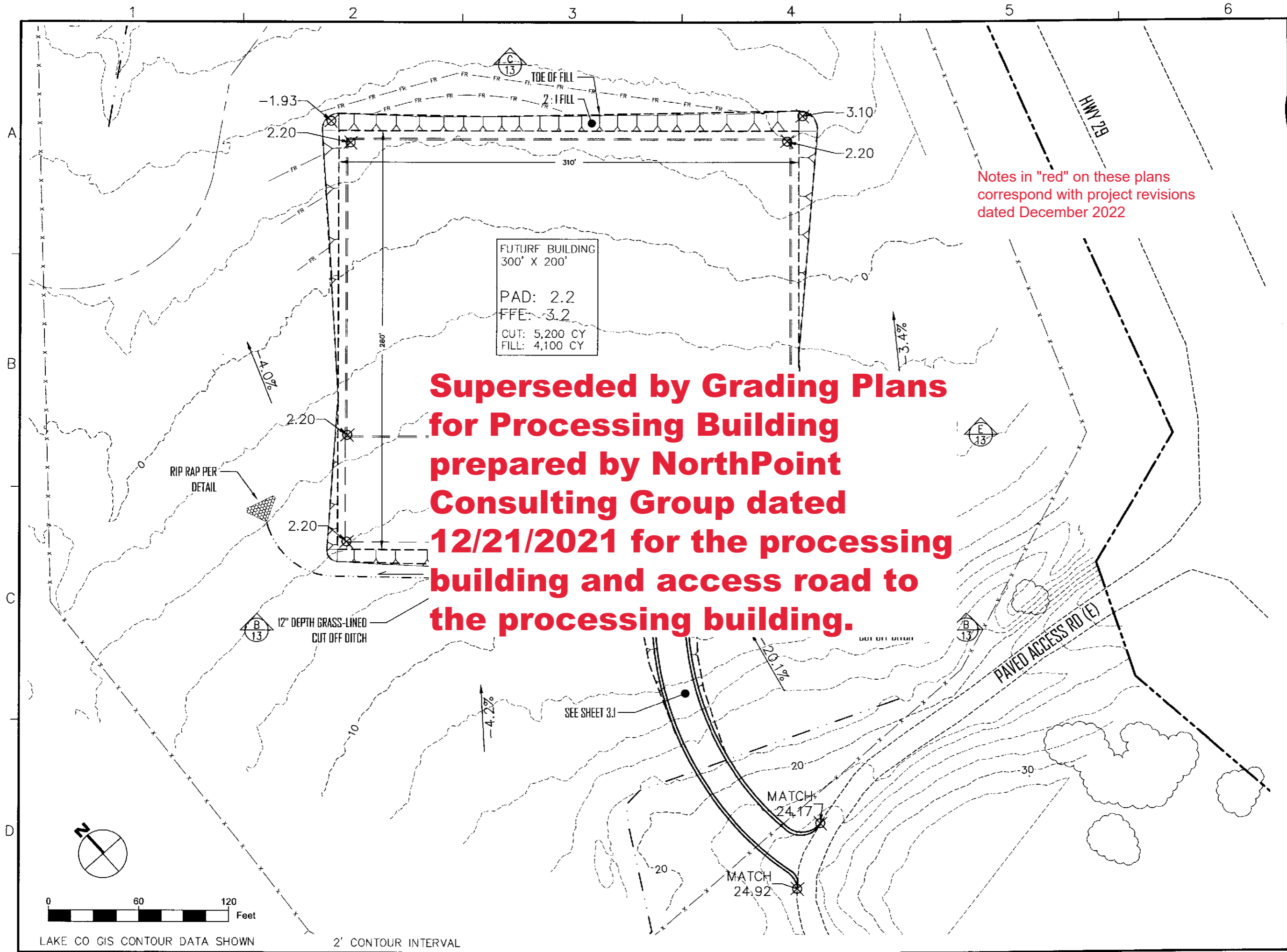
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**NOTES**

BAR X RANCH CULTIVATION  
MIDDLETOWN, CA

**VanDerWall Engineering, Inc.**

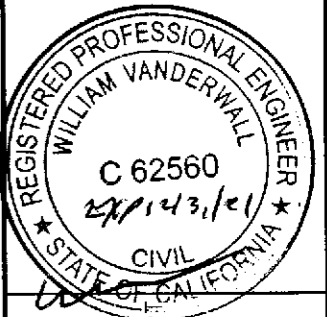
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
0	1"
DATE	MAY 2021
PROJ	21-25
DWG	
SHEET	2



**Superseded by Grading Plans  
for Processing Building  
prepared by NorthPoint  
Consulting Group dated  
12/21/2021 for the processing  
building and access road to  
the processing building.**

FUTURE BUILDING  
300' X 200'  
PAD: 2.2  
FFE: -3.2  
CUT: 5,200 CY  
FILL: 4,100 CY

Notes in "red" on these plans  
correspond with project revisions  
dated December 2022

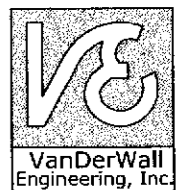


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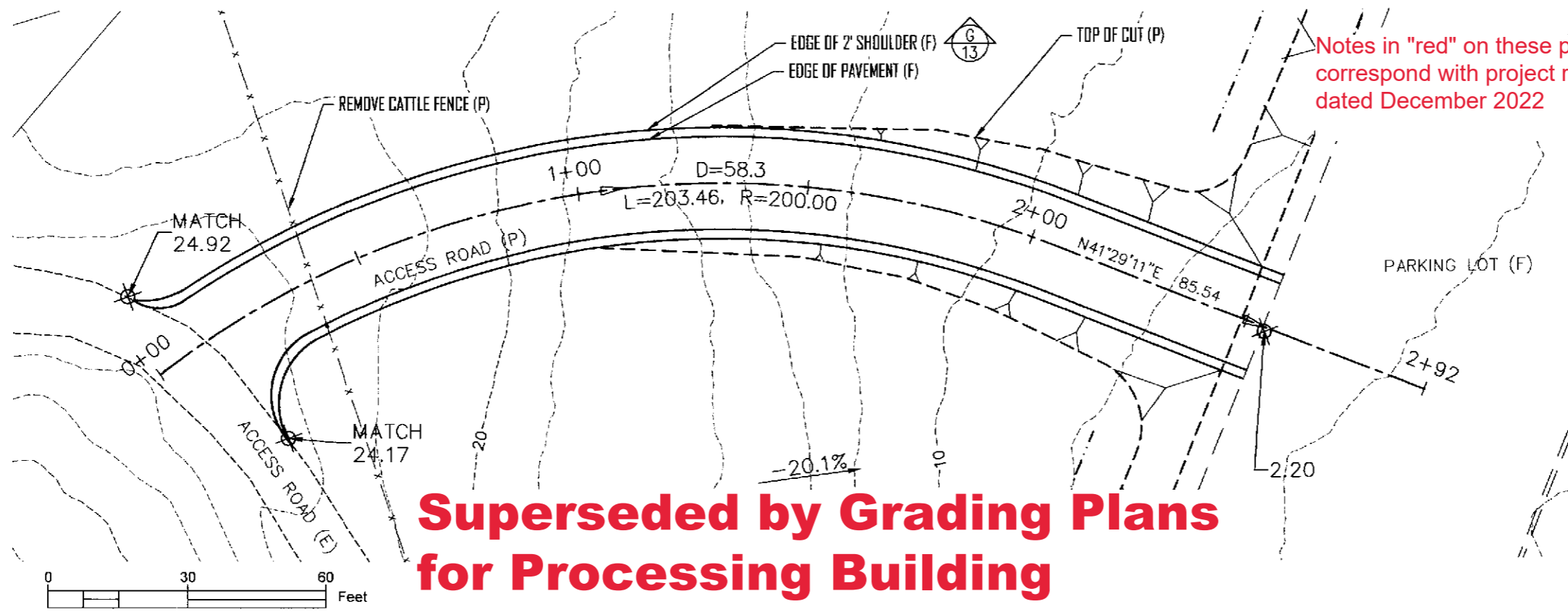
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**BUILDING PAD GRADING  
(FUTURE)**  
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MIDDLETOWN, CALIFORNIA

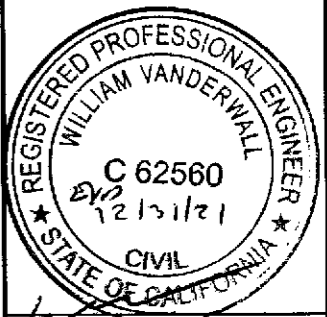
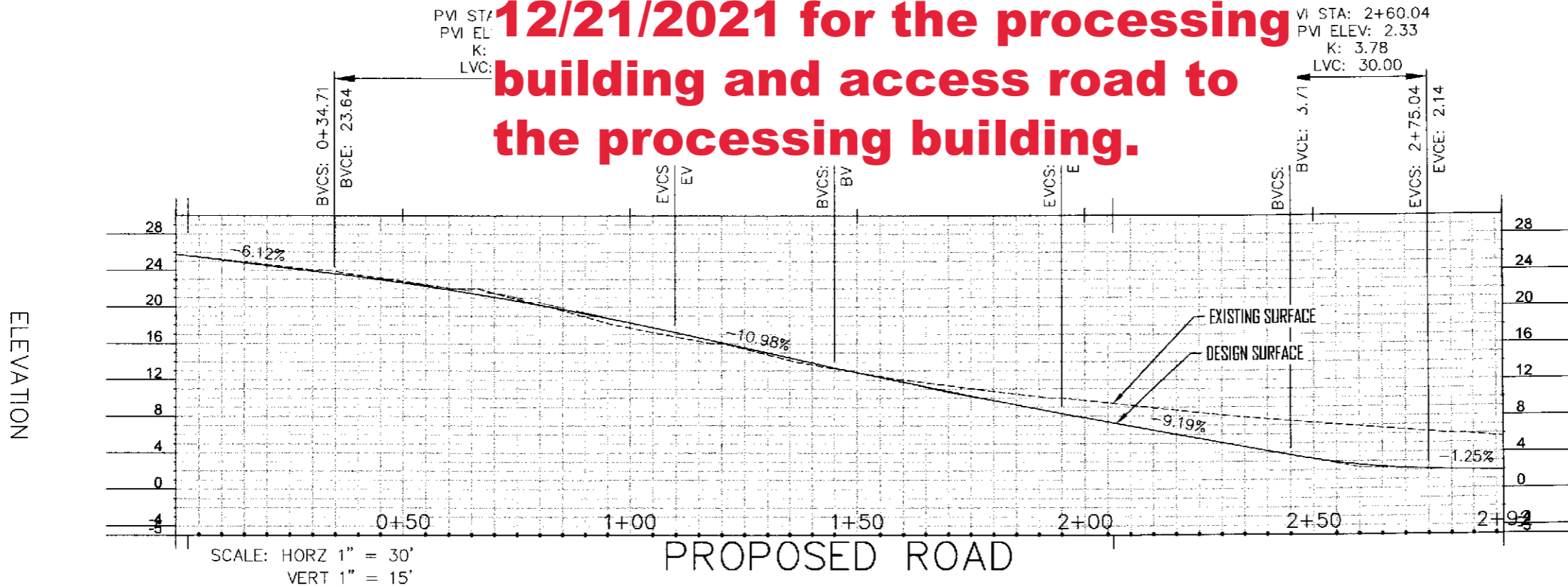


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PROJ	21-25
DWG	
SHEET	3



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**Superseded by Grading Plans for Processing Building prepared by NorthPoint Consulting Group dated 12/21/2021 for the processing building and access road to the processing building.**

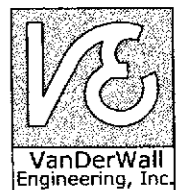


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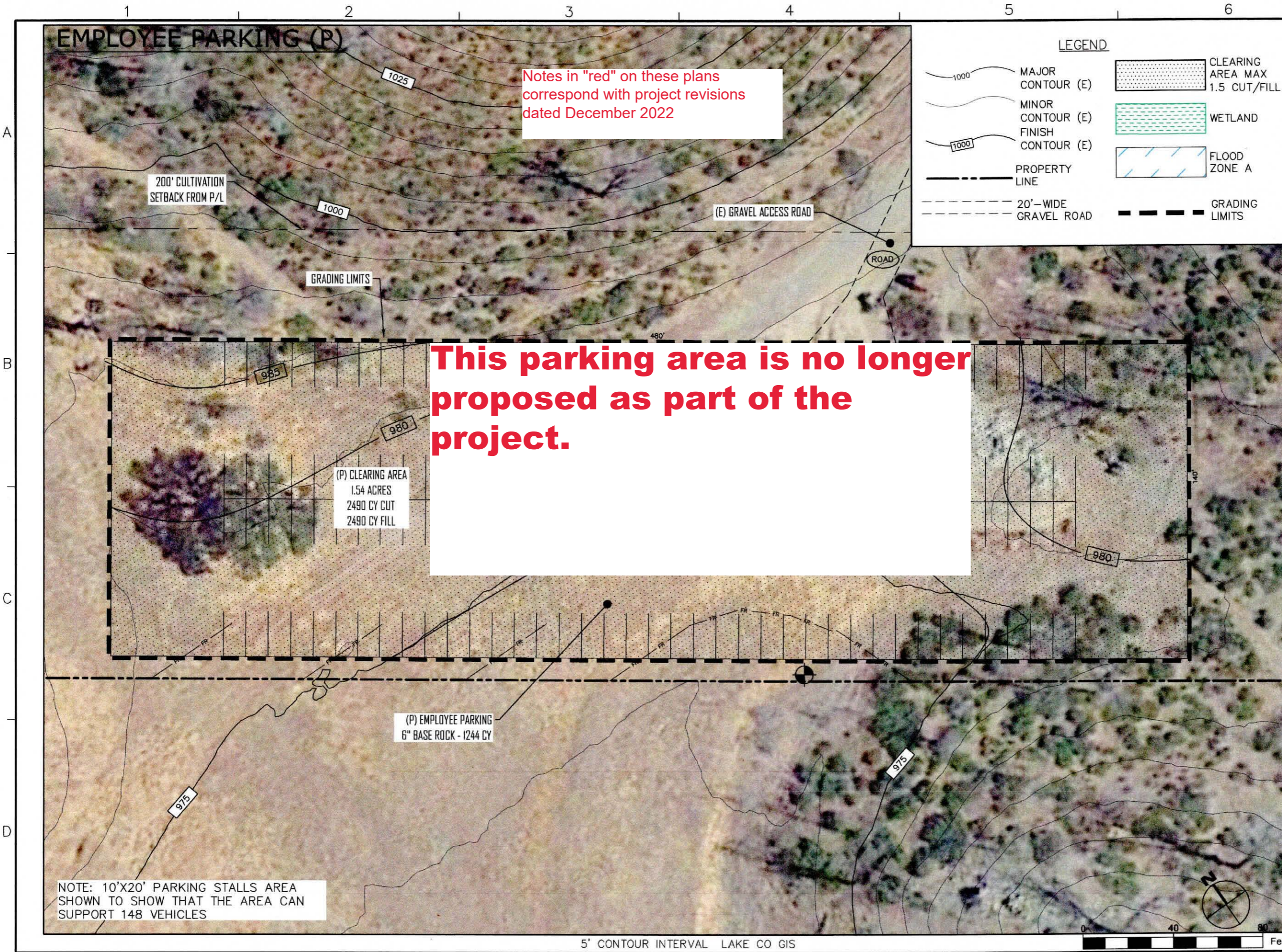
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**BUILDING PAD GRADING  
(FUTURE)**  
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MIDDLETOWN, CALIFORNIA

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SHEET	3.1



**This parking area is no longer proposed as part of the project.**



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**SOUTHWEST CULTIVATION/  
EMPLOYEE PARKING**

BAR X RANCH CULTIVATION  
MIDDLETOWN, CALIFORNIA

VERIFY SCALE	
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DATE	MAY 2021
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DWG	
SHEET	4

# SOUTHWEST #1 GARDEN

C LASS 3 WATER COURSE

ROAD

100' S.B.

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**LEGEND**

- MAJOR CONTOUR (E)
- MINOR CONTOUR (E)
- FINISH CONTOUR (E)
- PROPERTY LINE
- 20'-WIDE GRAVEL ROAD
- CLEARING AREA MAX 1' CUT/FILL
- WETLAND
- FLOOD ZONE A
- GRADING LIMITS

(P) CLEARING AREA  
6.88 ACRES  
5500 CY CUT  
5500 CY FILL

GRADING LIMITS

(E) UNIMPROVED ACCESS ROAD  
(P) 12' WIDE BASE ROCK SURFACE

200' CULTIVATION  
SETBACK TO P/L

(E) GRAVEL ACCESS ROAD

**This parking area is no longer proposed.**

~~(P) EMPLOYEE PARKING  
SEE SHEET 4~~

EMPLOYEE & DELIVERY  
ACCESS



5' CONTOUR INTERVAL LAKE CO GIS



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**SOUTHWEST CULTIVATION/  
EMPLOYEE PARKING**  
BAR X RANCH CULTIVATION  
MIDDLETOWN, CALIFORNIA



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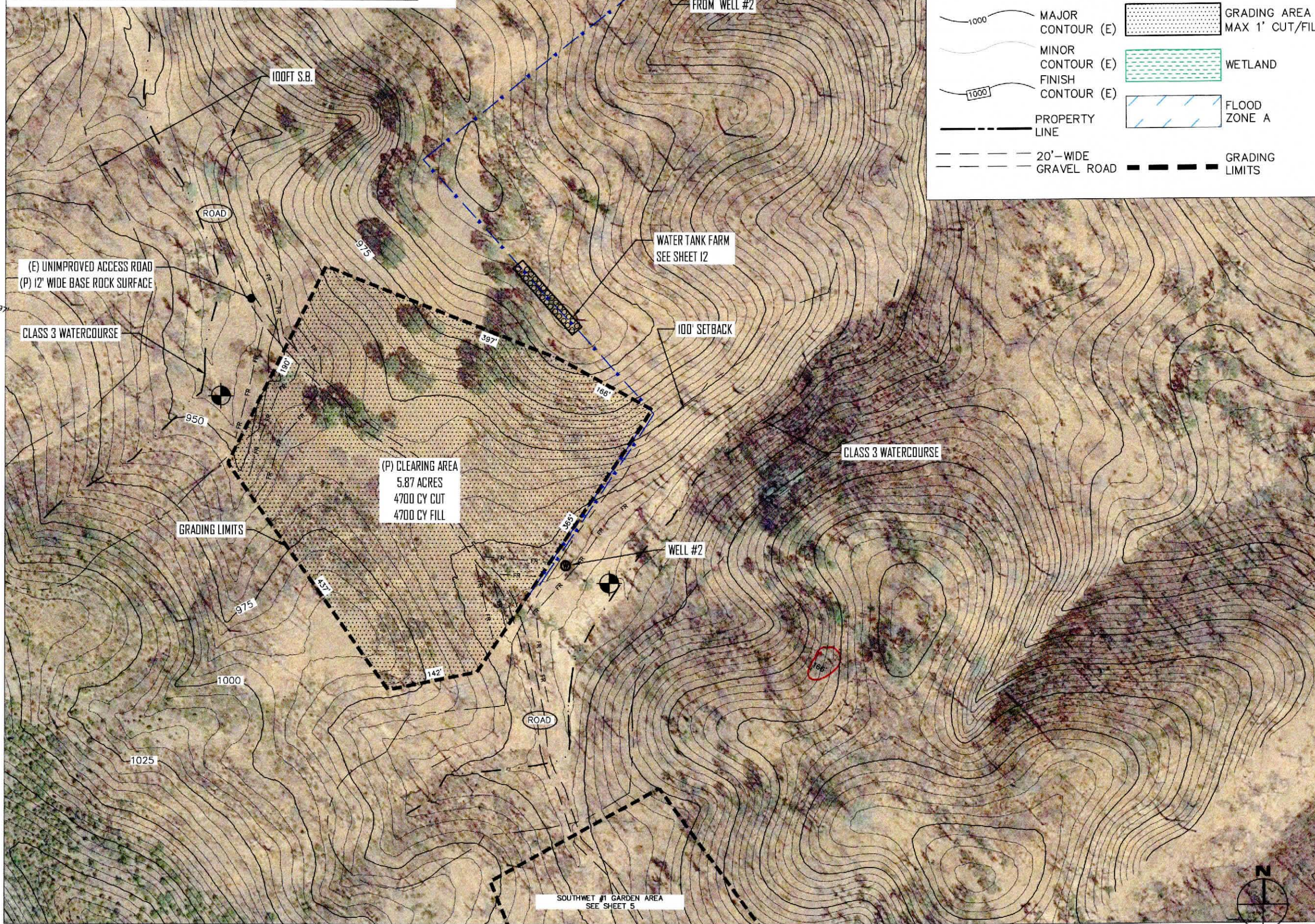
DATE MAY 2021

PROJ 21-25

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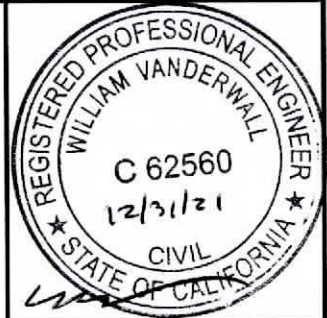
SHEET 5

# SOUTHWEST #2 GARDEN AREA



**LEGEND**

- MAJOR CONTOUR (E)
- MINOR CONTOUR (E)
- FINISH CONTOUR (E)
- PROPERTY LINE
- 20'-WIDE GRAVEL ROAD
- GRADING AREA MAX 1' CUT/FILL
- WETLAND
- FLOOD ZONE A
- GRADING LIMITS



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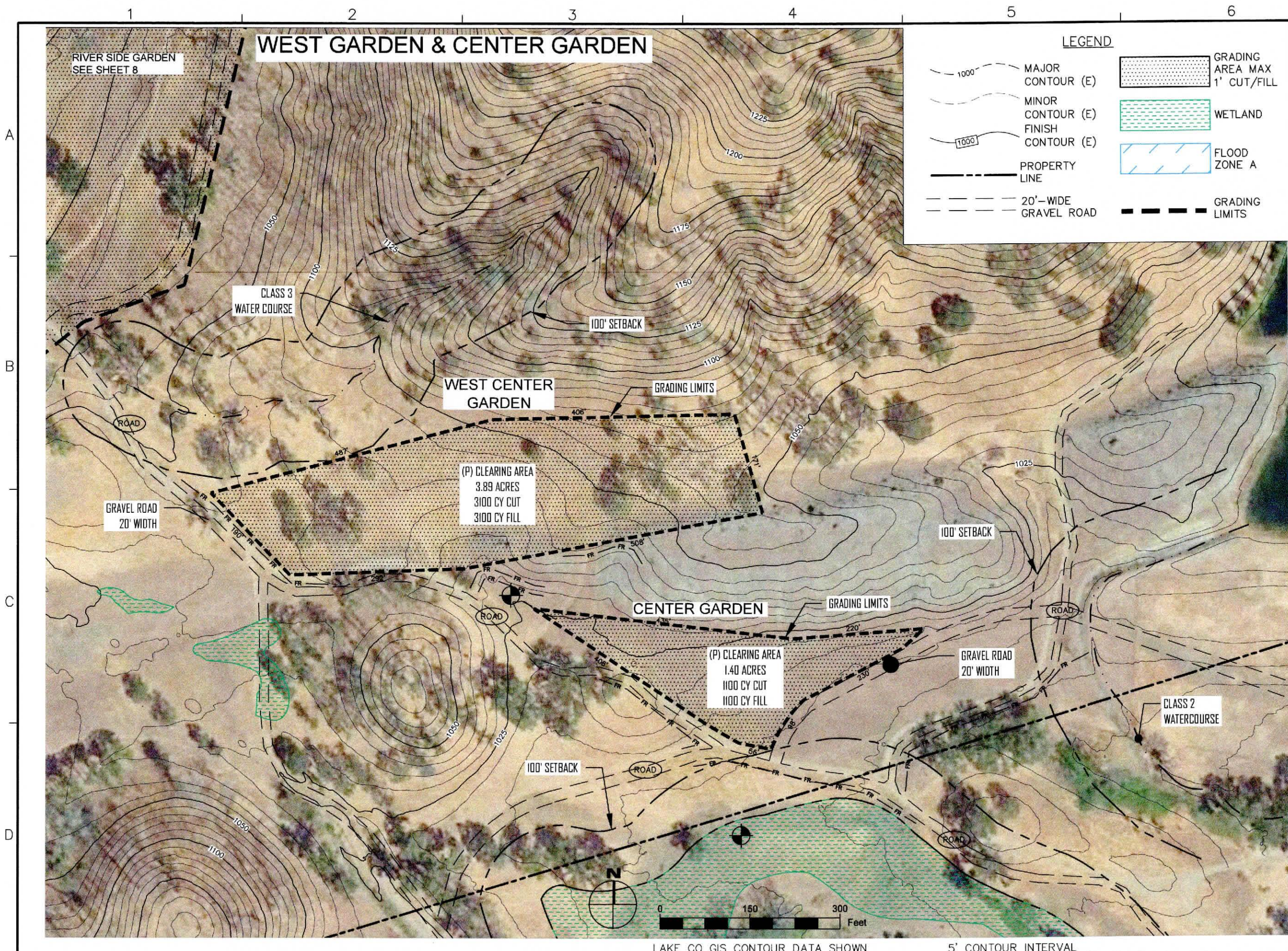
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**SOUTHWEST #2 CULTIVATION**

BAR X RANCH CULTIVATION  
 KELSEYVILLE, CALIFORNIA

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SHEET	6



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**WEST CENTER GARDEN  
& CENTER GARDEN**  
BAR X RANCH CULTIVATION  
MIDDLETOWN, CALIFORNIA

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VERIFY SCALE	
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0 1"	
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DWG	
SHEET	7



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RIVERSIDE GARDEN

LEGEND

- MAJOR CONTOUR (E)
- MINOR CONTOUR (E)
- FINISH CONTOUR (E)
- PROPERTY LINE
- 20'-WIDE GRAVEL ROAD
- GRADING AREA MAX 1' CUT/FILL
- WETLAND
- FLOOD ZONE A
- GRADING LIMITS



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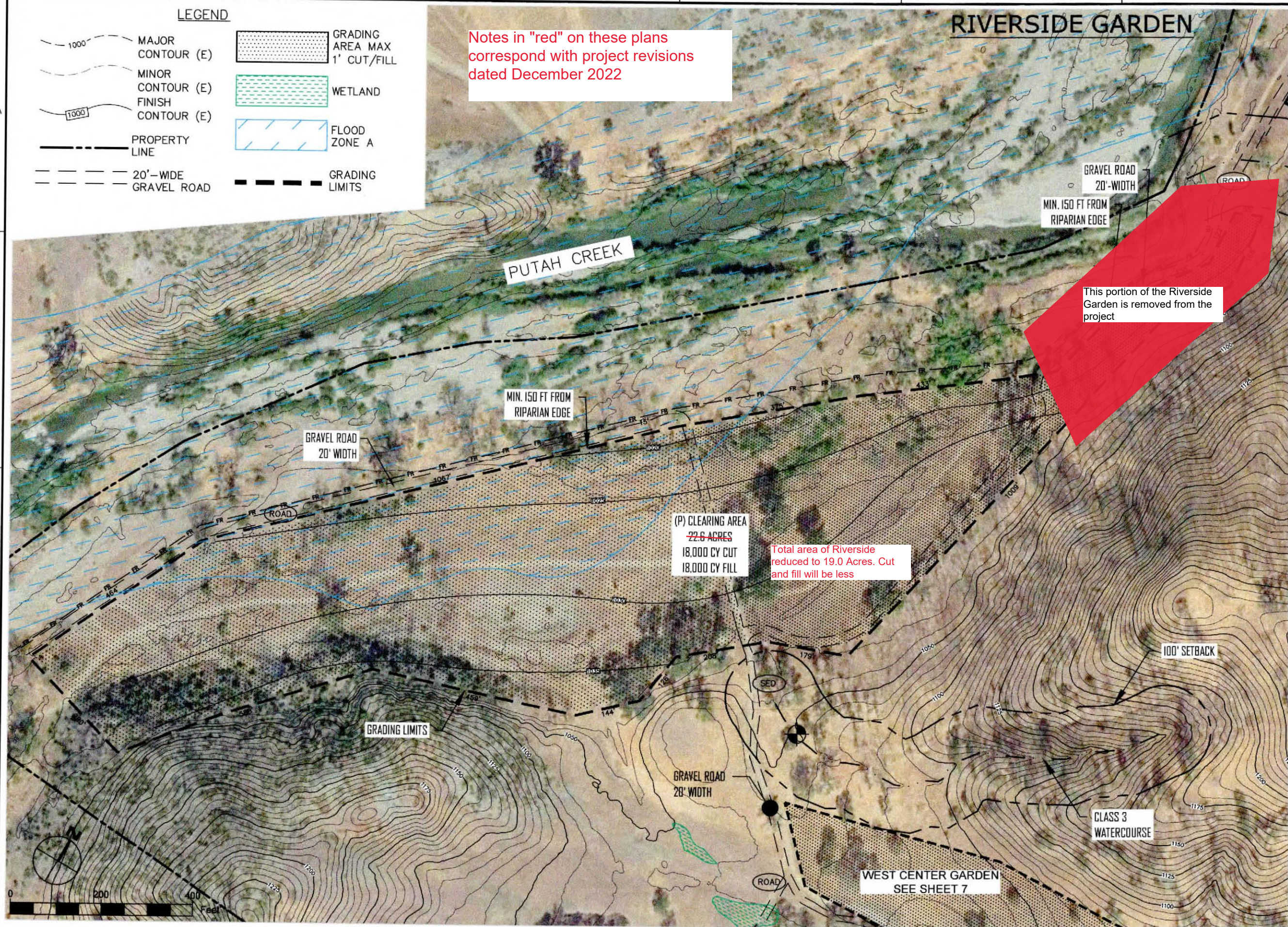
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**RIVERSIDE GARDEN  
GRADING**

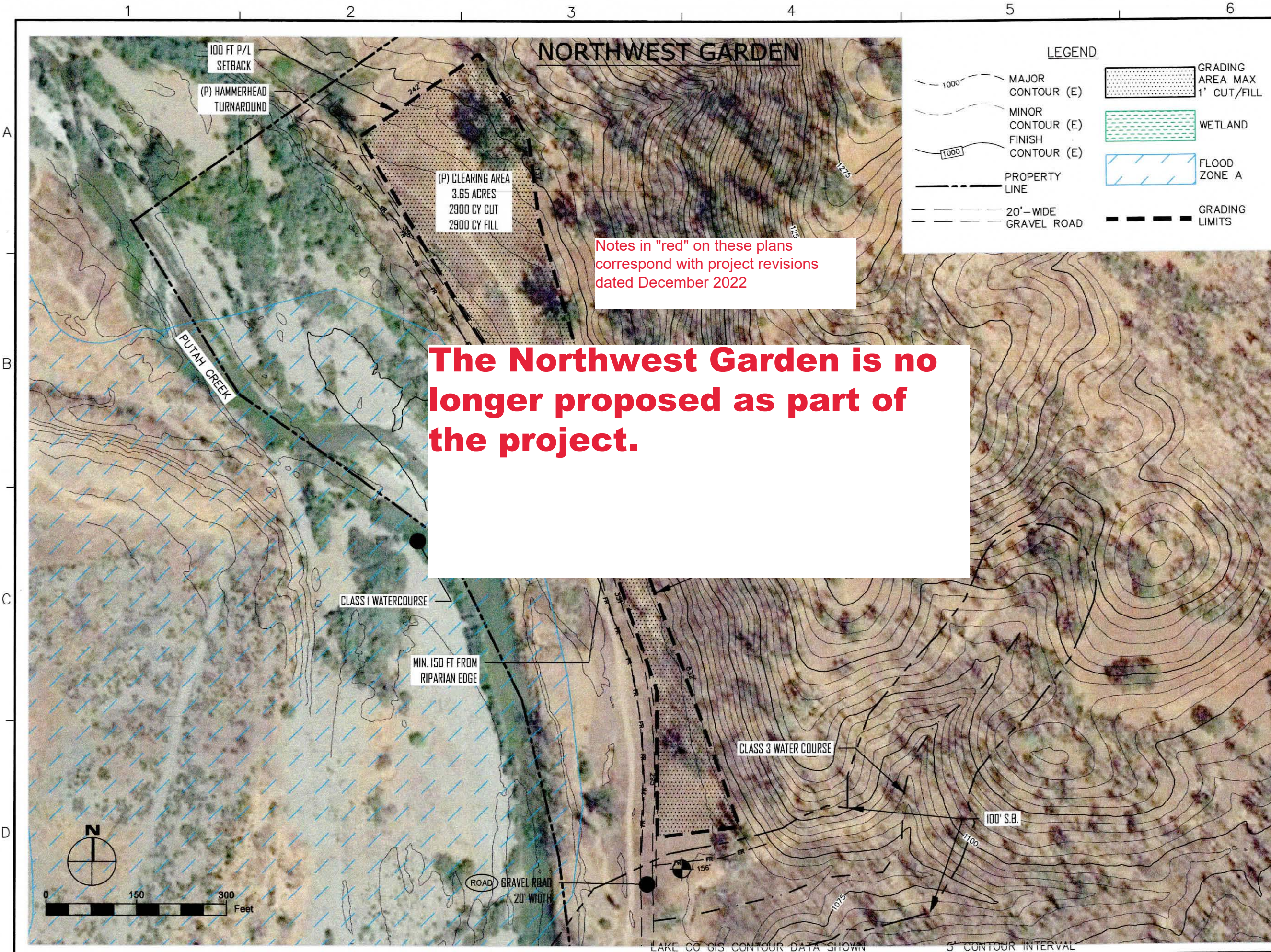
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SHEET	8

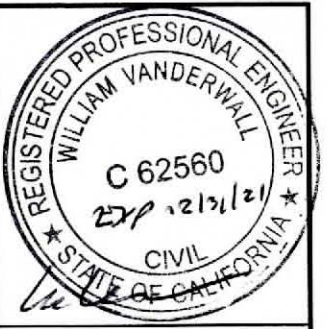


This portion of the Riverside Garden is removed from the project



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**The Northwest Garden is no longer proposed as part of the project.**



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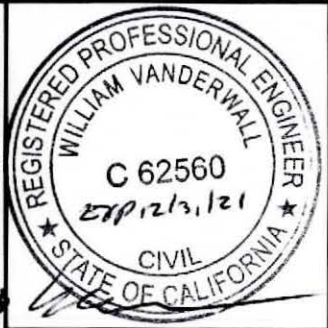
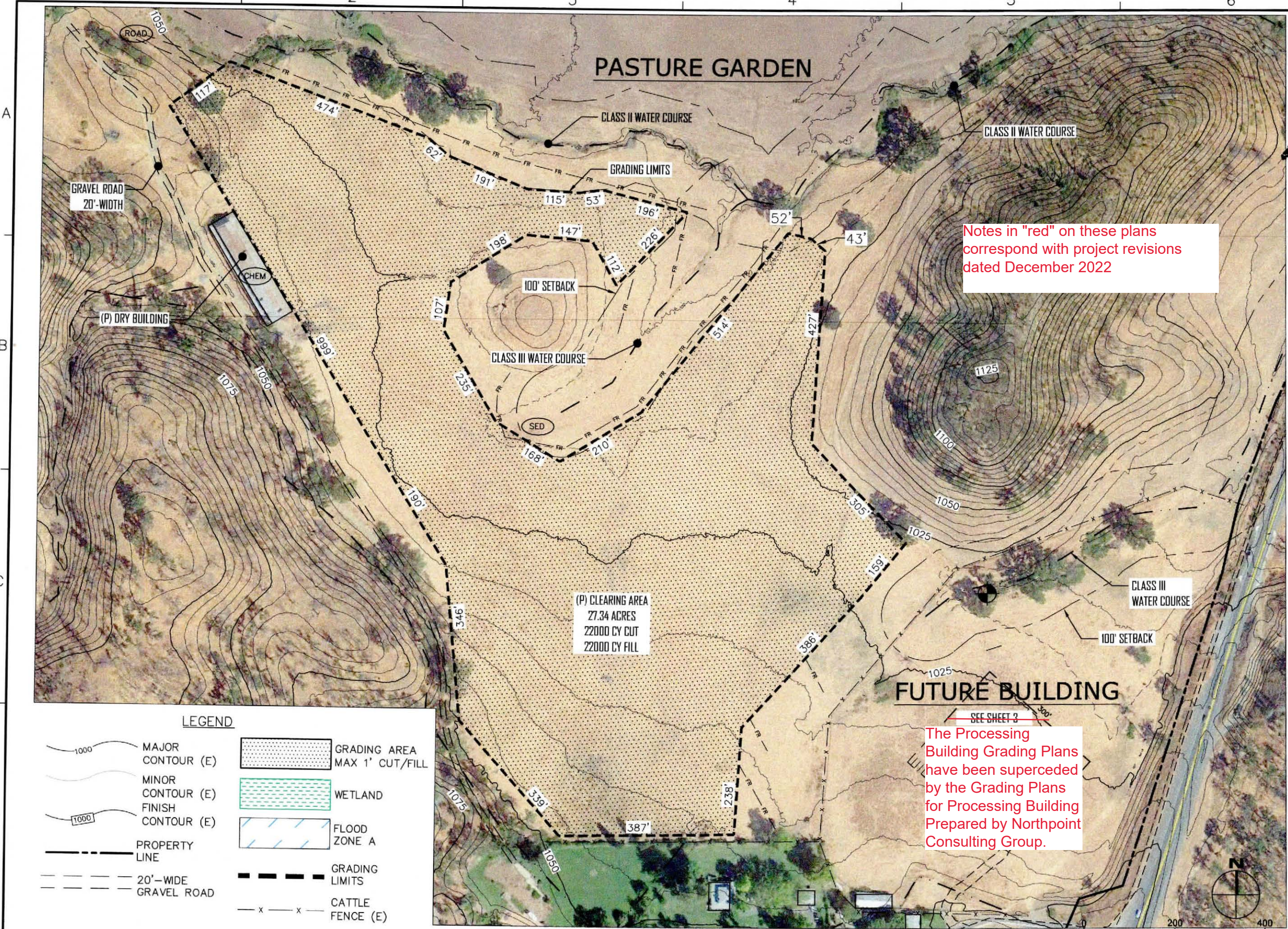
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**NORTHWEST CULTIVATION**

BAR X RANCH CULTIVATION  
MIDDLETOWN, CALIFORNIA

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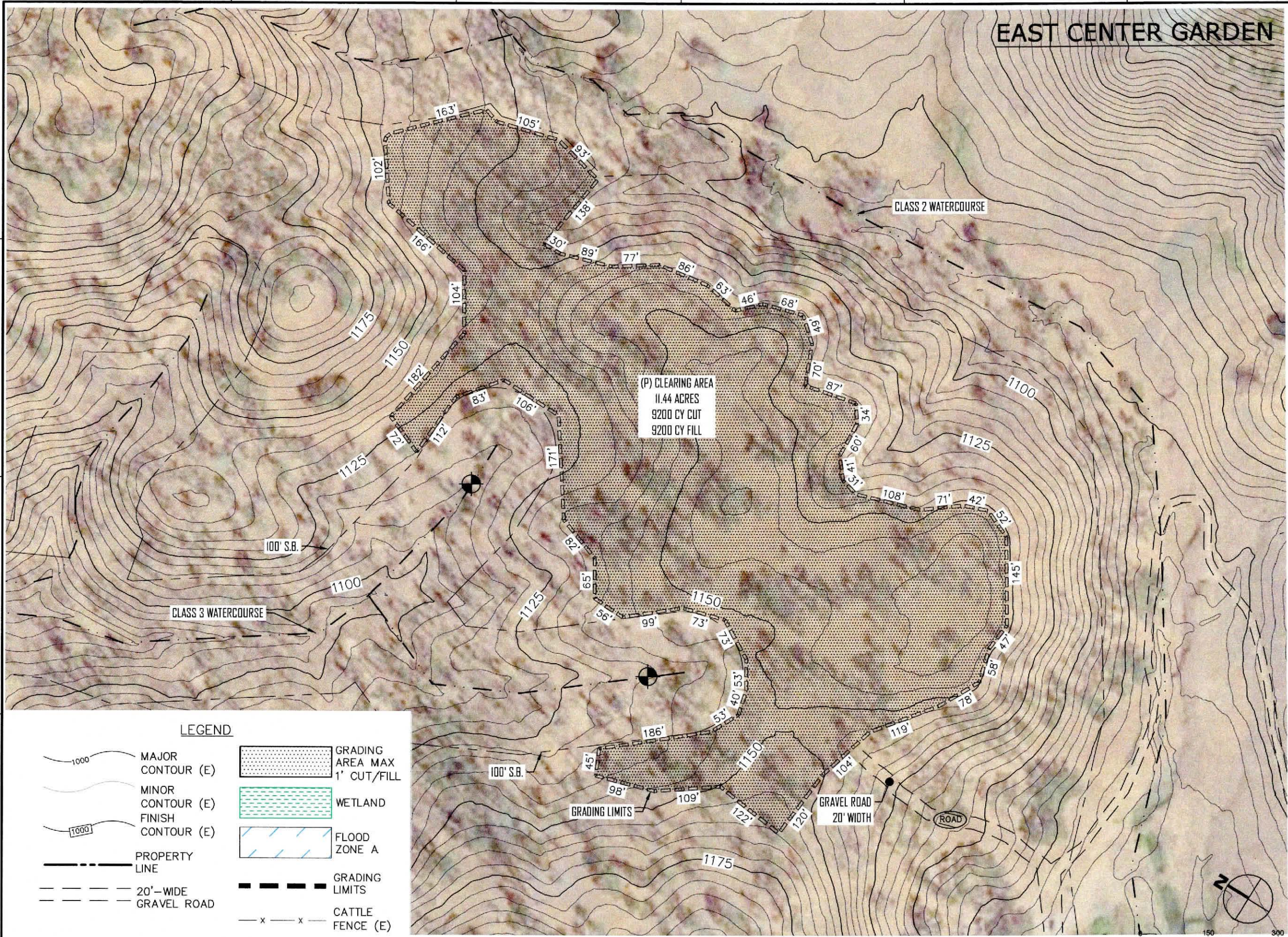
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**PASTURE GARDEN PHASE 1 & FUTURE BUILDING**  
 BAR X RANCH CULTIVATION  
 MIDDLETOWN, CALIFORNIA

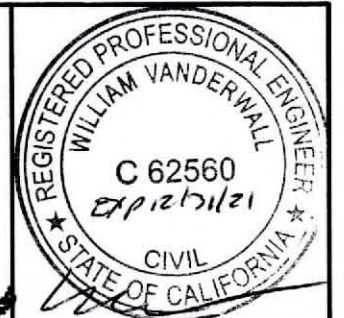
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
0	1"
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DWG	
SHEET	10

**LEGEND**

	MAJOR CONTOUR (E)		GRADING AREA MAX 1' CUT/FILL
	MINOR CONTOUR (E)		WETLAND
	FINISH CONTOUR (E)		FLOOD ZONE A
	PROPERTY LINE		GRADING LIMITS
	20'-WIDE GRAVEL ROAD		CATTLE FENCE (E)



**EAST CENTER GARDEN**



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**EAST CENTER GARDEN  
 GRADING**

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 Engineering, Inc.**

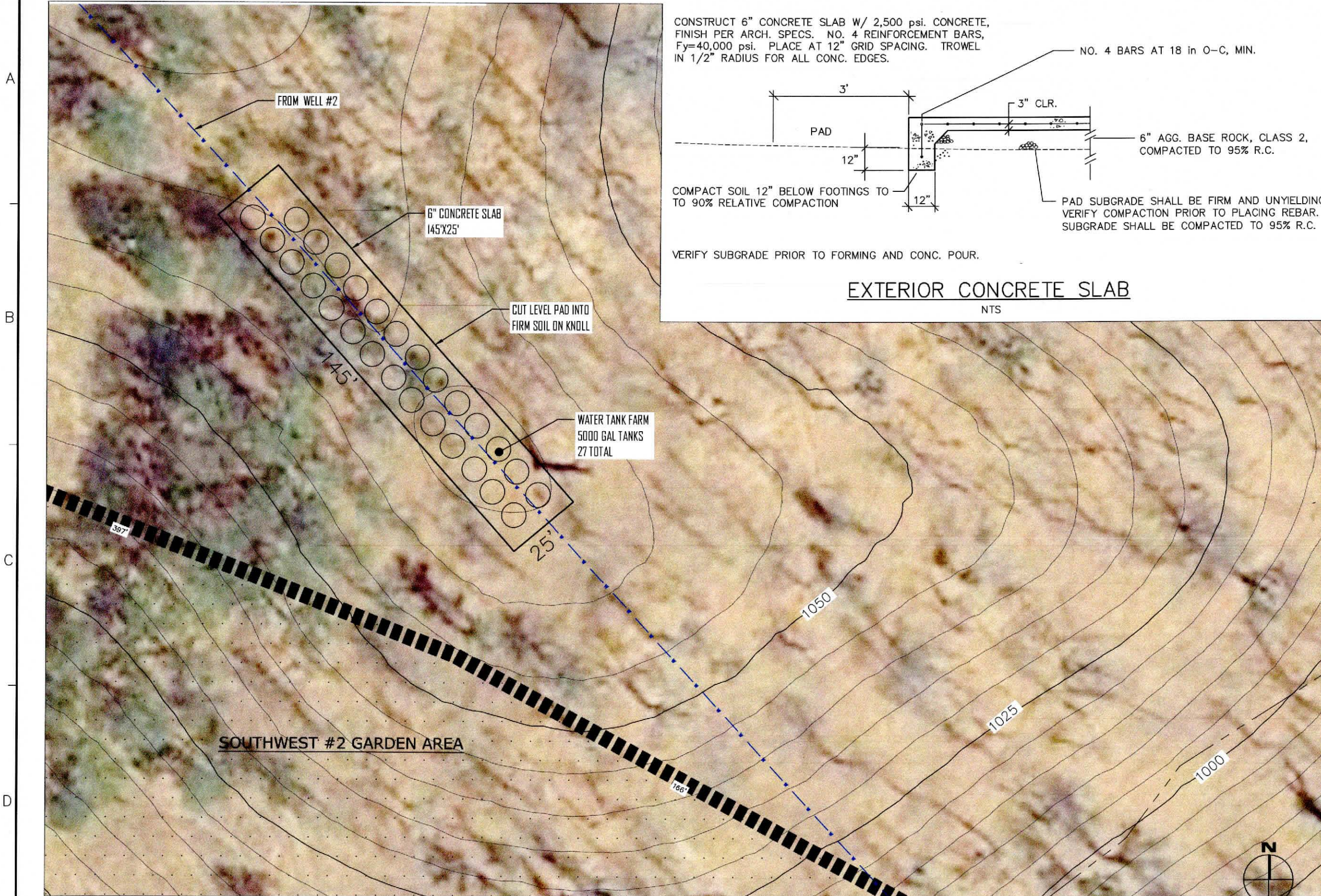
**LEGEND**

- MAJOR CONTOUR (E)
- MINOR CONTOUR (E)
- FINISH CONTOUR (E)
- PROPERTY LINE
- 20'-WIDE GRAVEL ROAD
- GRADING AREA MAX 1' CUT/FILL
- WETLAND
- FLOOD ZONE A
- GRADING LIMITS
- CATTLE FENCE (E)

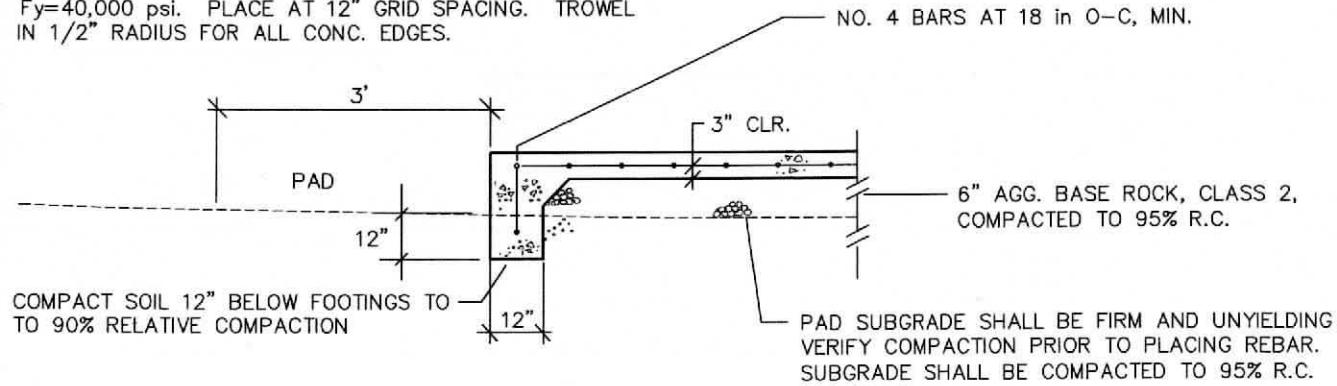
LAKE CO GIS CONTOUR DATA SHOWN 5' CONTOUR INTERVAL

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	MAY 2021
PROJ	21-25
DWG	
SHEET	11

# WATER TANK FARM



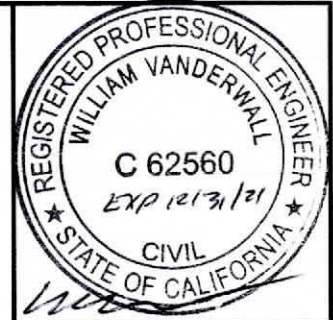
CONSTRUCT 6" CONCRETE SLAB W/ 2,500 psi. CONCRETE, FINISH PER ARCH. SPECS. NO. 4 REINFORCEMENT BARS, Fy=40,000 psi. PLACE AT 12" GRID SPACING. TROWEL IN 1/2" RADIUS FOR ALL CONC. EDGES.



VERIFY SUBGRADE PRIOR TO FORMING AND CONC. POUR.

## EXTERIOR CONCRETE SLAB

NTS



SUBMITTED TO:  
LAKE COUNTY  
COMMUNITY DEVELOPMENT DEPT  
COUNTY OF LAKE  
LAKEPORT, CA

PO BOX 431  
KELSEYVILLE, CA 95451  
707-279-4887

**VanDerWall**  
Engineering, Inc.

**WATER TANK FARM GRADING**



BAR X RANCH CULTIVATION  
KELSEYVILLE, CALIFORNIA

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING. 1"

DATE MAY 2021

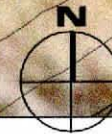
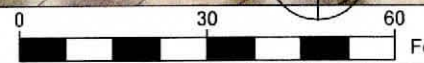
PROJ 21-25

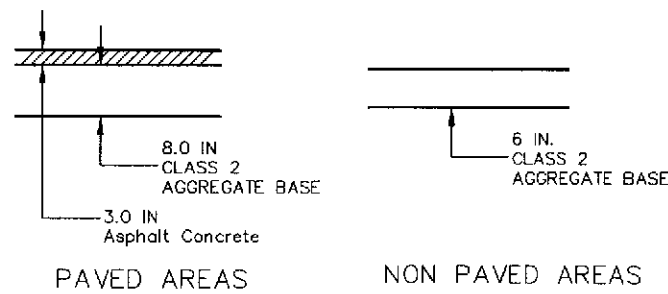
DWG

SHEET 12

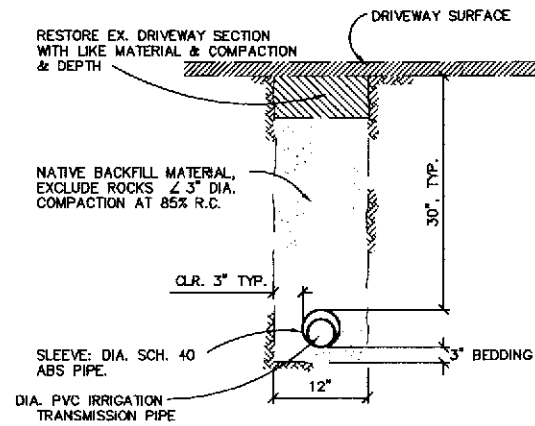
LAKE CO GIS CONTOUR DATA SHOWN

5' CONTOUR INTERVAL



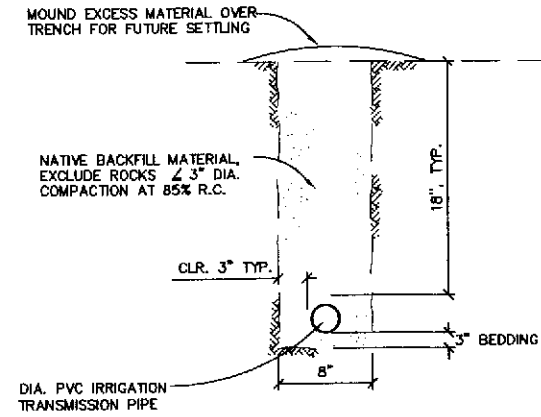


**A**  
13  
**STRUCTURAL SECTION**  
NTS

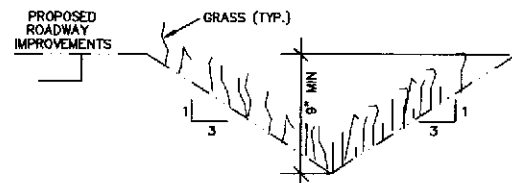


NOTE: AT ROAD CROSSINGS EXTEND SLEEVE 5 FT. BEYOND EDGES OF ROAD

**D**  
13  
**TYPICAL WATER CROSSING PRIVATE ROADWAY**

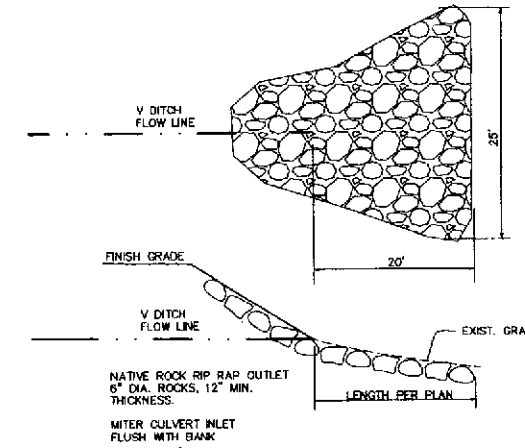


**E**  
13  
**TYPICAL IRRIGATION LINE**

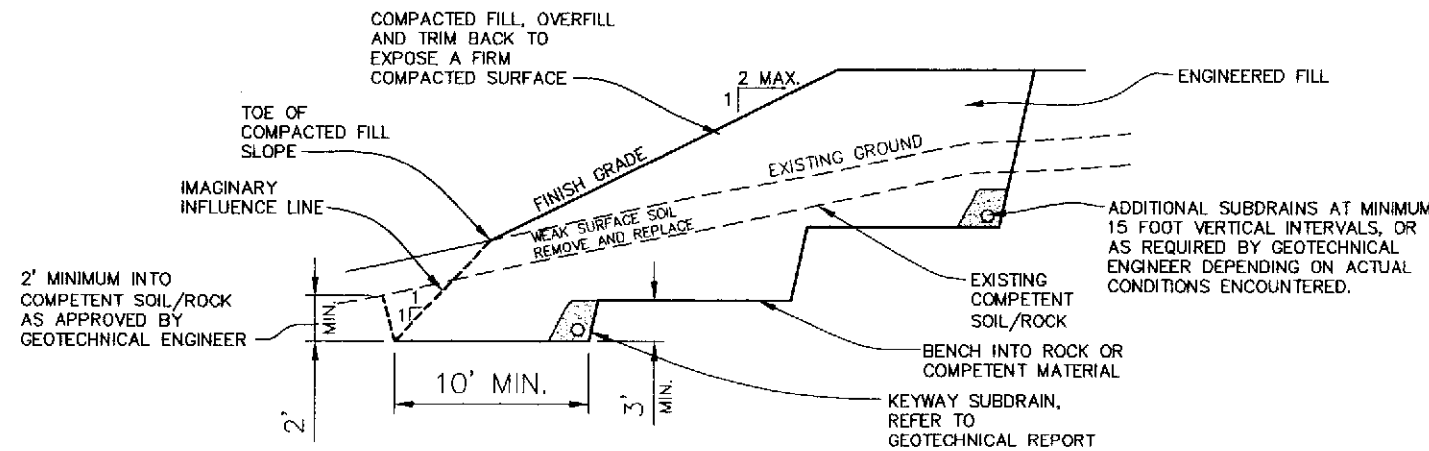


**GRASS SEED MIX:**  
APPLY 1/2 LBS PER 100 SF OF 'PATHWAY MIX'. CONTACT LA BALISTERS SEED SUPPLY AT (707) 526-6733. PATHWAY SEED MIX CONTAINS 50% OF CREEPING RED FESCUE, 30% OF PERENNIAL RYE, AND 20% OF HARD FESCUE.

**B**  
13  
**GRASS-LINED DITCH SECTION**  
NTS



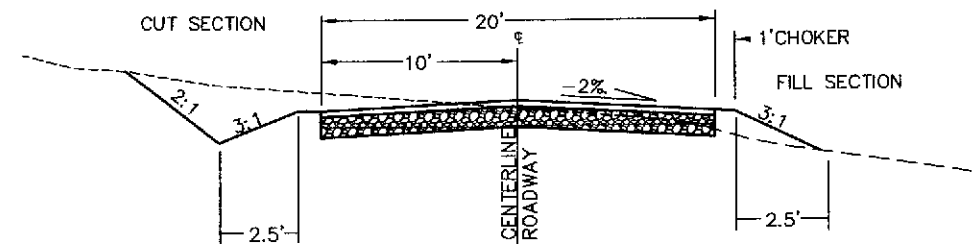
**F**  
13  
**RIP RAP DETAIL**  
NTS



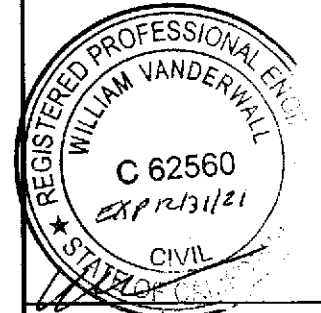
- NOTES:**
- KEYWAY EXCAVATION AND SUBDRAIN INSTALLATION SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER.
  - WHERE EXISTING SLOPE EXCEEDS 5:1, EXCAVATE SERIES OF BENCHES INTO COMPETENT SOIL/ROCK.
  - ALL SUBDRAINS SHALL HAVE CLEANOUTS AT A MINIMUM OF 400 FOOT INTERVALS AND AT UPSLOPE END.
  - INSTALLATION OF ALL SUBDRAINS SHALL BE OBSERVED BY A GEOTECHNICAL ENGINEER.
  - DIMENSIONS SHOWN ARE FOR ESTIMATING PURPOSES. ACTUAL DIMENSIONS AND EXTENT OF KEYS, BENCHES, AND SUBDRAINS WILL BE DETERMINED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.
  - SLOPES SHALL BE PROTECTED FROM EROSION PER THE EROSION CONTROL NOTES, SHEET C5.

**C**  
13  
**TYPICAL FILL SECTION**  
NTS

FOR FILLS PLACED ON TERRAIN SLOPING AT 5:1 (H:V) OR STEEPER.



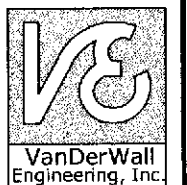
**G**  
13  
**ROAD TYPICAL X-SECTION**  
NTS



SUBMITTED TO:  
LAKE COUNTY  
COMMUNITY DEVELOPMENT DEPT  
COUNTY OF LAKE  
LAKEPORT, CA

PO BOX 431  
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707-279-4887

**VanDerWall**  
Engineering, Inc.



**FUTURE DRY BUILDING**

BAR X RANCH CULTIVATION  
MIDDLETOWN, CA

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE MAY 2021

PROJ 21-25

DWG

SHEET 13