Staff Report to the Agricultural Policy Advisory Commission

Application Number: 251002

Applicant: E&L Design Studio

Owner: Fernando Sanchez and Laura Elena Saenz Alvarado Trust

APN: 051-421-22

Address: 0 Lakeview Road, Watsonville, CA

Date: February 19, 2026

Agenda Item #: 8

Time: 1:30 p.m.

Project Description: Proposal to develop a 2,500 square foot two-bedroom house with a 469 square foot one-bedroom Junior Accessory Dwelling Unit (JADU) and a 1,200 square foot detached garage on a vacant Commercial Agricultural (CA) zoned parcel. The project includes an agricultural setback reduction from 200 feet to 35 feet to the southwest property line and a reduction to 44 feet to the northeast property line. Project requires a Condition Use Permit (CUP), a Minor Site Permit (MSP), and an Agricultural Buffer Setback Determination/Reduction from APAC (Agricultural Policy Advisory Commission).

Location: Project site is located on the north side of Lakeview Road, approximately 450 feet west of the intersection of Lakeview Road and Carlton Road, between 723 Lakeview Road and 749 Lakeview Road.

Permits Required: Agricultural Buffer Setback Reduction

Staff Recommendation:

- Recommend the Community Development and Infrastructure Department (CDI) Approve a reduction of the 200-foot agricultural buffer setback to 35 feet on the southwest side property line and to 45 feet at the northeast side property line.
- Recommend the CDI determine that the Minor Site Permit is consistent with the agricultural regulations, as proposed and designed.

Analysis and Discussion

The project site is an approximately 4.04-acre vacant parcel located on the north side of Lakeview Road, between 723 Lakeview Road and 749 Lakeview Road, in Watsonville. The site is zoned Commercial Agriculture (CA) and maintains an Agricultural (AG) General Plan designation. The development pattern of the surrounding neighborhood includes both single-family and agricultural land uses; properties on either side of the project site are developed for residential use (including farm labor housing at 723 Lakeview) and the property across from the subject parcel (306 Carlton Road) is an active berry farm. The site is mostly flat and covered in seasonal grasses but the rear third of the site, about 1.25 acres, slopes downhill into a tree and brush covered gully. A review of historical imagery indicates that cultivation of the site has not occurred for many decades.

The project applicant proposes development of an approximately 2,500 square foot single-family dwelling with a 469 square foot junior accessory dwelling unit (JADU) and a 1,200 square foot

detached garage, sited toward in the rear third of the property with access via a 375-foot driveway parallelling the northwestern property line. The development envelope would be located about 400 feet back from Lakeview Road, 140 feet from the riparian vegetation at the rear of the property, approximately aligned with the rearmost development on 723 Lakeview Road.

The proposed project requires APAC to make a recommendation to the CDI of an Agricultural Buffer Setback Reduction and a agricultural policy consistency determination for a Minor Site Development Permit for residential development on a CA-zoned parcel.

Agricultural Buffer Setback Reduction

The project is subject to review for compliance with the agricultural buffer setback standards of Santa Cruz County Code Chapter 16.50.095, which mandate a 200-foot setback for development involving "intensive human uses" (including dwellings) from parcels containing agricultural resource soil types. The proposed project would meet the 200-foot minimum setback from agricultural resource soils to the front and rear of the property, but a buffer reduction to 35-feet is proposed at the southwest property line (723 Lakeview Road) and a reduction to 44 feet is proposed at the northeast property line (749 Lakeview Road).

County Code authorizes APAC to approve agricultural buffer setback reductions of less than 200-feet provided that the Commission finds that the "lesser setback distance is found to be adequate to prevent conflicts between the nonagricultural development and the adjacent agricultural development and the adjacent agricultural land, based on the establishment of a physical barrier… or the existence of some other factor that effectively supplants the need for a 200-foot agricultural buffer setback" and finds that the nonagricultural development be sited to minimize conflicts and is located to remove as little land as possible from production or potential reduction.

Staff recommends the Commission recommend CDI approve the reduced buffer based on the Findings (Exhibit A), in that the proposed application incorporates a new vegetative barrier (two pittosporum hedges, each 150 feet in length) to be planted at the side property lines. County practice requires solid fencing in addition to the vegetative barrier, but the metal and fabric cyclone fencing already installed at the site is not proposed to be removed or replaced. Staff are not recommending that new, solid fencing be installed in addition to the vegetative barriers on the west side of the project site, where the entirety of the site is developed for non-agricultural use. However, to protect the right to farm for future crop production and to resolve conflict between residential and agricultural uses, conditions of approval for the project require the applicant to install solid board fencing in addition to the proposed vegetative barrier at the eastern property line.

The project has been evaluated as compliant with the requirements to avoid potential conflicts between uses and to remove as little land as possible from agricultural production. The applicant's agricultural viability study indicates that the property provides marginal value for commercial agricultural operations, and the proposed project is sited for maximum separation from the most active commercial agricultural operation in the area, the berry farm at 306 Carlton Road. Siting the proposed development closer to Lakeview Road would provide a marginal increase in onsite area available for future agriculture production but would increase the potential for conflict between the proposed residential use and the berry farm. The project design minimizes its impact on the on-site soil resources through clustered development in the rear third of the property, with about half of the 2.7-acres of flat and open land remaining undeveloped after completion of the project.

Site Development Permit and Use Permit Requirements

In addition to an agricultural buffer setback reduction permit the project is also subject to approval of a Minor Site Development Permit (MSP) for new development on a CA-zoned parcel. While APAC is identified as the decisionmaker for agricultural buffer setback reductions, County Code identifies the CDI Planning Director as the decisionmaker for MSPs with APAC maintaining an advisory role in evaluation of consistency with policies or interpretations.

Single-family residential development is a principally permitted use in the CA district, provided that the proposal meets the general site and development standards for the district, including that the total development area of the site does not exceed the larger 60,000 square feet or ten percent of the parcel (~17,628 square feet for the project site), and if exceeding 35,000 square feet of total development area, that a Master Site Plan is established for the project site. The project has been evaluated to be consistent with the standards for residential development in the CA zone district, meeting setbacks and height maximums, and includes 14,121 square feet of total development area (structures, patios, driveways, and water tanks), well-below the maximum threshold for residential development on commercial agricultural parcels.

County Code 13.10.314(B) further specifies that all discretionary residential uses in the CA zone district require special findings in addition to the development permit findings of SCCC 18.10. These findings include a determination that the proposed use is sited to minimize conflicts with commercial agricultural activities on site or in the area and that the use is sited to minimize the loss of agricultural land. As discussed above, the applicant's agricultural viability study (Exhibit F) indicates that the property provides marginal value for commercial agricultural operations, and the proposed project design demonstrates compliance with the siting requirements for nonagricultural development.

Therefore, Staff intends to recommend approval of the Minor Site Permit, provided that the Commission recommends CDI approves the agricultural buffer setback reduction and does not find inconsistency between the proposed project and the regulations for the protection of agricultural resources.

Recommendation

Staff recommend your Commission:

- **RECOMMEND** CDI approve the Agricultural Buffer Reduction from 200 feet to about 44 feet to the single-family dwelling from the adjacent CA zoned property known as APN 051-421-05 and to about 35 feet to the garage from the adjacent CA zoned property known as APN 051-421-23, proposed under Application 251002, based on the attached findings and recommended conditions.

- **RECOMMEND** the CDI determine that the proposed project is consistent with agricultural protection policies, as proposed and designed.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Division, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.sccoplanning.com

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Report Reviewed By: Sheila McDaniel
Principal Planner
Development Review

Exhibits

A. Findings
B. Conditions
C. Project plans
D. Assessor's, Location, Zoning and General Plan Maps
E. Parcel information
F. Agricultural Viability Study, prepared by Rush and Duttle Consulting, dated June 16, 2025

Required Findings for Agricultural Buffer Setback Reduction
SCCC 16.50.095(D)(1)

(a) Significant topographic differences exist between the agricultural and nonagricultural uses that eliminate or minimize the need for a 200-foot agricultural buffer setback; or

(b) Permanent substantial vegetation (such as a riparian corridor or woodland protected by the County's riparian corridor or sensitive habitat ordinances) or other physical barriers exist between the agricultural and nonagricultural uses that eliminate or minimize the need for a 200-foot agricultural buffer setback; or

(c) A lesser setback distance is found to be adequate to prevent conflicts between the nonagricultural development and the adjacent agricultural development and the adjacent agricultural land, based on the establishment of a physical barrier (unless it is determined that the installation of a barrier will hinder the affected agricultural use more than it would help it, or would create a serious traffic hazard on a public or private right-of-way) or the existence of some other factor that effectively supplants the need for a 200-foot agricultural buffer setback; or

The project plans indicate that two pittosporum hedges, each 150 feet in length, will be installed parallelling the side property line. The hedges address any potential or future conflict where the 200-foot agriculture buffer has been reduced. Further, although the two adjacent sites are zoned as Commercial Agriculture and designated as containing agricultural resource soil types, neither parcel has a history of commercial agricultural operations. 723 Lakeview is developed with multiple housing units, which limits future agricultural endeavors on that parcel. The proposed development is more than 200 feet (beyond the minimum buffer) from active commercial agricultural operations at 306 Carlton Road and more than 200-feet from 174 Carlton Road, which does not appear to engage in agriculture but is a mapped agricultural resource soil type. Notwithstanding, the project is conditioned to provide a six foot solid board fence at the east side property line for protection of future agricultural uses on that property.

(d) The imposition of a 200-foot agricultural buffer setback would preclude building on a parcel of record in which case a lesser buffer setback distance may be permitted; provided, that the maximum possible setback distance is required, coupled with a requirement for a physical barrier (e.g., solid fencing and/or vegetative screening) to provide the maximum buffering possible, consistent with the objective of permitting building on a parcel of record.

EXHIBIT A

Required Finding for Agricultural Buffer Setback Reduction on Commercial Agriculture (CA) Zoned Land - SCCC 16.50.095(D)(3)

(3) Minimize land use conflicts. In the event that an agricultural buffer setback reduction is proposed and the proposed nonagricultural development is located on Type 1, Type 2 or Type 3 commercial agricultural land, the nonagricultural development shall be sited so as to minimize possible conflicts between the agricultural land use located on the subject parcel, and the nonagricultural development shall be located so as to remove as little land as possible from production or potential production.

Although the property is designated as a Type 1 agricultural resource soil type, the applicant's agricultural viability study (Exhibit F) evaluates that the site retains marginal value for commercial agriculture. An evaluation of historical imagery of the site shows that agriculture has been limited, if not nonexistent, for several decades. Despite being evaluated as nonviable, the project has been designed to site development at the far end of the flat portion of the site, retaining about 1.4 acres at the front of the parcel as undeveloped land and available for commercial agricultural support or other agricultural uses.

Conditions of Approval

I. This permit authorizes an Agricultural Buffer Setback as indicated on the approved Exhibit "C" for this permit. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit, including, without limitation, any construction or site disturbance, the applicant/owner shall:

A. Sign, date, and return to Santa Cruz County Planning one copy of the approval to indicate acceptance and agreement with the conditions thereof.

B. Obtain a Building Permit and Grading Permit from the Santa Cruz County Building Official.

1. Any outstanding balance due to Santa Cruz County Planning must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.

II. Prior to issuance of a Building Permit the applicant/owner shall:

A. Submit final architectural plans for review and approval by Santa Cruz County Planning. The final plans shall be in substantial compliance with the plans marked Exhibit "C" on file with Santa Cruz County Planning. Any changes from the approved Exhibit "C" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:

1. A copy of the text of these conditions of approval incorporated into the full-size sheets of the architectural plan set.

2. A development setback of a minimum of 35 feet from the detached garage to APN 051-421-23 and 45 feet from the single-family dwelling to the adjacent Commercial Agriculture zoned parcel APN 051-421-05.

3. Final plans shall show the location of the vegetative buffering barrier (composed of drought tolerant shrubbery) and shall be revised to provide a six-foot solid board fence at the eastern side property line, and which shall be constructed in conjunction with the vegetative buffering. The shrubs utilized shall attain a minimum height of six feet upon maturity. Species type, plant sizes and spacing shall be indicated on the final plans for review and approval by Santa Cruz County Planning staff.

4. A Water Efficient Landscape Plan prepared in accordance with the requirements of the Water Efficient Landscape Ordinance (County Code Chapter 13.13) by a certified/licensed landscape architect, landscape contractor, civil engineer, landscape irrigation designer, landscape irrigation auditor, or water manager. WELO-exempt projects, residential

projects of up to two units, or landscapes where at least 30% of the water use is provided by graywater, recycled water or captured rainwater may provide either a signed Water Efficient Landscape Checklist or a Water Efficient Landscape Plan.

a. Any landscape plan submitted to comply with SCCC Ch. 13.13 shall include a Water Efficient Landscape Plan Submittal Compliance Statement.

B. The owner shall record a Statement of Acknowledgement, as prepared by Santa Cruz County Planning, and submit proof of recordation to Santa Cruz County Planning. The statement of Acknowledgement acknowledges the adjacent agricultural land use and the agricultural buffer setbacks.

III. All construction shall be performed according to the approved plans for the building permit. Prior to final building inspection, the applicant/owner must meet the following conditions:

A. The agricultural buffer setbacks shall be met as verified by the County Building Inspector.

B. The required vegetative barriers (pittosporum hedges) shall be installed prior to final inspection. The applicant/owner shall contact Santa Cruz County Planning's Agricultural Planner, a minimum of three working days in advance to schedule an inspection to verify that the required barrier has been completed.

C. Asphalt and concrete debris stockpiled throughout the site shall be removed.

D. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official and/or the County Senior Civil Engineer.

IV. Operational Conditions

A. The vegetative and physical barriers shall be permanently maintained.

B. All required Agricultural Buffer Setbacks shall be maintained.

C. A Landscape Installation Certificate prepared in accordance with the Water Efficient Landscape Ordinance (County Code Chapter 13.13) shall be provided.

D. The site shall not be used for stockpiling or dumping of material including asphalt, concrete, or soil which could affect the underlying agricultural resource soil.

E. In the event that future County inspections of the subject property disclose non-compliance with any Conditions of this Approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, up to and including permit revocation.

V. Indemnification

The applicant/owner shall indemnify, defend with counsel approved by the COUNTY, and hold harmless the COUNTY, its officers, employees, and agents from and against any claim (including reasonable attorney's fees, expert fees, and all other costs and fees of litigation), against the COUNTY, its officers, employees, and agents arising out of or in connection to this development approval or any subsequent amendment of this development approval which is requested by the applicant/owner, regardless of the COUNTY's passive negligence, but excepting such loss or damage which is caused by the sole active negligence or willful misconduct of the COUNTY. Should the COUNTY in its sole discretion find the applicant's/owner's legal counsel unacceptable, then the applicant/owner shall reimburse the COUNTY its costs of defense, including without limitation reasonable attorney's fees, expert fees, and all other costs and fees of litigation. The applicant/owner shall promptly pay any final judgment rendered against the COUNTY (and its officers, employees, and agents) covered by this indemnity obligation. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this development approval.

A. The COUNTY shall promptly notify the applicant/owner of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. The COUNTY shall cooperate fully in such defense.

B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

   1. COUNTY bears its own attorney's fees and costs; and

   2. COUNTY defends the action in good faith.

C. Settlement. The applicant/owner shall not be required to pay or perform any settlement unless such applicant/owner has approved the settlement. When representing the COUNTY, the applicant/owner shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the COUNTY.

D. Successors Bound. The "applicant/owner" shall include the applicant and/or the owner and the successor'(s) in interest, transferee(s), and assign(s) of the applicant and/or the owner.

Minor Variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires three years from the effective date listed below or if additional discretionary permits are required for the above permitted project, this permit shall expire on the same date as any subsequent approved discretionary permit(s) unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit,

will void the development permit, unless there are special circumstances as determined by the Planning Director.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Agricultural Policy Advisory Commission under the provisions of County Code Chapter 16.50, may appeal the act or determination to the Board of Supervisors in accordance with chapter 18.10 of the Santa Cruz County Code.

NEW RESIDENTIAL DEVELOPMENT FOR:

SANCHEZ'S RESIDENCE

0 LAKE VIEW RD.
WATSONVILLE, CA. 95076
A.P.N.:051-421-022-000

PROJECT TEAM

OWNER(S):
THE FERNANDO SANCHEZ & LAURA ELENA SAENZ ALVARADO FAMILY 2020 REVOCABLE TRUST
139 ORCHARD PARK CT.
WATSONVILLE, CA. 95076
(831) 254-6255
lsaenzal@gmail.com

AGRICULTURAL CONSULTANT:
ANTHONY DUTTLE, MS, MBA
RUSH & DUTTLE CONSULTING
6083 FIG GARDEN DR., #671
FRESNO, CA 93722
O:(831)-484-4834
aduttle@gmail.com

DESIGNER/APPLICANT:
E & L BUILDING DESIGN STUDIO
150 CAYUGA STREET SUITE 1
SALINAS, CA. 93901
O:(831) 250-8069
e_ldesigns@hotmail.com

BIOLOGICAL CONSULTANT:
ED MERCURIO 637 CARMELITA DR#20
SALINAS,CA.93901
O:(831)-206-0737
ed_mercurio@yahoo.com

GEOTECHNICAL ENGINEER:
ASHTON,P.E.
HARO,KASUNICH & ASSOCIATES,INC.
116 EAST LAKE AVE.
WATSONVILLE, CA. 95076
O:(831) 722-4175
jperez@harokasunich.com

SEPTIC DESIGN:
RYAN FOX,REHS#8605
FOX ONSITE SOLUTIONS
3220 YUCCA AVE,UNIT 6
SAN JOSE,CA 95124
O:(831) 531-7205
sterling@foxonsite.com

ARCHAEOLOGIST/HISTORIAN:
RUBÉN G. MENDOZA, PHD., RPA,
ARCHIVES & ARCHAEOLOGY
1645 BEACON HILL DRIVE
SALINAS, CA 93906
O:(831)-319-2026
Info@archivesarchaeology.com

WELL CONSULTANT:
JEFF MAGGIORA
MAGGIORA BROS. DRILLING, INC.
595 AIRPORT BLVD.
WATSONVILLE, CA 95076
O:(831)-724-1338
Jeffp.maggiorabros@gmail.com

CIVIL ENGINEER/LAND SURVEYOR:
JEFF S. NIELSEN, LICENSE #: LS 6832
MID COAST ENGINEERS
373 BLOHM AVENUE,
AROMAS, CA 95004
O:(831)-724-2580
andrea@midcoastengineers.com

GENERAL NOTES

1. ALL PLANS, CONSTRUCTION, DESIGN, WORKMANSHIP AND MATERIALS SHALL CONFORM WITH THE REQUIREMENTS OF THE: 2022 CRC, 2022 CEC, 2022 CMC, 2022 CPC, 2022 CFC, 2022 C.En.C., 2022 CGBSC AND CITY OF SALINAS ORDINANCES, ZONING DITRICTS & DEVELOPMENT STANDARDS.
2. JOB SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE OWNER/CONTRACTOR PER CCR TITLE 8, SECTION 336 www.dir.ca.gov/title8/336.html
3. ALL SITE INSPECTIONS REQUIRE A MINIMUM 24 HOURS NOTICE. FIRE DEPARTMENT INSPECTIONS ARE TO BE REQUESTED THROUGH THE BUILDING DIVISION, PLEASE BE SPECIFIC AS TO THE TYPE OF INSPECTION.
4. ALL HOSES USED IN CONNECTION WITH ANY CONSTRUCTION ACTIVITIES SHALL BE EQUIPPED WITH A SHUTOFF NOZZLE. WHEN AN AUTOMATIC SHUTOFF NOZZLE CAN BE PURCHASED OR OTHERWISE OBTAINED FOR THE SIZE OR TYPE OF HOSE IN USE, THE NOZZLE SHALL BE AN AUTOMATIC SHUTOFF NOZZLE.
5. OWNER/CONTRACTOR TO DETERMINE THE LOCATION OF UNDERGROUND UTILITIES AND SERVICES AND PERFORM WORK IN A MANNER WHICH WILL AVOID POSSIBLE DAMAGE TO SUCH.
6. APPROVED ADDRESS NUMBERS AND/OR LETTERS, WITH CONTRASTING BACK ROUND, SHALL BE PLACED ON BUILDING(S) TO BE VISIBLE FROM THE STREET.APPROVED ADDRESSES MUST BE CLEARLY IDENTIFIED WITH REFLECTIVE AND/OR ILLUMINATED NUMBERS AND/OR LETTERS A MINIMUM OF 4" HIGH WITH A MINIMUM STROKE WITH OF 1/2". CRC SECTION R319.1
7. BUILDINGS THAT UNDERGO CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE IN ACCORDANCE WITH 2022 CFC CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.

DEFERRED SUBMITTAL

PHOTOVOLTAIC SOLAR SYSTEM

FIRE SPRINKLERS

VICINITY MAP N.T.S.

SCOPE OF WORK

0 LAKEVIEW RD.

PROPOSAL TO CONSTRUCT A SINGLE FAMILY DWELLING (SFD) WITH AN ATTACHED JUNIOR ADDITIONAL DWELLING UNIT (JADU) AND A 4 CAR GARAGE. REQUIRES AGRICULTURAL BUFFER (200 FT) REDUCTION FOR SIDE YARDS BY THE AGRICULTURAL POLICY ADVISORY COMISSION (APAC)

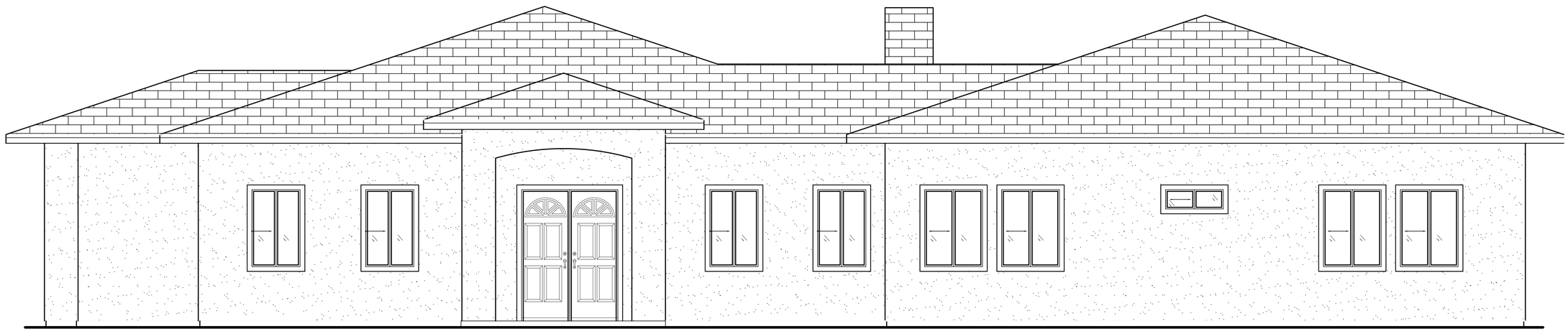
SHEET INDEX

DATA

JURISTICTION:	COUNTY OF SANTA CRUZ	
BUILDING CODE:	RESIDENTIAL	:2022 C.R.C.
CALIFORNIA GREEN	ELECTRICAL	:2022 C.E.C.
BUILDING STANDARDS CODE: 2022 C.G.B.S.C.	MECHANICAL	:2022 C.M.C.
	PLUMBING	:2022 C.P.C.
COUNTY OF SANTA CRUZ MUNICIPAL CODE:	FIRE	:2022 C.F.C.
	ENERGY CODE	:2022 C.En.C.
ZONING:	CA(COMMERCIAL AG)	
ASSESSORS PARCEL NO:	051-421-022-000	
CURRENT USE:	RESIDENTIAL	
PROPOSED USE:	RESIDENTIAL	
OCCUPANCY GROUP:	RESIDENCE R-3	
OCCUPANCY GROUP:	ACCESORY U	
NUMBER OF STORY:	2 STORY BUILDING	
CONSTRUCTION TYPE:	V-B	
BUILDING FIRE SPRINKLERS SYSTEMS:		
LOT SIZE:	4.0470 AC-176,287 SQ. FT.	
LANDSCAPE:		

PROPOSED BUILDINGS

0 LAKEVIEW RD. (CONDITIONED)		
MAIN DWELLING	2,500 S.F.	NEW
JADU	469 S.F.	NEW
	2,969 S.F.	TOTAL
0 LAKEVIEW RD. (UNCONDITIONED)		
COVERED PATIO	360 S.F.	NEW
GARAGE	1200 S.F.	NEW
	1560 S.F.	TOTAL
TOTAL:	4,529 S.F.	



1 SOUTH ELEVATION (FRONT ELEVATION)
N.T.S.

Exhibit C
Project Plans
Application 251002

E&L
BUILDING DESIGN STUDIO
150 CAYUGA ST. SUITE 1
SALINAS, CA. 93901
O: (831) 250-8069
e_ldesigns@hotmail.com

REVISION DATE: BY: LML 0

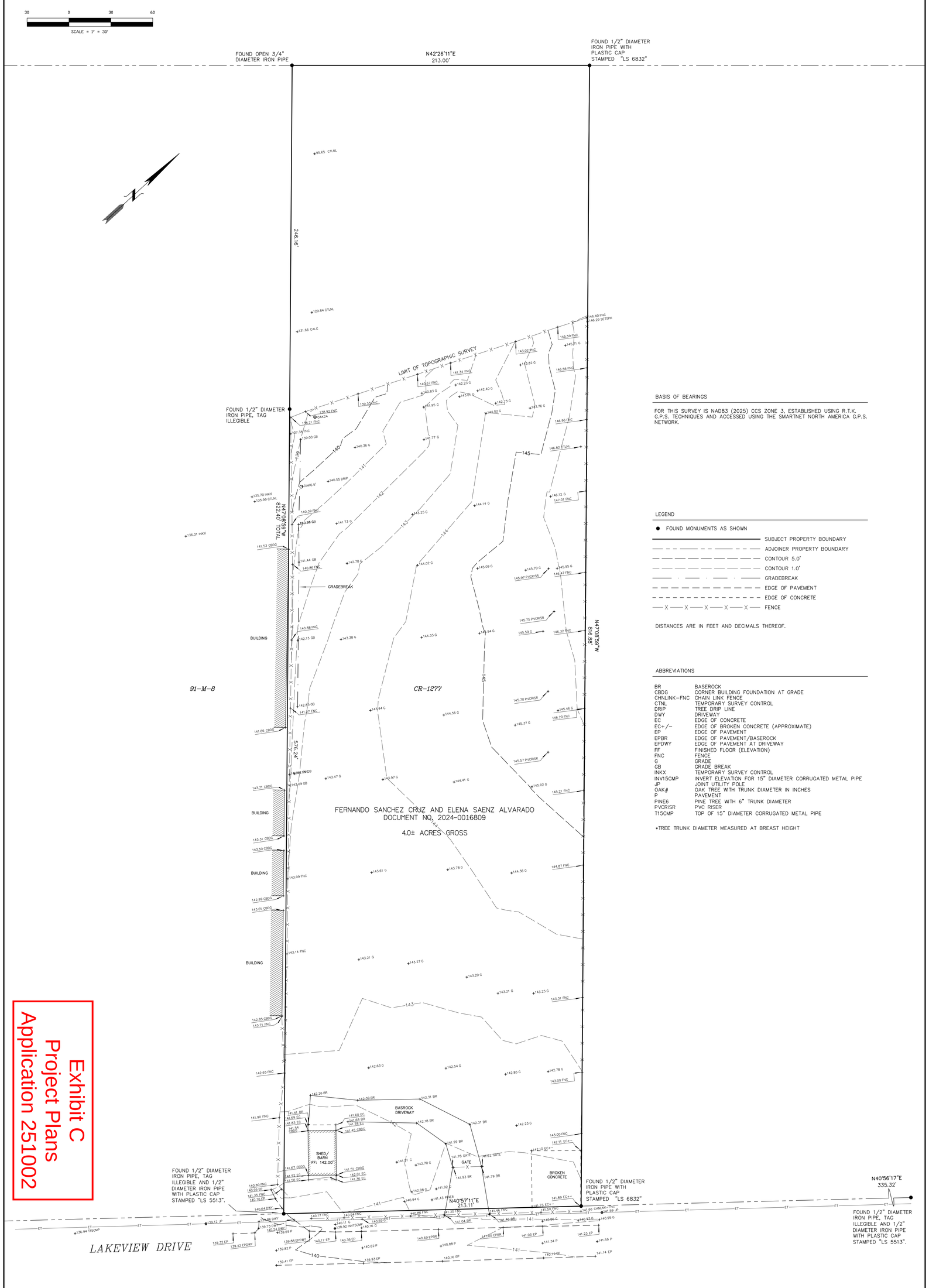
SANCHEZ'S RESIDENCE
0 LAKEVIEW RD.,
WATSONVILLE, CA. 95076
A.P.N.:051-421-022-000

GENERAL PLAN

05/13/25

JOB NUMBER: 25-11

PAGE: A0



BASIS OF BEARINGS

FOR THIS SURVEY IS NAD83 (2025) CCS ZONE 3, ESTABLISHED USING R.T.K. G.P.S. TECHNIQUES AND ACCESSED USING THE SMARTNET NORTH AMERICA G.P.S. NETWORK.

LEGEND

- ● FOUND MONUMENTS AS SHOWN
- SUBJECT PROPERTY BOUNDARY
- ADJOINER PROPERTY BOUNDARY
- CONTOUR 5.0'
- CONTOUR 1.0'
- GRADEBREAK
- EDGE OF PAVEMENT
- EDGE OF CONCRETE
- FENCE

DISTANCES ARE IN FEET AND DECIMALS THEREOF.

ABBREVIATIONS

BR	BASEROCK
CBDG	CORNER BUILDING FOUNDATION AT GRADE
CHNLINK-FNC	CHAIN LINK FENCE
CTNL	TEMPORARY SURVEY CONTROL
DRIP	TREE DRIP LINE
DWY	DRIVEWAY
EC	EDGE OF CONCRETE
EC+/-	EDGE OF BROKEN CONCRETE (APPROXIMATE)
EP	EDGE OF PAVEMENT
EPBR	EDGE OF PAVEMENT/BASEROCK
EPDWY	EDGE OF PAVEMENT AT DRIVEWAY
FF	FINISHED FLOOR (ELEVATION)
FNC	FENCE
G	GRADE
GB	GRADE BREAK
INKX	TEMPORARY SURVEY CONTROL
INV15CMP	INVERT ELEVATION FOR 15" DIAMETER CORRUGATED METAL PIPE
JP	JOINT UTILITY POLE
OAK#	OAK TREE WITH TRUNK DIAMETER IN INCHES
P	PAVEMENT
PINE6	PINE TREE WITH 6" TRUNK DIAMETER
PVCRISR	PVC RISER
T15CMP	TOP OF 15" DIAMETER CORRUGATED METAL PIPE

•TREE TRUNK DIAMETER MEASURED AT BREAST HEIGHT

Exhibit C
Project Plans
Application 251002

Page 12

TOPOGRAPHIC SURVEY

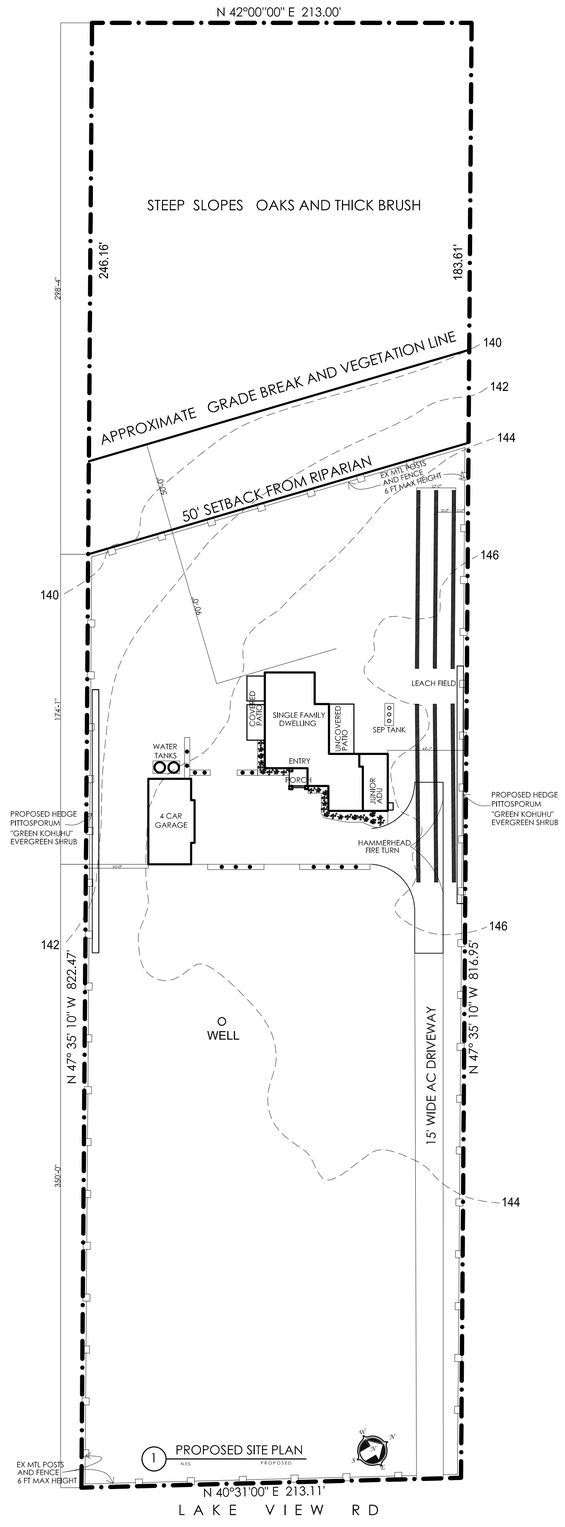
THE LANDS CONVEYED TO FERNANDO SANCHEZ CRUZ AND ELENA SAENZ ALVARADO, BY GRANT DEED RECORDED AUGUST 29, 2024 IN DOCUMENT NO. 2024-0016809, OFFICIAL RECORDS OF SANTA CRUZ COUNTY.

A.P.N. 051-421-22
LAKEVIEW DRIVE, WATSONVILLE
SANTA CRUZ COUNTY CALIFORNIA

MID COAST ENGINEERS
CIVIL ENGINEERS AND LAND SURVEYORS
373 BLOHM AVENUE, AROMAS, CA - (831) 724-2580

JEFFREY S. NIELSEN No. 6832 PROFESSIONAL LAND SURVEYOR STATE OF CALIFORNIA

SCALE	1" = 30'
DATE:	SEP 5 2025
DRAWN BY:	AB
REVIEWED BY:	JSN
JOB NO.:	2508923
SHEET	1
OF	1 SHEETS



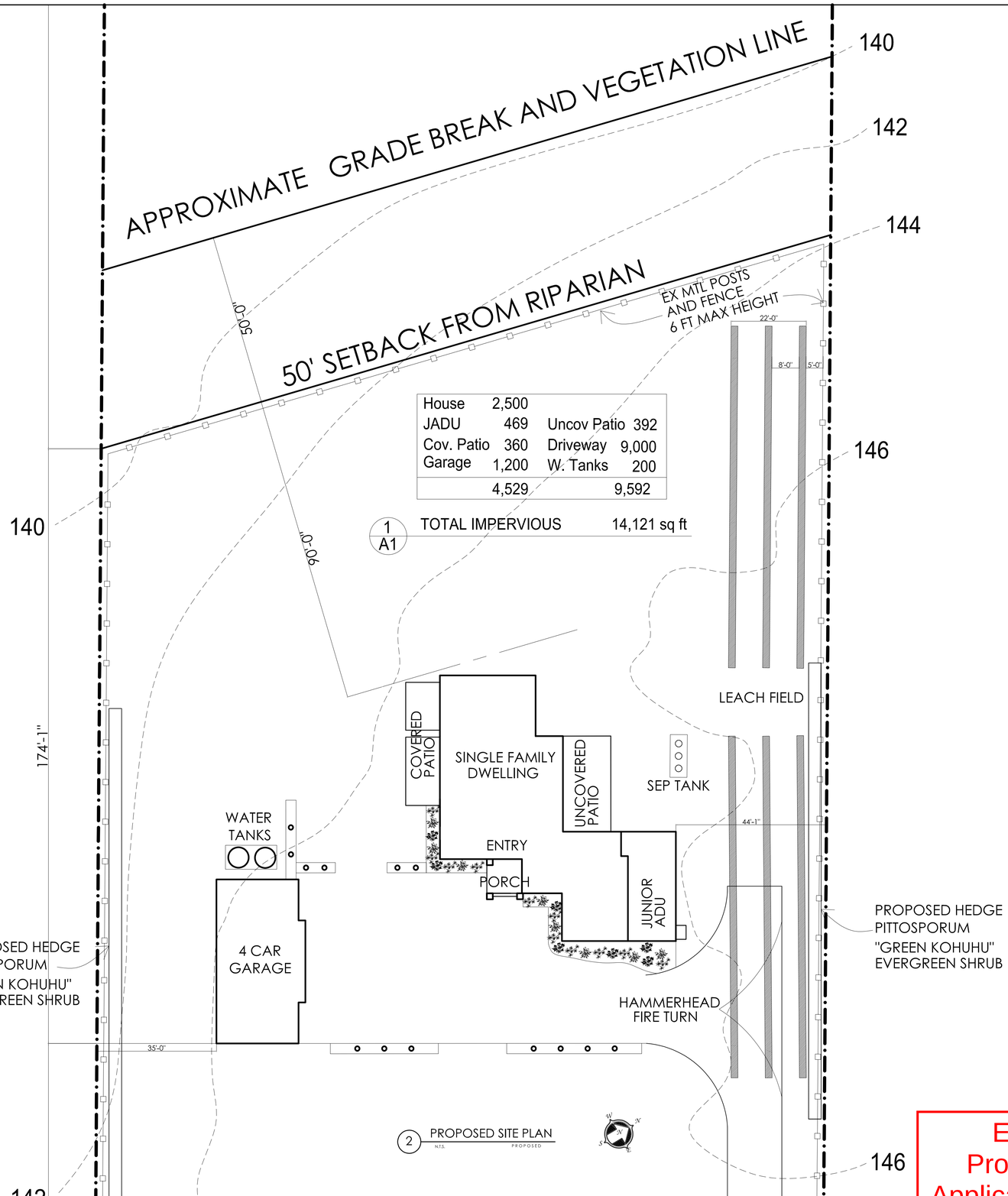


Exhibit C
Project Plans
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E & L
BUILDING DESIGN STUDIO
150 CAYUGA ST.
SUITE 1
SALINAS, CA. 93901
(831) 250-8069
e_ldesigns@hotmail.com

REVISION
DATE:
BY: LML
0

SANCHEZ'S RESIDENCE

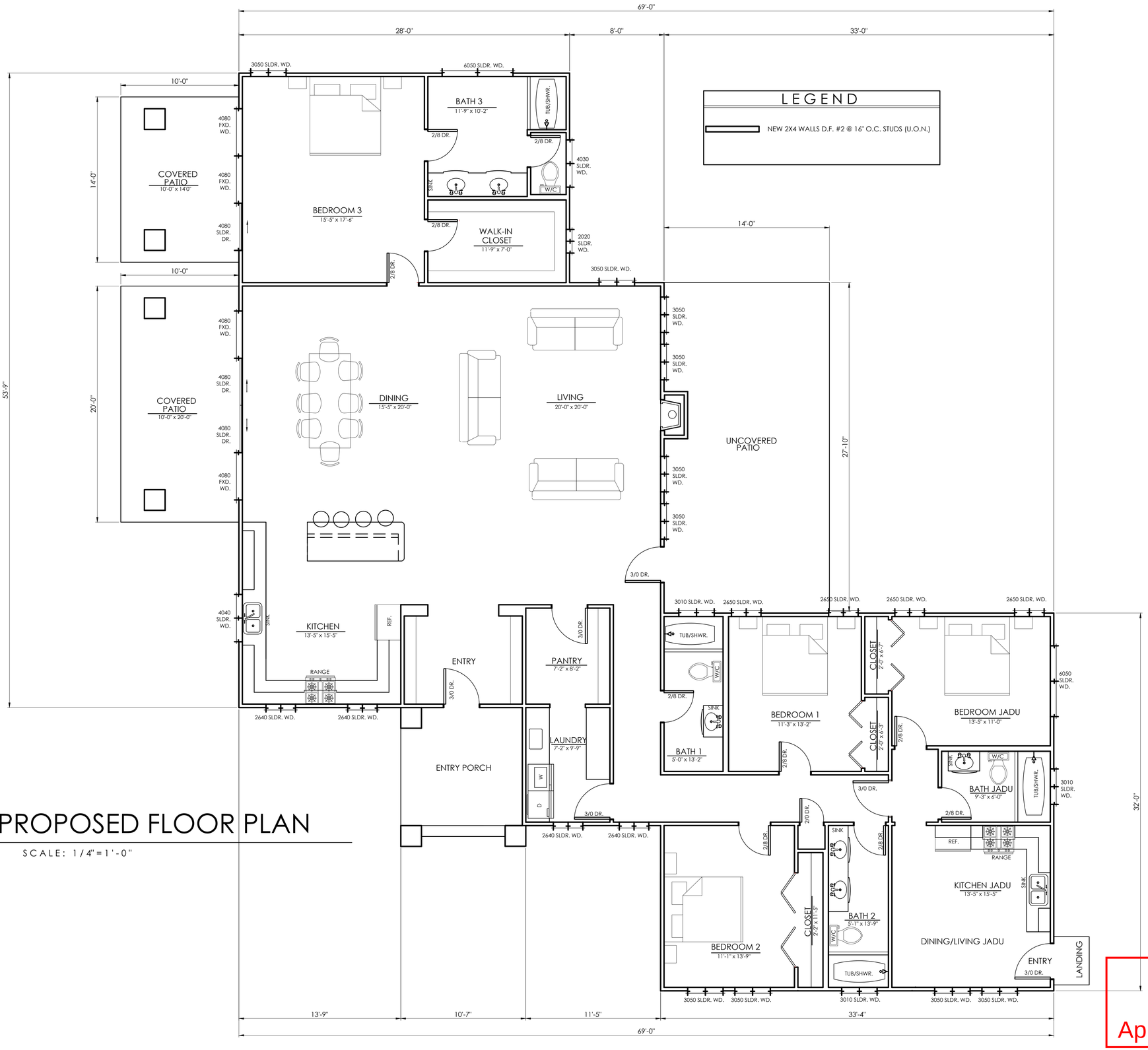
DLAKEVIEW RD.,
WATSONVILLE, CA. 95076
A.P.N.:051-421-022-000

PROPOSED SITE PLAN

05/13/25

JOB NUMBER:
25-11

PAGE:
A1



LEGEND

NEW 2X4 WALLS D.F. #2 @ 16" O.C. STUDS (U.O.N.)

1 PROPOSED FLOOR PLAN

SCALE: 1/4"=1'-0"

Exhibit C
Project Plans
Application 251002

E & L
BUILDING DESIGN STUDIO
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DATE:
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0

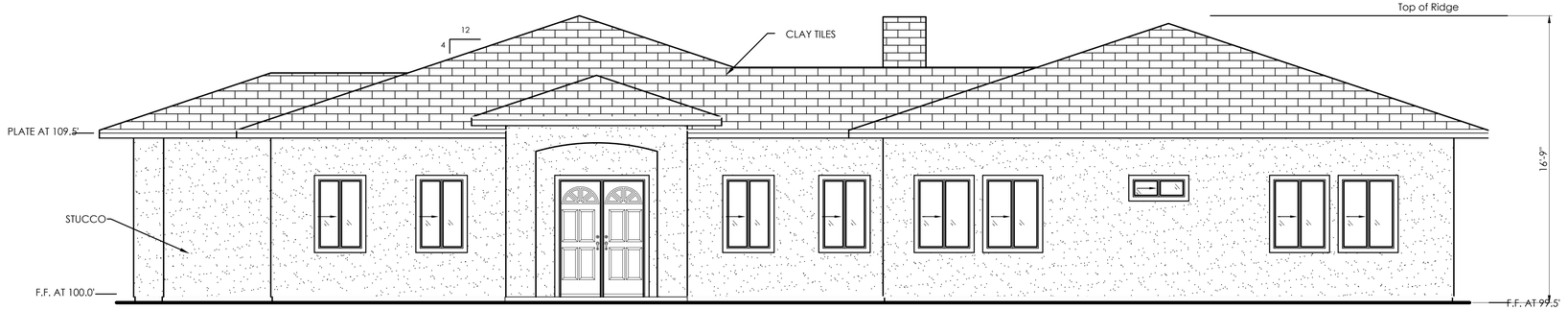
SANCHEZ'S RESIDENCE
0 LAKEVIEW RD.
WATSONVILLE, CA. 95076
A.P.N.:051-421-022-000

PROPOSED SFD/JADU
FLOOR PLAN

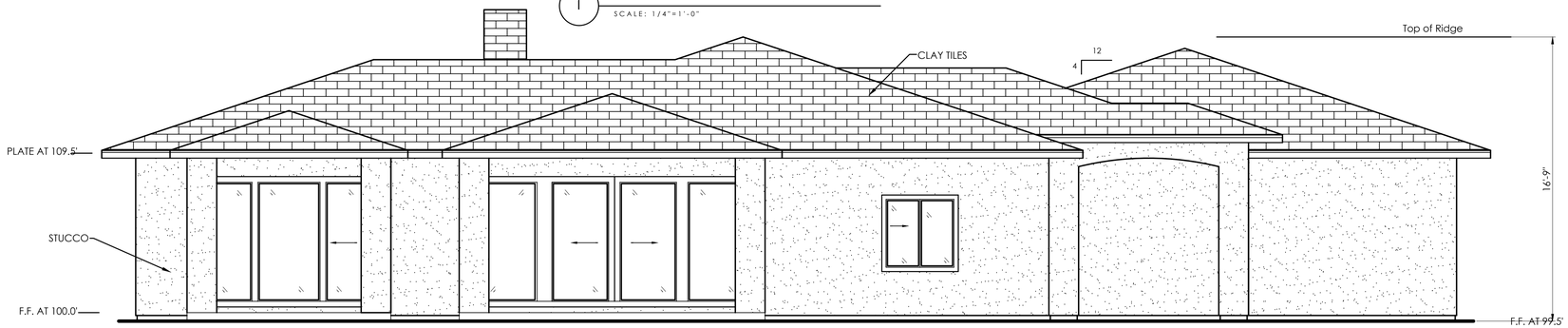
05/13/25

JOB NUMBER:
25-11

PAGE:
A2.0



1 SOUTH ELEVATION (FRONT ELEVATION)
SCALE: 1/4"=1'-0"



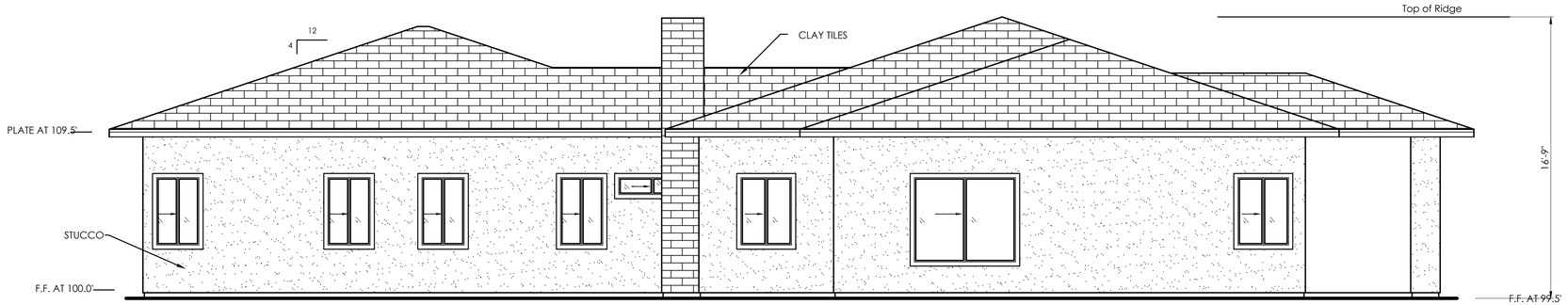
2 WEST ELEVATION (REAR ELEVATION)
SCALE: 1/4"=1'-0"

PROPOSED EXTERIOR FINISHES

ROOF:	CLAY TILES
ROOF PITCH:	GABLE 4:12 , 4:12 ENTRY PORCH
FASCIA/RAKE:	2X6 PRIMED SPRUCE
OVERHANG:	2'-0" GABLE, 2'-0" EAVE
GUTTER/: DOWNSPOUTS	4" GUTTER PLASTIC DOWNSPOUTS & BRACKETS @ 3'-0" O.C. MAX W/ SPLASH BLOCKS
WALL:	STUCCO
WINDOWS:	WHITE VINYL DOUBLE PANE
MOLDINGS:	FOAM TRIM

EXTERIOR COLORS:

STUCCO:	BONE WHITE
ROOF:	DARK GREY
WINDOW:	BLACK
MOLDINGS:	WHITE



3 NORTH ELEVATION (SIDE ELEVATION)
SCALE: 1/4"=1'-0"

4 EAST ELEVATION (FRONT ELEVATION)
SCALE: 1/4"=1'-0"

Exhibit C
Project Plans
Application 251002

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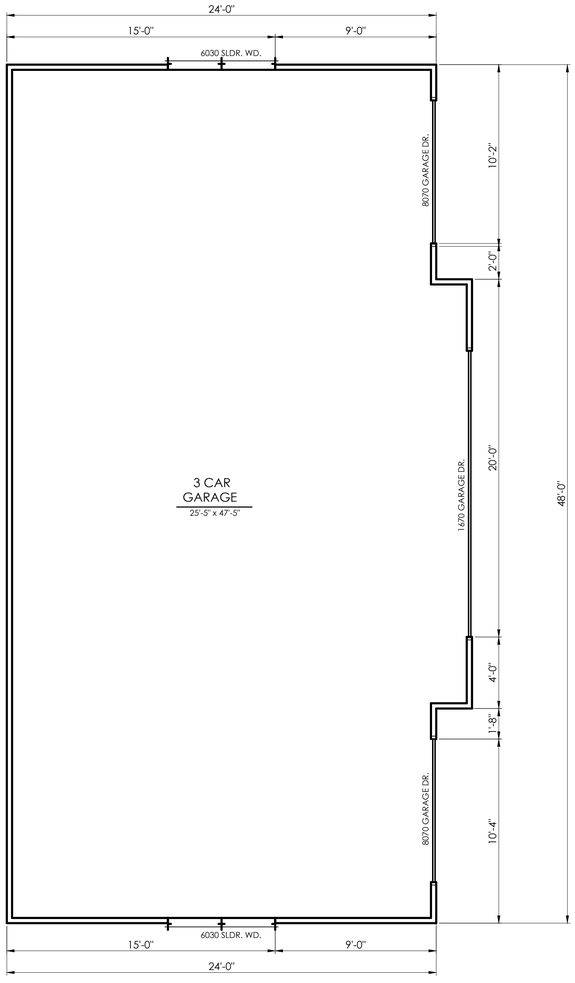
SANCHEZ'S RESIDENCE
0 LAKEVIEW RD.
WATSONVILLE, CA. 95076
A.P.N.:051-421-022-000

PROPOSED SFD/JADU
ELEVATIONS

05/13/25

JOB NUMBER:
25-11

PAGE:
A2.1



1 PROPOSED FLOOR PLAN

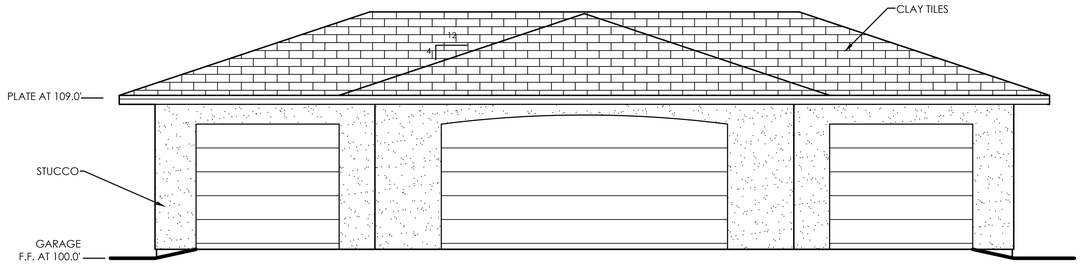
SCALE: 1/4"=1'-0"

PROPOSED EXTERIOR FINISHES

ROOF:	CLAY TILES
ROOF PITCH:	GABLE 4:12 , 4:12 ENTRY PORCH
FASCIA/RAKE:	2X6 PRIMED SPRUCE
OVERHANG:	2'-0" GABLE, 2'-0" EAVE
GUTTER/: DOWNSPOUTS	4" GUTTER PLASTIC DOWNSPOUTS & BRACKETS @ 3'-0" O.C. MAX W/ SPLASH BLOCKS
WALL:	STUCCO
WINDOWS:	WHITE VINYL DOUBLE PANE
MOLDINGS:	FOAM TRIM

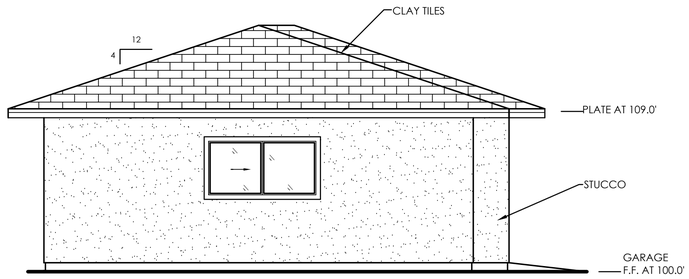
EXTERIOR COLORS:

STUCCO:	BONE WHITE (TO MATCH MAIN RESIDENCE)
ROOF:	DARK GREY (TO MATCH M.R.)
WINDOW:	BLACK (TO MATCH M.R.)
MOLDINGS:	WHITE



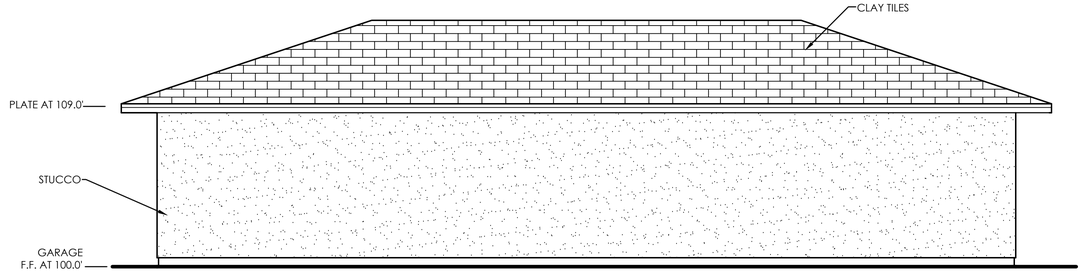
1 EAST ELEVATION (FRONT ELEVATION)

SCALE: 1/4"=1'-0"



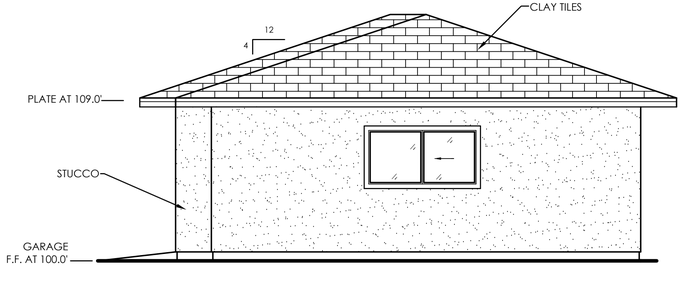
2 SOUTH ELEVATION (FRONT ELEVATION)

SCALE: 1/4"=1'-0"



3 WEST ELEVATION (REAR ELEVATION)

SCALE: 1/4"=1'-0"



4 NORTH ELEVATION (SIDE ELEVATION)

SCALE: 1/4"=1'-0"

Exhibit C
Project Plans
Application 251002

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REVISION
DATE:
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SANCHEZ'S RESIDENCE
0 LAKEVIEW RD.
WATSONVILLE, CA. 95076
A.P.N.:051-421-022-000

PROPOSED GARAGE
FLOOR PLAN / ELEVATIONS

05/13/25

JOB NUMBER:
25-11

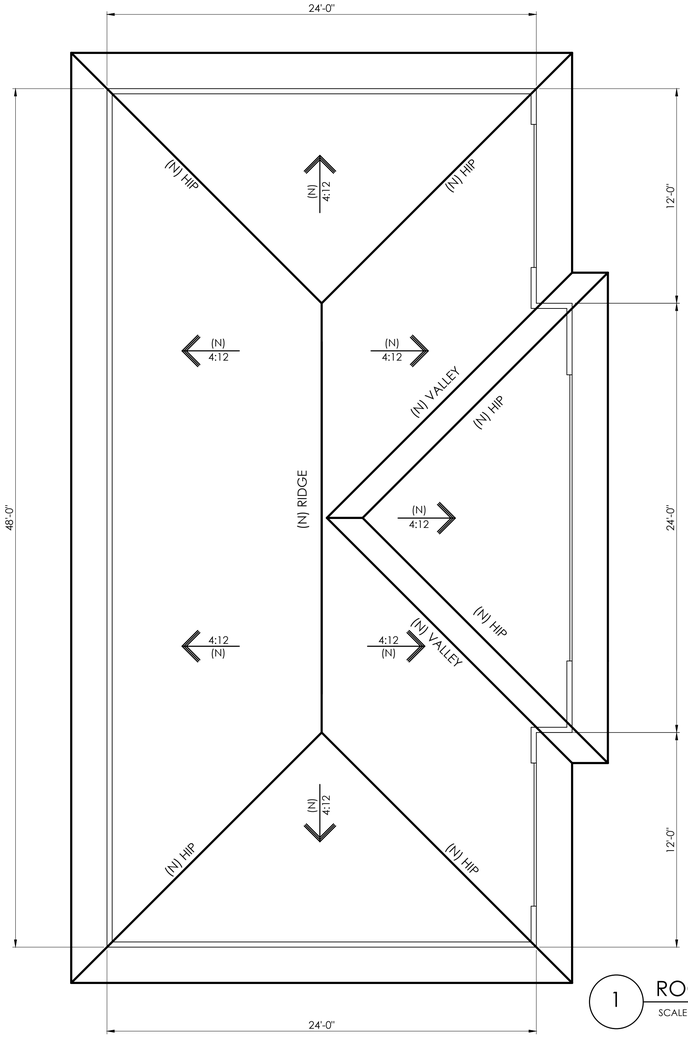
PAGE:
A3

LEGEND

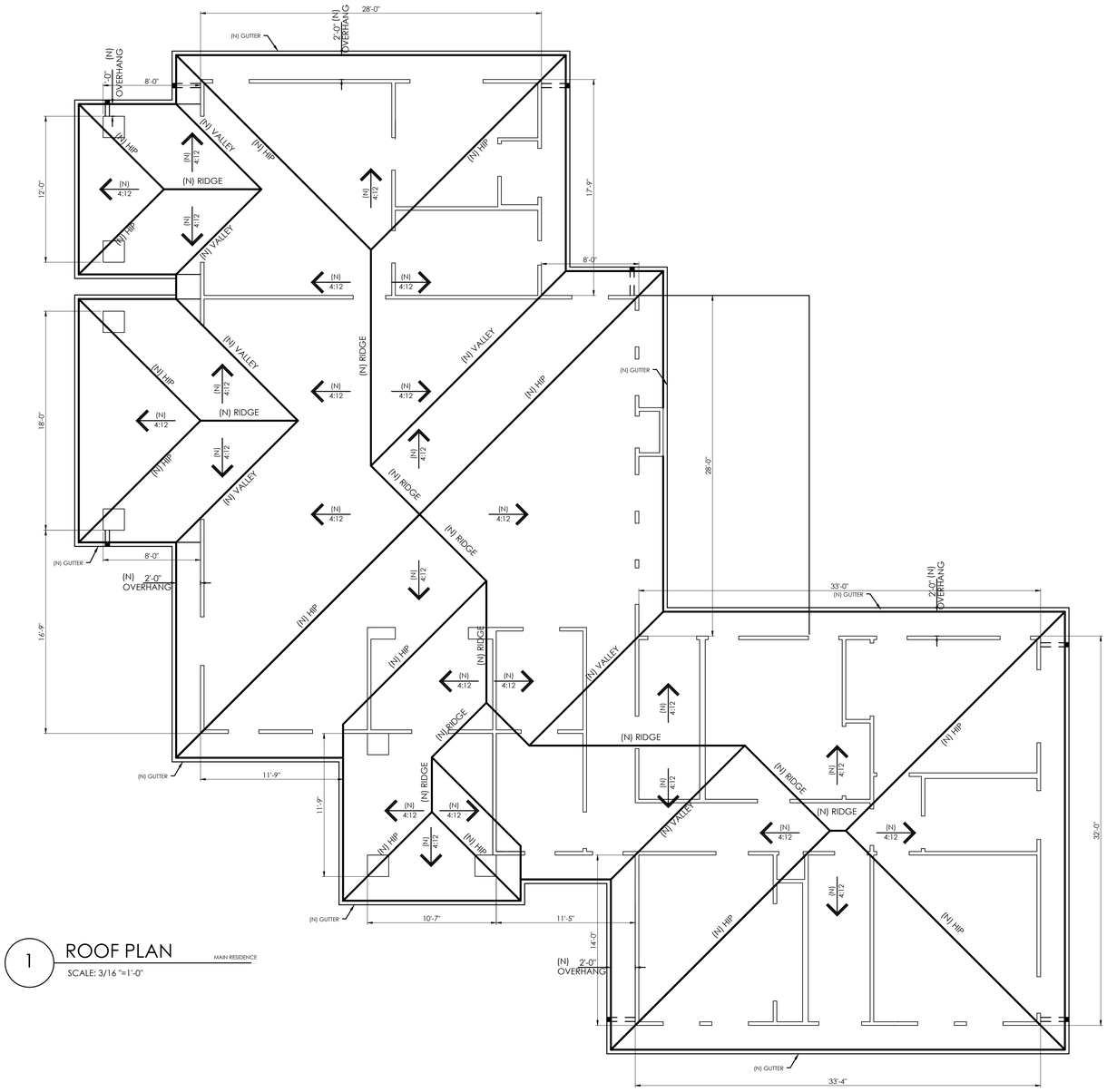
- WALLS
- GUTTERS
- DOWNSPOUTS WITH SPALSH BLOCKS (12 / D3)
- SLOPE DIRECTION ARROW
- ROOF LINE
- CALIFORNIA FRAMING (9 / D3)
- EAVE VENTS (4 / D3)

CAL GREEN NOTES

THE CAL-GREEN MANDATORY REQUIREMENTS ARE LOCATED ON SHEET G8. 1



1 ROOF PLAN — GARAGE
SCALE: 1/4 "=1'-0"



1 ROOF PLAN — MAIN RESIDENCE
SCALE: 3/16 "=1'-0"

Exhibit C
Project Plans
Application 251002

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SANCHEZ'S RESIDENCE
0 LAKEVIEW RD.
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A.P.N.:051-421-022-000

ROOF PLANS

05/13/25

JOB NUMBER: 25-11

PAGE: A4

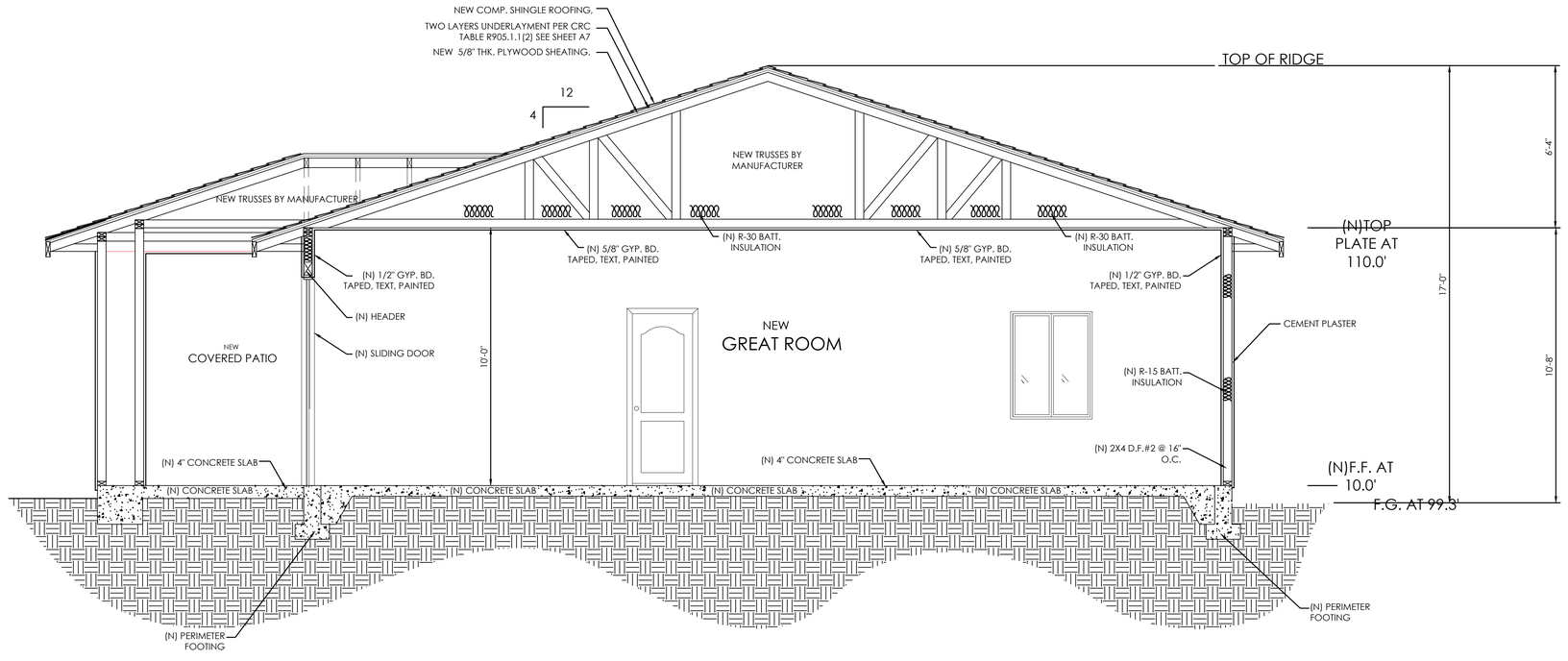

Exhibit C
Project Plans
Application 251002

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SANCHEZ'S RESIDENCE
OLAKEVIEW RD.
WATSONVILLE, CA. 95076
A.P.N.:051-421-022-000

SECTION

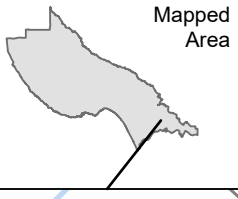
05/13/25

JOB NUMBER:
25-11

PAGE:
A5

Santa Cruz County Planning Department

Parcel Location Map

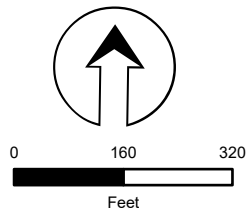


Parcel: 05142122

☐ Subject Parcel

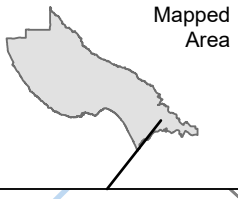
Map printed: 6 Feb. 2026

Exhibit D
Parcel, Zoning, and General Plan Maps
Application 251002



Santa Cruz County Planning Department

Parcel General Plan Map



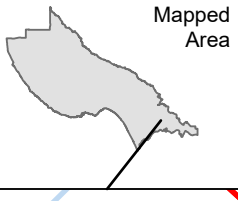
Subject Parcel

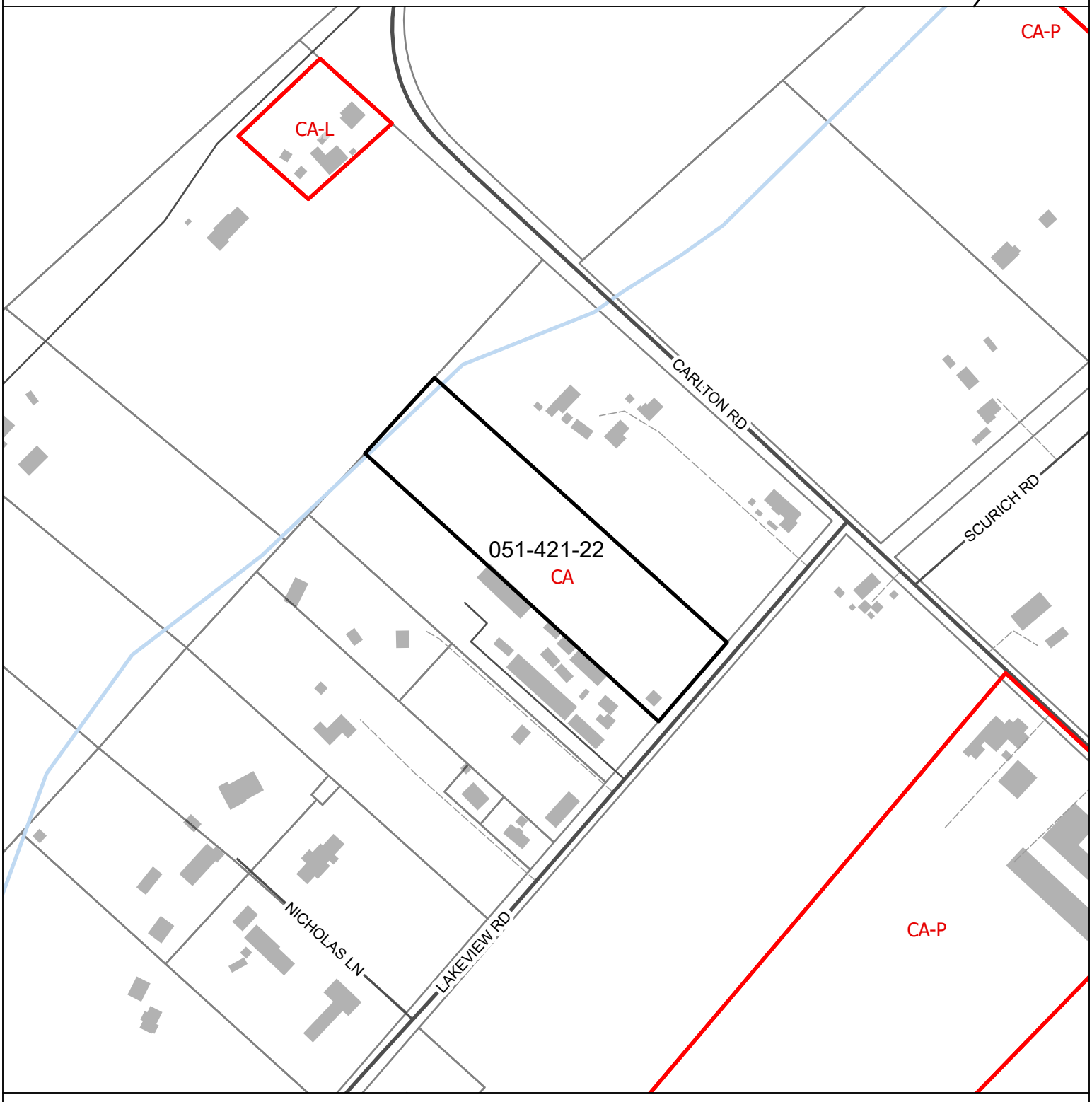
Exhibit D
Parcel, Zoning, and General Plan Maps
Application 251002

0 160 320
Feet

Santa Cruz County Planning Department

Parcel Zoning Map





Subject Parcel

Exhibit D
Parcel, Zoning, and General Plan Maps
Application 251002

0 160 320
Feet

Parcel Information

Services Information

Urban/Rural Services Line:	__ Inside _X_ Outside
Water Supply:	Private Well
Sewage Disposal:	Septic
Fire District:	Pajaro Fire
Drainage District:	Flood Control Zone 7

Parcel Information

Parcel Size:	4.04 acres
Existing Land Use - Parcel:	Vacant
Existing Land Use - Surrounding:	Residential (single and multifamily), Commercial Agriculture
Project Access:	Via Lakeview Drive
Planning Area:	Pajaro Valley
Land Use Designation:	AG (Agriculture)
Zone District:	CA (Commercial Agriculture)
Coastal Zone:	__ Inside _X_ Outside
Appealable to Calif. Coastal Comm.	__ Yes _X_ No

Environmental Information

Geologic Hazards:	Not mapped/no physical evidence on site
Fire Hazard:	Not a mapped constraint
Slopes:	0-10% across majority of site, sloping to 30% at rear of site
Env. Sen. Habitat:	Mapped for Congdon's Tarplant, not observed during survey
Grading:	No grading proposed
Tree Removal:	No trees proposed to be removed
Scenic:	Not a mapped resource
Archeology:	Mapped, Archaeological Report Review (REV251168) inspected

EXHIBIT E

Anthony Duttle, MS, MBA
Dale W. Rush, Ph.D.
Steven Morrison, Ph.D
Albert A. Stoddard III, Ph.D
Michael Atkins B.S.

RUSH & DUTTLE CONSULTING

AN ASSOCIATION OF AGRICULTURAL CONSULTANTS

California
6083 Fig Garden Dr., #671
Fresno, CA 93722

Texas
315 Greenleaf Drive
Mico, TX 78028
Office: (831) 484-4834
Email: ADuttle@ymail.com

Final Report

June 16, 2025, **File No. 25010.01**

The Fernando Sanchez and Laura Elena Sanchez Alvarado
Family 2020 Revokable Trust
139 Orchard Park Court,
Watsonville, CA 95076

Re: Agricultural land viability assessment of APN 046-261-26 Road, Watsonville, California.

At the request of Mr. Edgar Sanchez, project manager and son of Fernando Sanchez, owner, and in accordance with Santa Cruz County (SCC) General Plan Policy ARC-1.3.1 and 1.3.2 (Exhibit 1), an Agricultural Viability Assessment of the condition, and status of land within APN 046-261-26 was undertaken. The proposed project is to construct a single-family dwelling with attached, Jr. Additional Dwelling Unit (ADU), detached garage, water tanks and driveway on 4.01 acres of land described as APN 046-261-26 as is allowed under the SCC "CA" Commercial Agriculture zoning designation (Exhibit 2). The area within the subject parcel is designated as "Commercial Agriculture (CA) Type 1A. The Commercial Agricultural classification defines land that is viable agricultural land – prime and unique farmland, and prime rangeland " with allowed uses to include, farm buildings, livestock raising, greenhouses, farm worker camps and one single-family dwelling (Exhibit 3).

Santa Cruz County defines Commercial Agricultural land as viable agricultural lands outside the Coastal Zone which has been in, or have a history of, commercial agriculture over a long period of time, and are likely to continue to be capable of commercial agricultural use in the foreseeable future Exhibit 4). Type 1A "Agricultural Land." is defined as lands of known high productivity which are not located in any utility assessment district for which bonded indebtedness has been incurred. Type 1A lands essentially meet the U.S. Department of Agriculture Soil Conservation Service and the California Department of Food and Agriculture criteria for "prime" and "unique" farmland and "prime" rangeland.

This investigation reviews the soils, historic uses, topography, current status, surrounding community, agricultural production history and appropriateness of the subject APNs, for "Commercial Agriculture". The intent was to specifically address issues with respect to suitability for agricultural uses under the "CA" Commercial Agriculture designation, and the proposed uses as allowed under the "CA" Agriculture zoning designation by Santa Cruz County. In addition, this report assesses the potential impact on the surrounding agricultural community and evaluation of historic agricultural revenue generated on the land from such uses

Exhibit F
Agricultural Viability Analysis
Application 251002

Qualifications

As a part of my normal work, I evaluate agriculture-related issues including losses or damage to crops, and/or associated property, and changes in land use. In addition, my firm evaluates properties in the region including Monterey and Santa Cruz Counties with respect to agricultural land suitability studies and comparative land uses, where agricultural, commercial, residential, and other alternate uses are considered under requests to local planning commissions, departments review boards and submitted analyses on behalf of various clients. I also provide expert witness services in hearings and litigation. I have a bachelor's degree in Agricultural Biology, a Master of Science degree in Agricultural Biology, a Master of Business Administration from the University of California, and more than 30 years of national, regional, local, professional, and field experience. I am a nationally and regionally Certified Crop Advisor, Certified Professional Agronomist and California licensed Pest Control Adviser.

ARC 1.3.1-1,2 Agricultural viability

ARC 1.3.1 was established to preserve agricultural lands in Santa Cruz County and allows the conversion of agricultural land to non-agricultural uses only when; (1) The subject land is determined to not currently or will become viable for Agricultural uses in the future, (2) Information is presented which show the land does not meet the criteria for commercial agricultural land, (3) The conversion of such land to non-agricultural uses will not impair the viability or create conflicts with other agricultural land in the area, and (4) the conversion of such land is positioned within the parcel to minimize the impact on the land (ref. Exhibit 1).

Current land status, features, and agronomic characteristics

The parcel is centrally located in a community of small acreage lots north of Lakeview Road approximately 3.2 miles northeast of the central plaza of Watsonville, CA (Exhibit 5), with the community estimated to be 106 acres (Exhibit 6).The subject parcel is reported to be a 4.01 acre rectangular shaped parcel with its length being approximately 4 times it's southwest boundary which is bordered by Lakeview Road, and a vineyard beyond (Exhibit 7). The long, southwest edge of the parcel is bordered entirely by an agricultural housing complex (Exhibit 8). It is surrounded to the northeast by few small acreage rural residential parcels (Exhibit 9), and to the northwest by a wooded creek and rural residential parcels beyond (Exhibit 10).

From Lakeview Road, the parcel slopes slightly to approximately 2/3 of the length northwest towards the rear of the parcel before dropping sharply towards the wooded creek at the rear of the property (Exhibit 11). There is no existing agricultural or domestic well reported or observed on the parcel and historical imagery revealed the subject parcel has not been used for agricultural production of any type for at least 30 years (Exhibit 12).

Soils Report

The USDA NRCS Custom Soil Survey Report provides relevant information on the subject parcel (Exhibit 13). The survey reveals that 2.9 acres (74.9 percent) of the parcel is classified as Watsonville loam with 2 to 15 percent slopes which is a poorly drained soil. This soils of this portion of the parcel are considered Farmland of Statewide Importance and with Revised Storie Index rating of Grade 5 – very poor. This soils of this portion of the parcel also have a non-irrigated capability classification of 3e. Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation

Exhibit F
Agricultural Viability Analysis
Application 251002

practices, or both.

Further, the soils in this portion of the parcel have a hydric rating of 88 indicating that the soils are highly hydric. Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation. These conditions increase the risk of erosion and significantly increase conditions are highly unfavorable for crops produced in the surrounding area.

The remainder of the soils of the parcel are classified as Tierra-Watsonville complex, with 15 to 30 percent slopes. This soils of this portion of the parcel are considered not prime farmland with Revised Storie Index rating of Grade 4 – poor. These soils of this portion of the parcel also have a non-irrigated capability classification of 4e. Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

The entire parcel's non-irrigated subclass rating of "e" indicates erosion potential is elevated as a significant issue.

ARC 1.3.1 (3)
The surrounding parcels to the north of Lakeview Road are most accurately described as residences developed within and consistent with the Santa Cruz County Planning Department description: Zone District Residential Agriculture "RA", with allowed uses to include: "*One single-family dwelling, one second dwelling unit, home occupations, small-scale agriculture, greenhouses, wineries, private stables and paddocks, schools, community facilities open space and recreational uses."* (Ref. Exhibit 2). The community surrounding the parcel is bordered to the north, east and south across Lakeview Road by commercial greenhouses and traditional truck farms (Exhibit 15). Regional land uses to the east, south and north include traditional row and truck crops, variably sized small open blocks of land combined with scattered or clustered residences.

ARC 1.3.1 (4) Proposed design and placement of structures within the parcel
The structures and water tanks are estimated to occupy 5,121 square feet (2.9 percent) of the parcel while pavement and features associated with the roadway occupy 0.21 acres (5.15 percent) of the parcel along the Eastern boundaries. The total area of the proposed project is approximately 14,121 square feet (8.1%) of parcel (ref. Exhibit 1). The garage, which is to be the southernmost structure on the parcel, is proposed to be 345 feet from the Lakeview Road Boundary and commercial agriculture beyond.

ARC 1.3.2
ARC-1.3.2 (LCP) Requires a viability study to be conducted in conjunction with an application that proposes to convert commercial agricultural and prime agricultural lands to non-agricultural land uses, to include an economic feasibility evaluation. This requires an analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of filing the application and an analysis of the operational expenses, excluding the cost of land, associated with the production of the agricultural products grown in the area for the five years immediately preceding the date of filing the application.

Exhibit F
Agricultural Viability Analysis
Application 251002

While the community where the subject parcel resides, is actively farmed with commercial agriculture activities including nursery, berry and vegetable production, the subject parcel has not been utilized for any crop or livestock production for at least 30 years. The current owners report that there is no history of agricultural activities on the land and no records of agricultural income or expenses associated with the property.

Discussion

While the subject APN 046-261-26 is slightly larger than four acres (including roads and easements), it is not farmable, not suitable for commercial agriculture, is reported or observed to have been part of commercially viable agricultural ventures alone or in aggregate with the surrounding land for more than 30 years due to edaphic features.

For the subject APN, the substantial limiting factors include Hydric, soils on most of the parcel which result in poor percolation of moisture which give rise to anaerobic conditions following moisture events on the parcel and severity of slope with substantial erosion potential on the remainder of the parcel. In addition, the co-dominant limitation (historically and currently) is the lack of a permanent adequate source of agricultural irrigation water. Observations and data review are consistent with the NRCS California Storie Index rating of Grade 5, very poor, non-prime farmland.

When these factors are combined with the small size of the parcel and the absence of a traditional irrigation source, agricultural husbandry is significantly limited, and the potential "Commercial Agriculture" viability of the site is essentially implausible.

The existing agricultural labor housing and residential lots which border both sides of the parcel are not necessarily compatible with traditional commercial farming operations. However, it was observed that the residential structures on most neighboring parcels (ref. exhibit 11) do not meet the minimum buffer requirement of 200 feet from agricultural activities on adjoining properties while the proposed project was more than 350 feet. The approval of the proposed project would not likely have a measurable effect on activities on the surrounding agricultural community.

The proposed development of the parcel is preferable and superior to the alternative of perpetually unproductive, idled, highly erodible land, can provide benefits to the owner, and is consistent with the immediate community.

Anthony Duttle, MS, MBA, CCA, CPAg, PCA
Attachments, Exhibits 1- 15

Exhibit F
Agricultural Viability Analysis
Application 251002

June 16, 2025

Exhibits 1-15

Agricultural Viability Assessment report

File Number: 25010.01

Exhibit F
Agricultural Viability Analysis
Application 251002

Exhibits

1. **Santa Cruz County Agricultural Viability Report Content Requirements & Code Standards/Requirements.**
2. **Proposed residence plans.**
3. **Santa Cruz County, Basic Zone Districts – Summary of Uses.**
4. **Santa Cruz County Agricultural Land Preservation and Protection Chapter 16.50.**
5. **Site Location within Santa Cruz County, Approximately 3.5 Miles Northeast of Watsonville city center.**
6. **Site location within the immediate community and proximity to ongoing commercial agriculture.**
7. **General conditions of the parcel.**
8. **Adjoining housing complex to the southwest**
9. **Surrounding residences on adjoining parcels to the east of subject parcel.**
10. **Wooded Creek in the Northwest portion of the parcel.**
11. **Elevation map and images of Slopes on the parcel.**
12. **Historical imagery of the parcel**
13. **USDA NRCS Custom Soil Survey Report, Lakeview Road.**

Exhibit F
Agricultural Viability Analysis
Application 251002

1. **Santa Cruz County Agricultural Viability Report Content Requirements & Code Standards/Requirements.**

Agricultural Viability Report Content Requirements
&
Code Standards/Requirements

General Plan Policies - Study Requirements

OBJECTIVE ARC-1.3 PREVENT THE CONVERSION OF COMMERCIAL AGRICULTURAL LAND

(LCP) To prevent the conversion of Commercial Agricultural Land that is agriculturally viable to non-agricultural uses, in order to protect agricultural lands and support the local agricultural economy.

ARC-1.3.1 (LCP) Conversion of Commercial Agricultural Lands. Consider conversion and/or development of commercial agricultural lands to non-agricultural uses only when all of the following criteria are met:

(1) It is determined that the land is not viable for farming or for other allowable agriculture uses, and that it is not likely to become viable in the future (see policy ARC-1.3.2); and

(2) Findings are made that new information has been presented to demonstrate that the conditions on the land in question do not meet the criteria for commercial agricultural land; and

(3) The conversion of such land or use to non-agricultural uses will not impair the viability of, or create potential conflicts with, other commercial agricultural lands in the area; and

(4) The conversion of such land is concentrated on the site or parcel to the minimum area necessary to achieve the objectives of the proposed conversion.

ARC-1.3.2 (LCP) Determining Agricultural Viability. Require a viability study to be conducted in conjunction with an application that proposes to convert commercial agricultural and prime agricultural lands to non-agricultural land uses, to include but not limited to an economic feasibility evaluation which contains at least:

(1) An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of filing the application.

(2) An analysis of the operational expenses, excluding the cost of land, associated with the production of the agricultural products grown in the area for the five years immediately preceding the date of filing the application.

Exhibit F
Agricultural Viability Analysis
Application 251002

(3) An identification of the geographic area used in the analyses. The area shall be of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for the land stated in the application*.

Recommendations regarding viability shall be made by the Agricultural Policy Advisory Commission based on evaluation of the viability study and the following criteria: parcel size, sizes of adjacent parcels, degree of non-agricultural development in the area, inclusion of the parcel in utility assessment districts, soil capabilities and topography, water availability and quality, and proximity to other agricultural use.

**A viability study is not required for lands to be included in allowable public/quasi-public uses such as for a public park or biotic reserve, or land for use as setback levees for the Pajaro Levee project.*

County Code Requirements for analysis

16.50.040 Criteria for designation.

The following criteria shall be used to determine into which agricultural land type the agricultural resource lands (commercial agricultural land) of the County will be classified:

(A) Type 1—"Commercial Agricultural Land." This type is for viable agricultural lands outside the Coastal Zone which have been in, or have a history of, commercial agriculture over a long period of time, and are likely to continue to be capable of commercial agricultural use in the foreseeable future.

(1) Type 1A—"Viable Agricultural Land." Type 1A agricultural lands comprise areas of known high productivity which are not located in any utility assessment district for which bonded indebtedness has been incurred. These lands essentially meet the U.S. Department of Agriculture Soil Conservation Service and the California Department of Food and Agriculture criteria for "prime" and "unique" farmland and "prime" rangeland.

(2) Type 1B—"Viable Agricultural Land in Utility Assessment Districts." This type includes viable agricultural lands, as defined above, which are within a utility assessment district for which bonded indebtedness has been incurred, except agricultural preserves.

(B) Type 2—"Commercial Agricultural Land." This category is for agricultural lands outside the Coastal Zone which would be considered as Type 1A, except for one or more limiting factors, such as parcel size, topographic conditions, soil characteristics or water availability or quality, which may adversely affect continued productivity or which restrict productivity to a narrow range of crops. Despite such limitations, these lands are considered suitable for commercial agricultural use. Type 2 agricultural lands are currently in agricultural use (on a full-time or part-time basis) or have a history of commercial agricultural use in the last 10 years (the Agricultural Resources map generally reflects conditions as of 1982 when

Exhibit F
Agricultural Viability Analysis
Application 251002

agricultural designations were established) and are likely to continue to be capable of agricultural use for a relatively long period. In evaluating amendments to Type 2 designations the preceding factors, along with adjacent parcel sizes, degree of nonagricultural development in the area and proximity to other agricultural uses, shall be considered in addition to the criteria listed under each individual type below.

(1) Type 2A—"Limited Agricultural Lands in Large Blocks." These lands are in fairly large blocks, are not in any utility assessment district which has incurred bonded indebtedness, and are not subject to agricultural-residential use conflicts.

(2) Type 2B—"Geographically Isolated Agricultural Land with Limiting Factors." This category includes agricultural lands with limiting factors which are geographically isolated from other agricultural areas. These lands are not in a utility assessment district which has incurred bonded indebtedness and are not subject to agricultural-residential use conflicts.

(3) Type 2C—"Limited Agricultural Lands in Utility Assessment Districts." This type includes agricultural lands with limiting factors which are in a utility assessment district which has incurred bonded indebtedness.

(4) Type 2D—"Limited Agricultural Lands Experiencing Use Conflicts." These are agricultural lands with limiting factors which are experiencing extreme pressure from agricultural-residential land use conflicts such as pesticide application, noise, odor or dust complaints, trespass, or vandalism.

(5) Type 2E—"Vineyard Lands." These are agricultural lands that may or may not be located on lands zoned Commercial Agriculture (CA), and often occur in the Rural Residential (RR), Special Use (SU) Agriculture (A), and Rural Residential (RA) zone districts.

(C) Type 3—"Coastal Zone Prime Agricultural Land." This category includes all of the following lands outside the urban services line and the rural services line within the Coastal Zone in Santa Cruz County:

(1) Land which meets the U.S. Department of Agriculture Soil Conservation Service criteria of prime farmland soils and which are physically available (i.e., open lands not forested or built on) for agricultural use.

(2) Land which meets the California Department of Food and Agriculture criteria for prime rangeland soils and which are physically available (i.e., open lands not forested or built on) for agricultural use.

(3) Land planted with fruit or nut-bearing trees, vines, bushes, or crops which have a nonbearing

period of less than five years, and which normally return during the commercial bearing period on an annual basis from the production of unprocessed plant production not less than $200.00 per acre; the $200.00 per acre value shall be utilized to establish a base value per acre as of 1965. This base value per acre figure shall be adjusted annually in accordance with any change in the San Francisco Bay Area Consumer Price Index to reflect current values.

(4) Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than $200.00 per acre for three of the five previous years, as provided in subsection (C)(3) of this section.

(5) Land which meets the California Department of Food and Agriculture criteria for unique farmland of Statewide importance and which is physically available (i.e., open lands not forested or built on) for agricultural use. The criteria for “prime farmland soils,” “prime rangeland soils,” and “unique farmland of Statewide importance” are further defined in the General Plan and Local Coastal Program glossary. [Ord. 5424 § 3, 2022; Ord. 4753 § 3, 2003; Ord. 4416 § 23, 1996; Ord. 4406 § 23, 1996; Ord. 3447 § 1, 1983; Ord. 3336 § 1, 1982].

16.50.050 Amendment of designations.

(A) Amendments to the designations of agricultural resource land types may be initiated by an applicant, the Board of Supervisors, the Planning Commission, the Agricultural Policy Advisory Commission, or the Planning Director. Consideration of such proposals for the addition, removal or change of agricultural resource land type designations shall be limited to instances where new information has become available regarding the appropriateness of specific designations based on the criteria set forth under SCCC 16.50.040.

(B) Applications for amendments to the designation of agricultural resource land types shall be considered in accordance with the requirements of Chapter 18.50 SCCC (General Plan Administration) and/or 18.60 SCCC (Local Coastal Program Administration), and with the procedures established in Chapter 18.10 SCCC for consideration of legislative matters, for which the Board of Supervisors is the approving body.

(C) Applications to amend the designations of agricultural resource land types shall be reviewed periodically and are preferred to be timed to coincide with the Land Conservation Act/Agricultural Preserve application review process. All proposed amendments shall be subject to a report and environmental review by the Planning Director or designee, a public hearing and recommendation by the Agricultural Policy Advisory Commission, a public hearing and recommendation by the Planning Commission, and a public hearing and final decision by the Board of Supervisors.

Exhibit F
Agricultural Viability Analysis
Application 251002

(D) The Board of Supervisors, after a public hearing, may approve a proposed amendment, consisting of either the removal or change of a Type 1 or Type 2 designation if it makes the following findings:

(1) That there has been new information presented, which was not available or otherwise considered in the original decision to apply a particular designation, to justify the amendment. Such new information may include, but not be limited to, detailed soils analysis, well output records, water quality analysis, or documented history of conflicts from surrounding urban land uses;

(2) That the evidence presented has demonstrated that conditions on the parcel(s) in question do not meet the criteria, as set forth in SCCC 16.50.040, for the existing agricultural land type designation for said parcel(s); and

(3) That the proposed amendment will meet the intent and purposes of the agricultural land preservation and protection ordinance and the commercial agriculture zone district ordinance.

(E) The Board of Supervisors may, after a public hearing, approve amendments to remove a Type 3 designation and the subsequent conversion (changing the land use designation from agriculture to nonagricultural uses) of agricultural lands, only if it makes the following findings:

(1) That there has been new information presented, which was not available or otherwise considered in the original decisions to apply a particular designation, to justify the amendment. Such new information may include, but not be limited to, detailed soils analysis, well output records, water quality analysis, or documented history of conflicts from surrounding urban land uses;

(2) That the evidence presented has demonstrated that conditions on the parcel(s) in question do not meet the criteria, as set forth in SCCC 16.50.040, for the existing agricultural land type designation for said parcel(s);

(3) That the proposed amendment will meet the intent and purposes of the agricultural land preservation and protection ordinance and the commercial agriculture zone district ordinance;

(4) That the viability of existing or potential agricultural use on the periphery of urban areas (as defined by the urban services line or rural services line) is already severely limited by conflicts with the urban uses; the evaluation of agricultural viability shall include, but not be limited to, an economic feasibility evaluation which contains at least:

(a) An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of filing the application; and

Exhibit F
Agricultural Viability Analysis
Application 251002

(b) Analysis of the operational expenses, excluding the cost of land, associated with the production of the agricultural products grown in the area for the five years immediately preceding the date of filing application;

(5) That the conversion of such land on the periphery of the urban areas (as defined by the urban services line or rural services line) would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development; and

(6) That the conversion of such land would not impair the viability of other agricultural lands in the area.

(7) That the conversion is consistent with General Plan/Local Coastal Plan Policies BE-5.1.3 and ARC-1.3.1.

(F) Any amendment to eliminate or add a Type 1, Type 2 or Type 3 agricultural land designation constitutes a change in the County General Plan and must be processed concurrent with a General Plan amendment. Any amendment of a Type 3 designation also constitutes a change in the Local Coastal Program Land Use Plan which must be processed concurrently with a land use plan amendment subject to approval by the State Coastal Commission. [Ord. 5443 § 4, 2024; Ord. 5424 § 3, 2022; Ord. 4753 § 3, 2003; Ord. 4416 § 24, 1996; Ord. 4406 § 24, 1996; Ord. 3685 § 1, 1985; Ord. 3447 § 1, 1983; Ord. 3336 § 1, 1982].

13.10.314 Required special findings for CA uses.

(A) Nonresidential Conditional Uses. For parcels within the CA Commercial Agriculture and the Agricultural Preserve (-P) Combining Zone Districts, the following special findings must be made in addition to the findings required by Chapter 18.10 SCCC in order to approve any nonresidential project listed under SCCC 13.10.312 that requires a conditional use permit, except agricultural uses and agricultural buffer determinations:

(1) That the establishment or maintenance of this use will enhance or support the continued operation of commercial agriculture on the parcel (excepting public/quasi-public community facilities of significant benefit to public health, safety, and welfare) and will not reduce, restrict, or adversely affect agricultural activities or resources, or the economic viability of commercial agricultural operations, in the area;

(2) The use is sited on the property to avoid removing land from production and to preserve agricultural resource soils. If avoidance and preservation are not possible, remove as little land as possible from agricultural production and future production. Technical reports may be required to

demonstrate conservation of farmland to the maximum extent feasible; and

(3) That the use or structure is ancillary to the principal agricultural use of the parcel, or to parcels owned or leased by the operator where so indicated in SCCC 13.10.312(D), Agricultural Uses Chart, or:

(a) That no other agricultural use is feasible for the parcel;

(b) That the use consists of an interim public use which does not impair long-term agricultural viability;

(c) The use consists of a permanent public use that will result in the production of recycled wastewater facility solely for agricultural irrigation and that limits and mitigates the impacts of facility construction on agriculture consistent with the requirements of SCCC 13.10.635 and 13.10.643; or

(d) The use consists of a permanent discretionary community or public facility use as allowed in the Agricultural Uses Chart that the County has determined to be of significant benefit to the public health, safety, and welfare, subject to the following additional findings:

(i) Loss of commercial agricultural land is mitigated, which may include a permanent agricultural conservation easement on land of at least equal quality and size, as partial compensation for the direct loss of agricultural land, mitigations consistent with SCCC 13.10.643(D), or other feasible mitigations;[2]

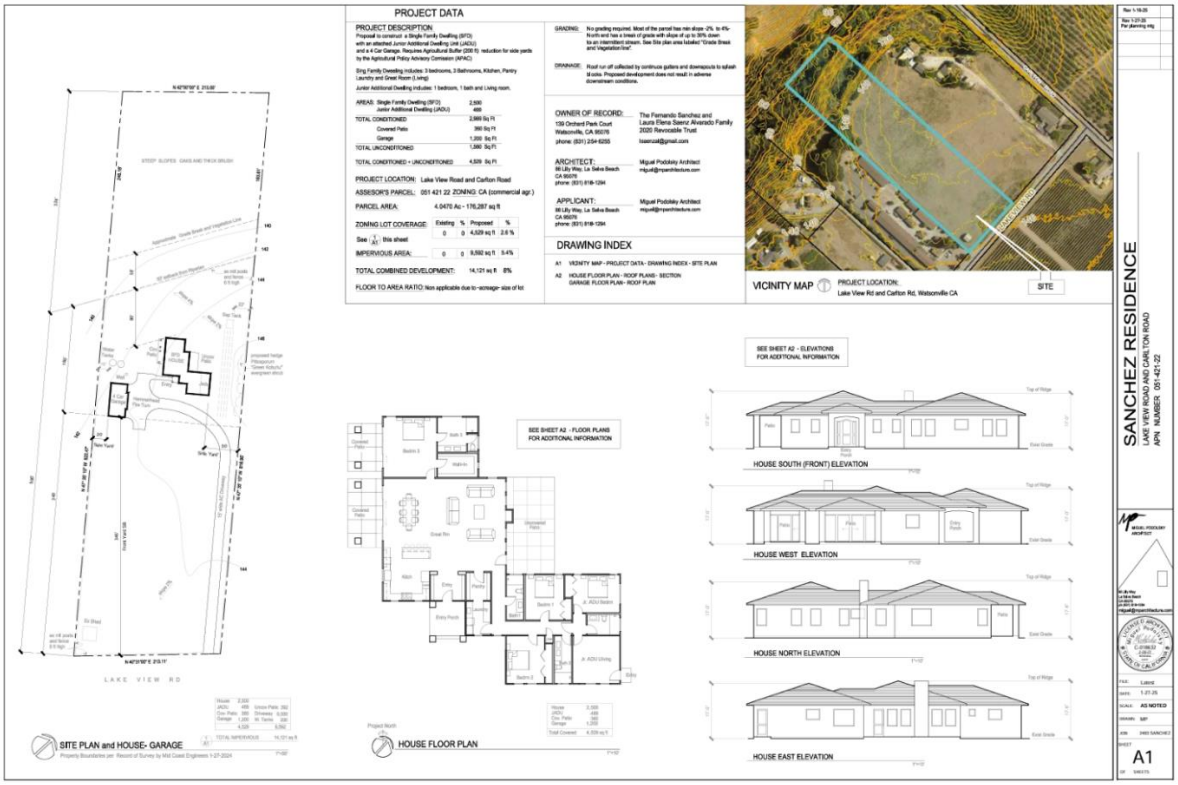
(ii) For public facility uses with a development area greater than 12,000 square feet, an analysis is provided of two alternate sites located off agricultural resource land, identifying why development on these sites is not feasible;

(iii) The public facility use does not significantly degrade air and water quality;

(iv) If located in the Coastal Zone, the public facility use is consistent with the California Coastal Act; and

Exhibit F
Agricultural Viability Analysis
Application 251002

2. Proposed residence plans.



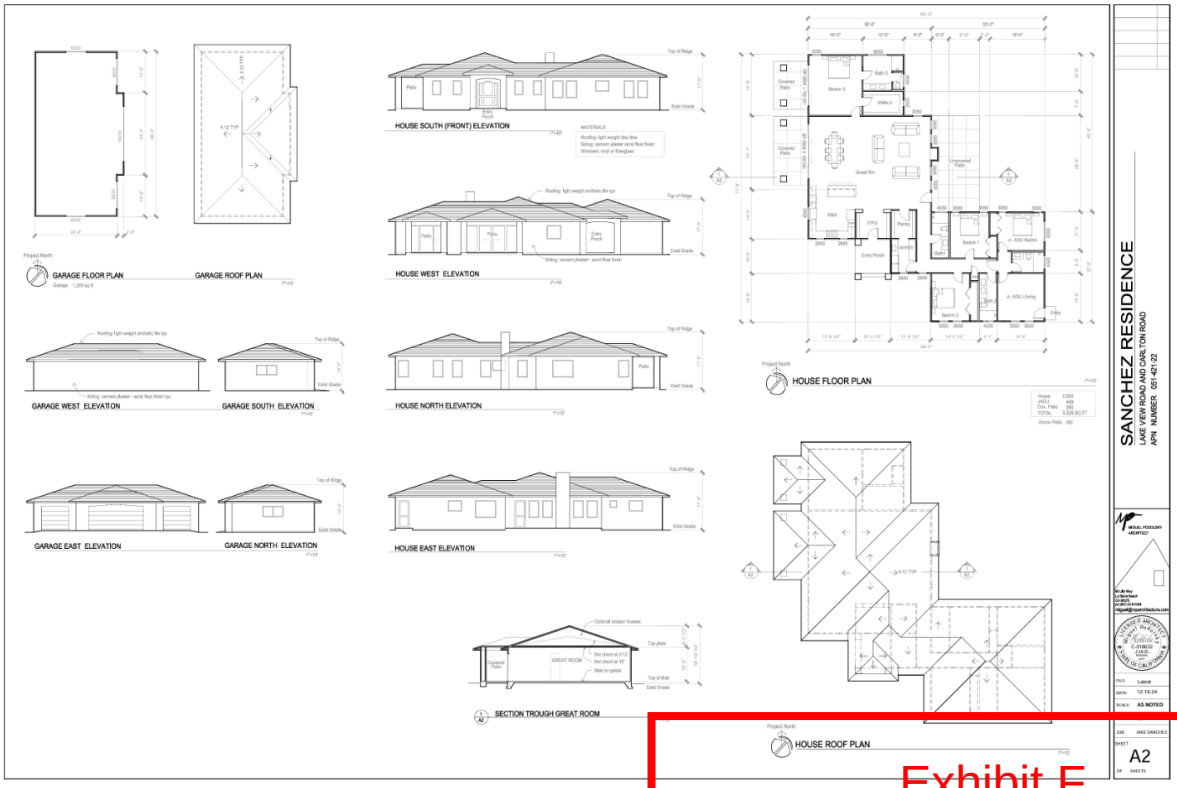


Exhibit F
Agricultural Viability Analysis
Application 251002

3. Santa Cruz County, Basic Zone Districts – Summary of Uses page 1.

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131

Basic Zone Districts – Summary of Uses

The following list is provided to give a general idea of the uses allowed in each zone district. Most non-residential uses are allowed only with a development permit (use approval), approved by the County. A building permit is also required for a use involving new construction or structural additions and remodels. For a complete list of uses allowed in any given zone district and the level of review required, contact the Zoning Counter at (831) 454-2130, between the hours of 1:00 p.m. and 4:00 p.m.daily or refer to the online Santa Cruz County Code (http://www.sccoplanning.com) Section 13.10.

Zone District	Allowed Uses
"CA" Commercial Agriculture	Commercial agriculture, farm buildings, livestock raising, green-houses, farm worker camps. One single-family dwelling.
"A" Agriculture	Agriculture, farm buildings, livestock raising, lumber mills, visitor accommodations, zoos & natural science museums. One single-family dwelling.
"AP" Agricultural Preserve	Similar to "CA" zone; applies to parcels under agricultural preserve contracts with the County.
"RA" Residential Agricultural	One single-family dwelling, one second dwelling unit, home occupations, small-scale agriculture, greenhouses, wineries, private stables and paddocks, schools, community facilities, open space and recreational uses.
"RR" Rural Residential	One single-family dwelling, one second dwelling unit, home occupations, and horses with a use approval.
"R-1" Single-Family Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.
"RB" Single-Family Ocean Beach Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs.
"RM" Multi-Family Residential	Single- and multi-family dwellings and dwelling groups, mobile home parks, home occupations, 2 cats and 1 dog per dwelling.

Exhibit F
Agricultural Viability Analysis
Application 251002

4. Santa Cruz County Agricultural Land Preservation and Protection Chapter 16.50

16.50.040 Criteria for designation.

The following criteria shall be used to determine into which agricultural land type the agricultural resource lands (commercial agricultural land) of the County will be classified:

(A) Type 1—"Commercial Agricultural Land." This type is for viable agricultural lands outside the Coastal Zone which have been in, or have a history of, commercial agriculture over a long period of time, and are likely to continue to be capable of commercial agricultural use in the foreseeable future.

(1) Type 1A—"Viable Agricultural Land." Type 1A agricultural lands comprise areas of known high productivity which are not located in any utility assessment district for which bonded indebtedness has been incurred. These lands essentially meet the U.S. Department of Agriculture Soil Conservation Service and the California Department of Food and Agriculture criteria for "prime" and "unique" farmland and "prime" rangeland.

Exhibit F
Agricultural Viability Analysis
Application 251002

5. **Site Location within Santa Cruz County, Approximately 3.5 Miles Northeast of Watsonville city center.**

6. **Site location within the immediate community and proximity to ongoing commercial agriculture.**

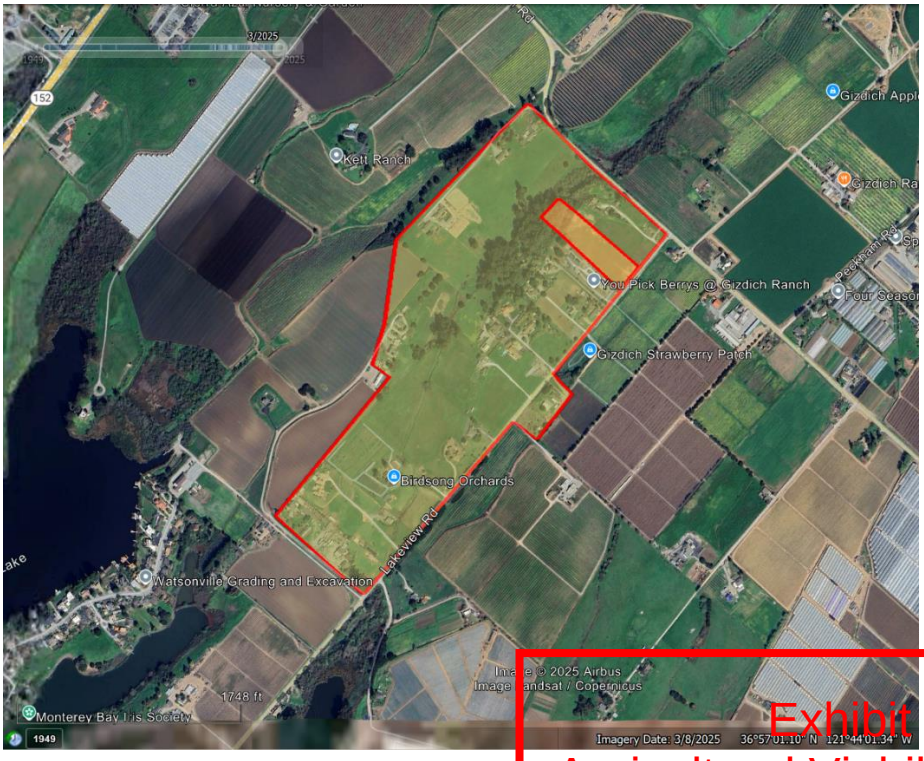


Exhibit F
Agricultural Viability Analysis
Application 251002

Exhibit F
Agricultural Viability Analysis
Application 251002

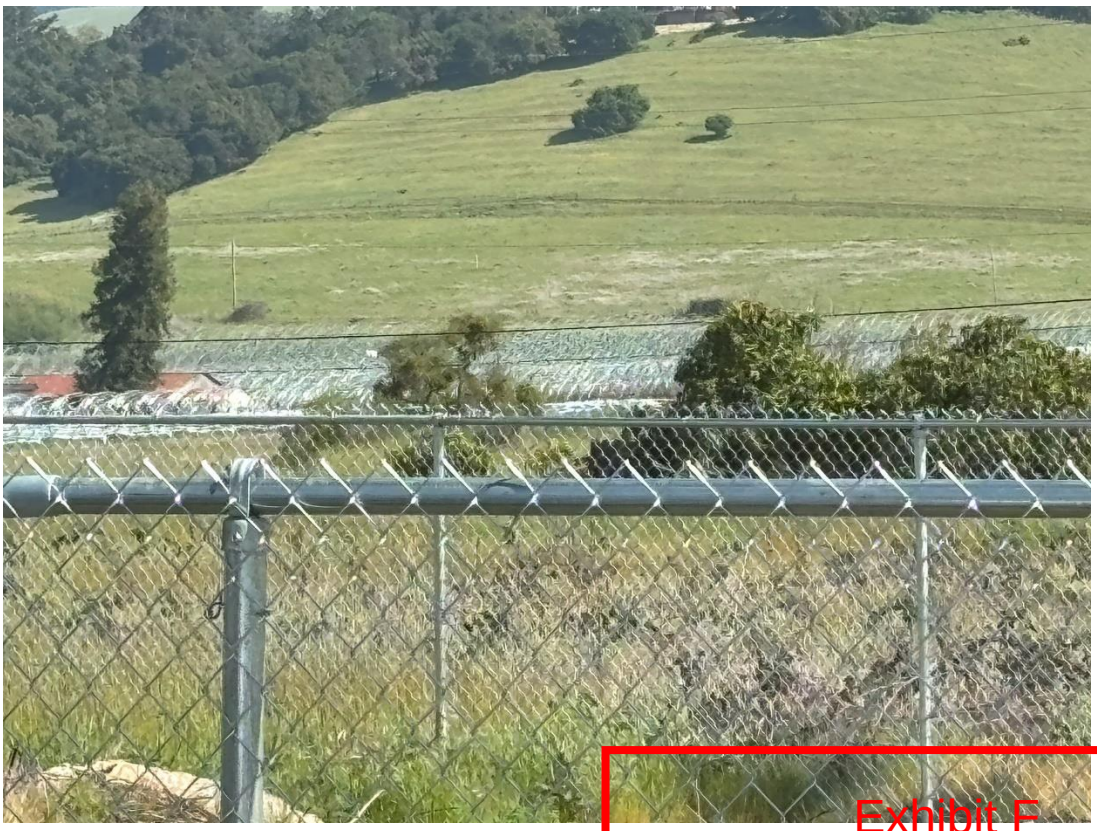


Exhibit F
Agricultural Viability Analysis
Application 251002

7. **General parcel conditions.**

8. **Adjoining housing complex to the southwest**

Exhibit F
Agricultural Viability Analysis
Application 251002

Exhibit F
Agricultural Viability Analysis
Application 251002

9. Surrounding residences on adjoining parcels to the east of subject parcel.

Exhibit F
Agricultural Viability Analysis
Application 251002

Exhibit F
Agricultural Viability Analysis
Application 251002

10. Wooded Creek in the Northwest portion of the parcel.

Exhibit F
Agricultural Viability Analysis
Application 251002

11. Elevation map and images of Slopes on the parcel.

Exhibit F
Agricultural Viability Analysis
Application 251002

12. Historical imagery of the parcel

Circa 1993

Exhibit E
Agricultural Viability Analysis
Application 251002

Circa 2005

Circa 2015

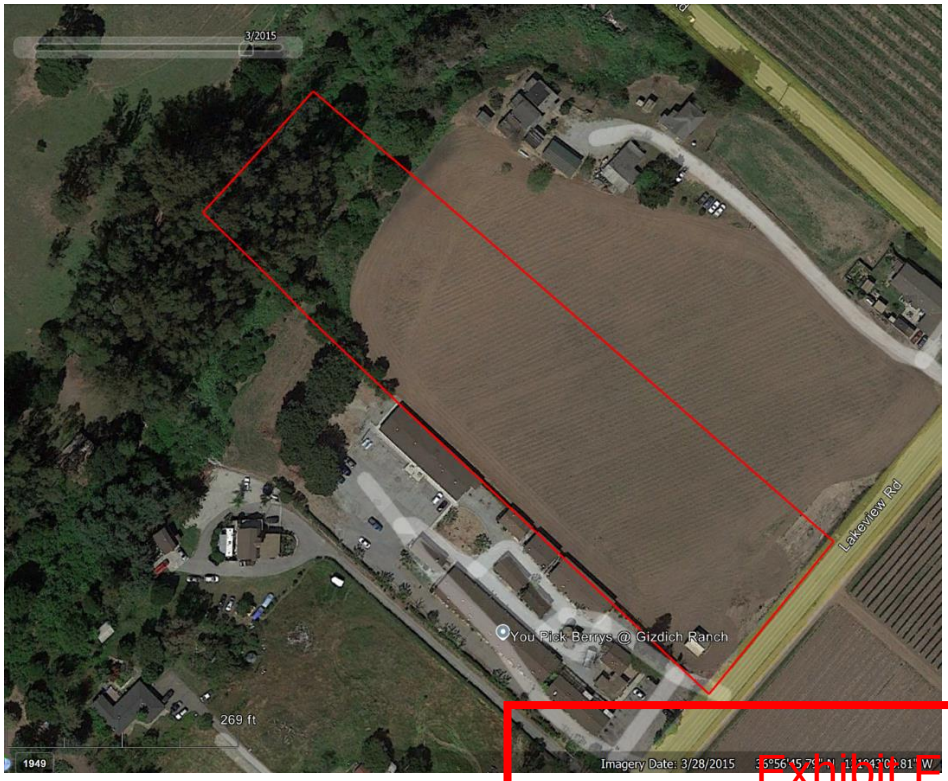


Exhibit F
Agricultural Viability Analysis
Application 251002

Circa 2025

13. USDA NRCS Custom Soil Survey Report, Lakeview Road

Exhibit F
Agricultural Viability Analysis
Application 251002

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Santa Cruz County, California

Exhibit F
Agricultural Viability Analysis
Application 251002

June 16, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Exhibit F
Agricultural Viability Analysis
Application 251002

Contents

Exhibit F
Agricultural Viability Analysis
Application 251002

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

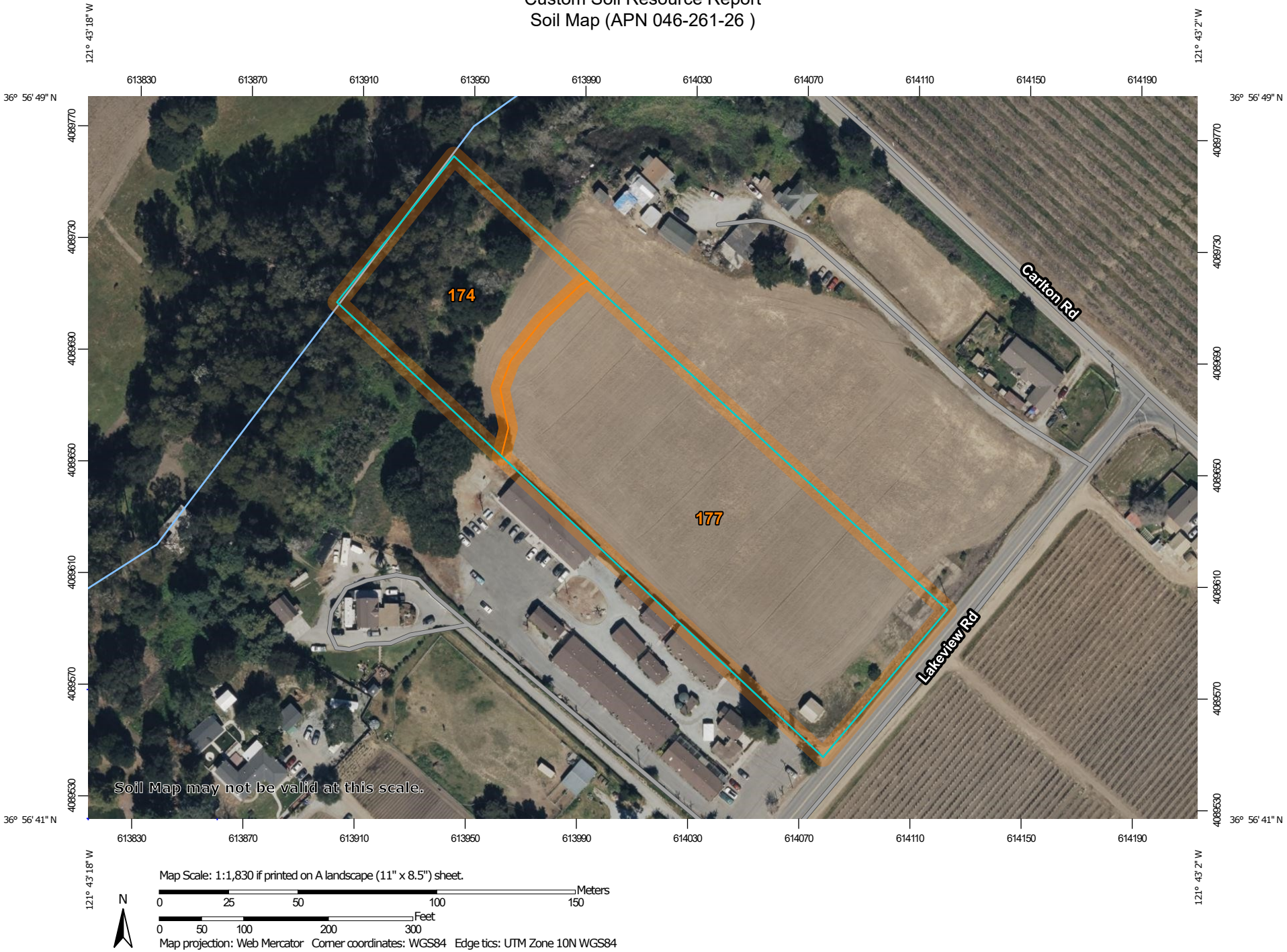
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Exhibit F
Agricultural Viability Analysis
Application 251002

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Exhibit F
Agricultural Viability Analysis
Application 251002



Map Scale: 1:1,830 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 25 50 100 150

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
Survey Area Data: Version 18, Sep 8, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 11, 2022—May 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (APN 046-261-26)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
174	Tierra-Watsonville complex, 15 to 30 percent slopes	1.1	27.2%
177	Watsonville loam, 2 to 15 percent slopes	2.9	72.8%
Totals for Area of Interest		**4.0**	**100.0%**

Map Unit Descriptions (APN 046-261-26)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Exhibit F
Agricultural Viability Analysis
Application 251002

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Exhibit F
Agricultural Viability Analysis
Application 251002

Santa Cruz County, California

174—Tierra-Watsonville complex, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: h9g2
Elevation: 20 to 1,200 feet
Mean annual precipitation: 14 to 28 inches
Mean annual air temperature: 57 to 59 degrees F
Frost-free period: 245 to 275 days
Farmland classification: Not prime farmland

Map Unit Composition

Tierra and similar soils: 55 percent
Watsonville and similar soils: 30 percent
Minor components: 12 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tierra

Setting

Landform: Marine terraces, fan terraces
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 14 inches: sandy loam
H2 - 14 to 66 inches: clay

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.6 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R015XD115CA - CLAYPAN
Hydric soil rating: No

Description of Watsonville

Setting

Landform: Marine terraces, fan terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 18 inches: loam
H2 - 18 to 39 inches: clay
H3 - 39 to 63 inches: sandy clay loam

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R014XD089CA - CLAYPAN
Hydric soil rating: Yes

Minor Components

Elkhorn, sandy loam

Percent of map unit: 5 percent
Hydric soil rating: No

Pfeiffer, gravelly sandy loam

Percent of map unit: 4 percent
Hydric soil rating: No

Los osos, loam

Percent of map unit: 2 percent
Hydric soil rating: No

Tierra

Percent of map unit: 1 percent
Hydric soil rating: No

177—Watsonville loam, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: h9g5
Elevation: 20 to 1,200 feet

Exhibit F
Agricultural Viability Analysis
Application 251002

Mean annual precipitation: 28 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 245 to 275 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Watsonville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Watsonville

Setting

Landform: Marine terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 18 inches: loam
H2 - 18 to 39 inches: clay
H3 - 39 to 63 inches: sandy clay loam

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Ecological site: R014XD089CA - CLAYPAN
Hydric soil rating: Yes

Minor Components

Elkhorn, sandy loam

Percent of map unit: 5 percent
Hydric soil rating: No

Pinto, loam

Percent of map unit: 4 percent
Hydric soil rating: No

Watsonville, thick surface

Percent of map unit: 3 percent
Landform: Marine terraces
Landform position (two-dimensional): Toeslope

Exhibit F
Agricultural Viability Analysis
Application 251002

Landform position (three-dimensional): Tread
Hydric soil rating: Yes

Elder

Percent of map unit: 1 percent
Hydric soil rating: No

Danville

Percent of map unit: 1 percent
Hydric soil rating: No

Cropley, silty clay

Percent of map unit: 1 percent
Hydric soil rating: No

Exhibit F
Agricultural Viability Analysis
Application 251002

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

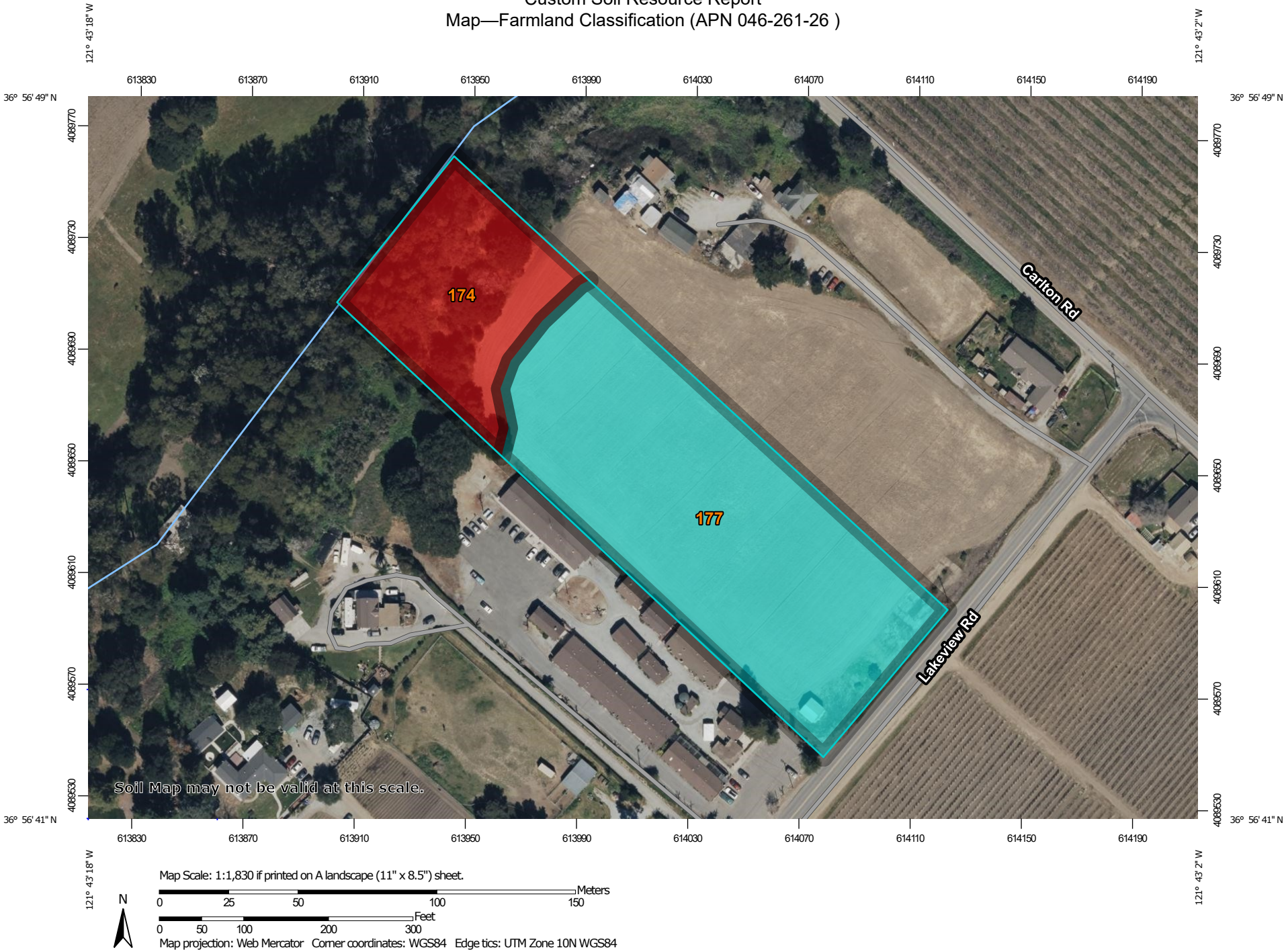
Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Farmland Classification (APN 046-261-26)

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Exhibit F
Agricultural Viability Analysis
Application 251002

Map—Farmland Classification (APN 046-261-26)



Map Scale: 1:1,830 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

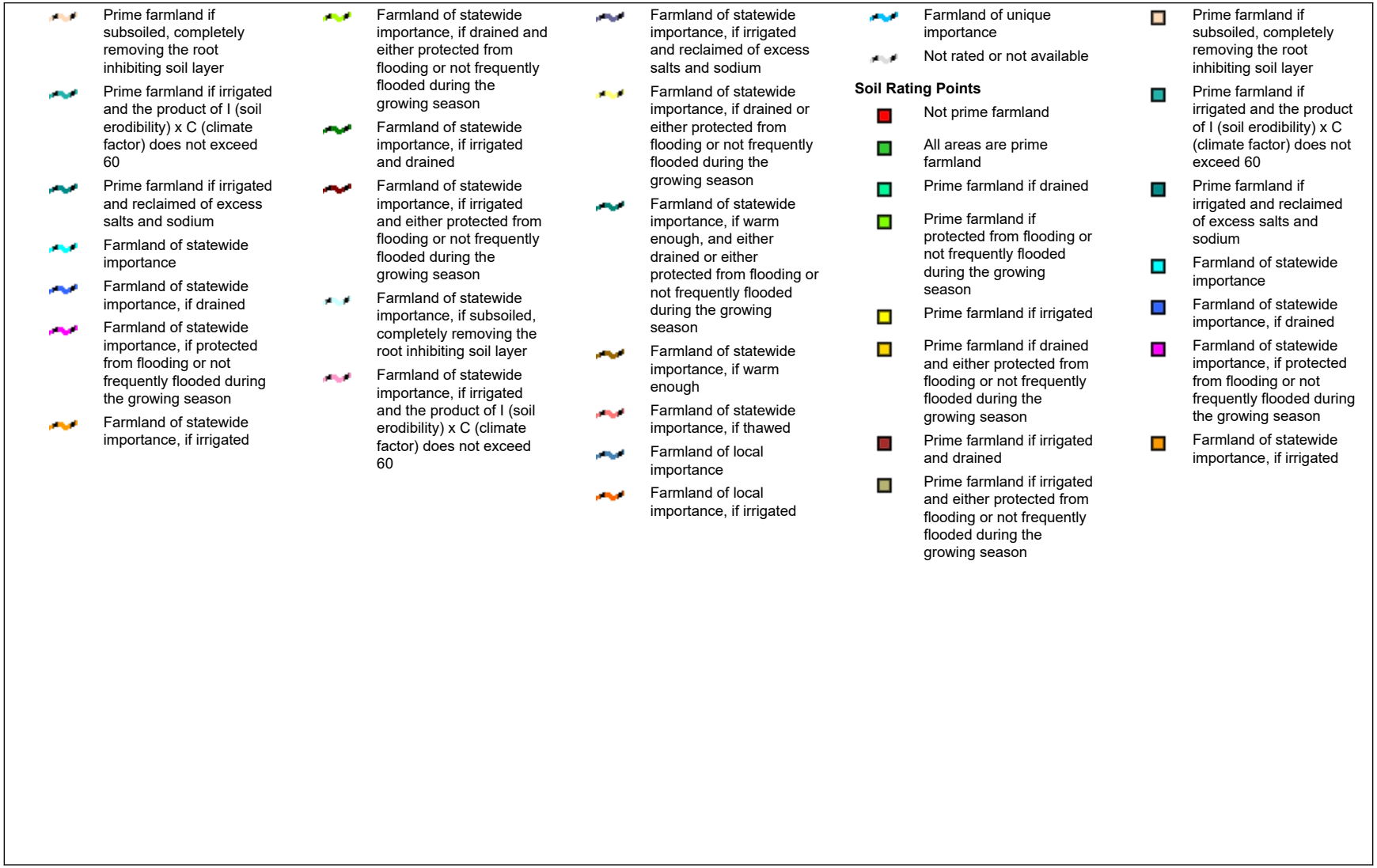
Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated
- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season


Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated
Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated and drained
Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough
Farmland of statewide importance, if thawed
Farmland of local importance
Farmland of local importance, if irrigated
Farmland of unique importance
Not rated or not available
Soil Rating Points
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
Survey Area Data: Version 18, Sep 8, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 11, 2022—May 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Farmland Classification (APN 046-261-26)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
174	Tierra-Watsonville complex, 15 to 30 percent slopes	Not prime farmland	1.1	27.2%
177	Watsonville loam, 2 to 15 percent slopes	Farmland of statewide importance	2.9	72.8%
Totals for Area of Interest			**4.0**	**100.0%**

Rating Options—Farmland Classification (APN 046-261-26)

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

California Revised Storie Index (CA) (APN 046-261-26)

The Revised Storie Index is a rating system based on soil properties that govern the potential for soil map unit components to be used for irrigated agriculture in California.

The Revised Storie Index assesses the productivity of a soil from the following four characteristics:

- Factor A: degree of soil profile development

- Factor B: texture of the surface layer

- Factor C: steepness of slope

- Factor X: drainage class, landform, erosion class, flooding and ponding frequency and duration, soil pH, soluble salt content as measured by electrical conductivity, and sodium adsorption ratio

Revised Storie Index numerical ratings have been combined into six classes as follows:

- Grade 1: Excellent (81 to 100)

- Grade 2: Good (61 to 80)

- Grade 3: Fair (41 to 60)

- Grade 4: Poor (21 to 40)

- Grade 5: Very poor (11 to 20)

Exhibit F
Agricultural Viability Analysis
Application 251002

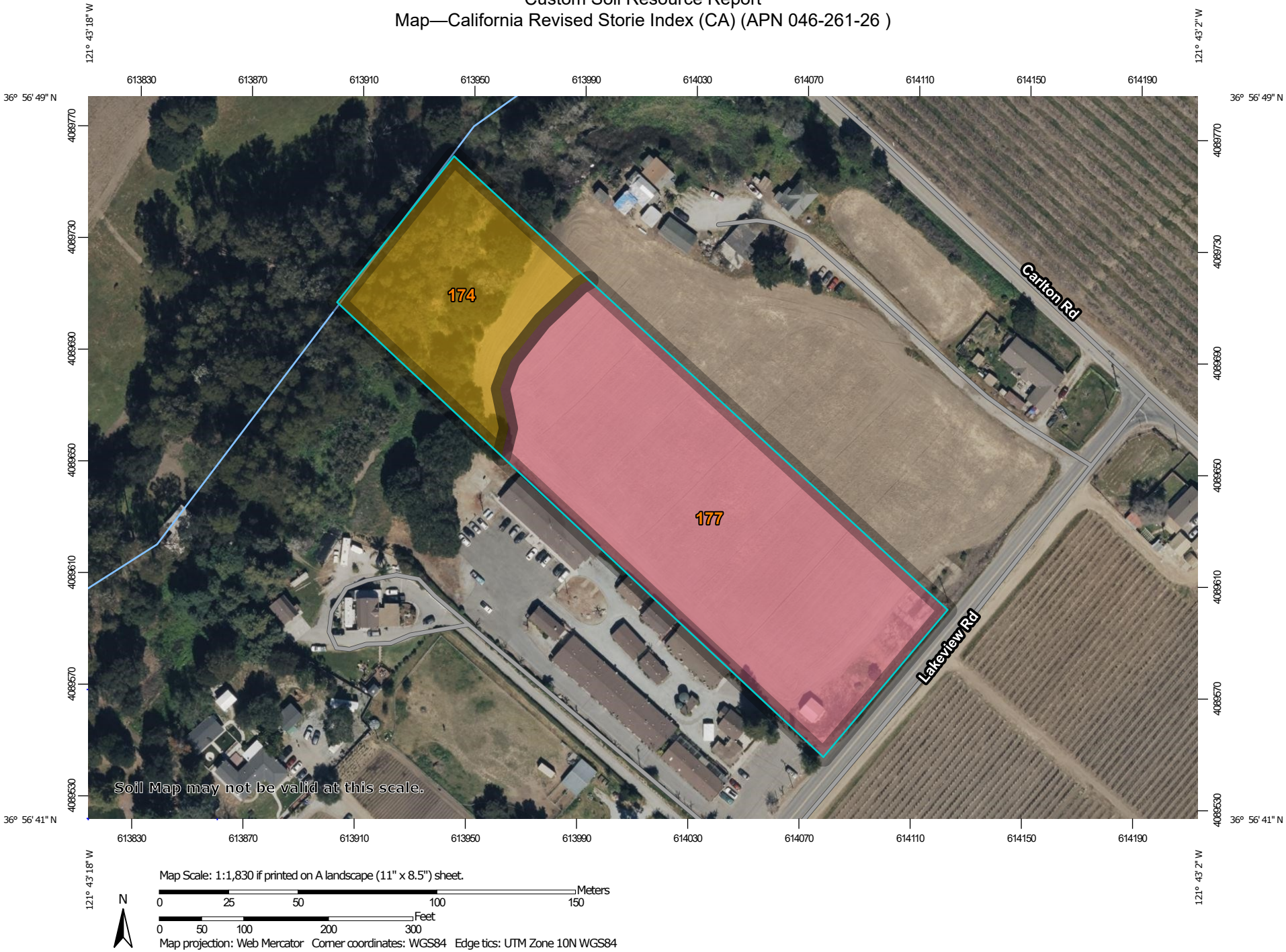
- Grade 6: Nonagricultural (10 or less)

The components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as the one shown for the map unit. The percent composition of each component in a particular map unit is given to help the user better understand the extent to which the rating applies to the map unit.

Other components with different ratings may occur in each map unit. The ratings for all components, regardless the aggregated rating of the map unit, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Exhibit F
Agricultural Viability Analysis
Application 251002

Map—California Revised Storie Index (CA) (APN 046-261-26)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Grade 1 - Excellent
- Grade 2 - Good
- Grade 3 - Fair
- Grade 4 - Poor
- Grade 5 - Very Poor
- Grade 6 - Nonagricultural
- Not rated
- Not rated or not available

Soil Rating Lines
- Grade 1 - Excellent
- Grade 2 - Good
- Grade 3 - Fair
- Grade 4 - Poor
- Grade 5 - Very Poor
- Grade 6 - Nonagricultural
- Not rated
- Not rated or not available

Soil Rating Points
- Grade 1 - Excellent
- Grade 2 - Good
- Grade 3 - Fair
- Grade 4 - Poor
- Grade 5 - Very Poor
- Grade 6 - Nonagricultural
- Not rated
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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Soil Survey Area: Santa Cruz County, California
Survey Area Data: Version 18, Sep 8, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 11, 2022—May 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—California Revised Storie Index (CA) (APN 046-261-26)

Map unit symbol	Map unit name	Rating	Component name (percent)	Acres in AOI	Percent of AOI
174	Tierra-Watsonville complex, 15 to 30 percent slopes	Grade 4 - Poor	Tierra (55%)	1.1	27.2%
177	Watsonville loam, 2 to 15 percent slopes	Grade 5 - Very Poor	Watsonville (85%)	2.9	72.8%
Totals for Area of Interest				**4.0**	**100.0%**

Rating Options—California Revised Storie Index (CA) (APN 046-261-26)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Nonirrigated Capability Class (APN 046-261-26)

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels-capability class, subclass, and unit. Only class and subclass are included in this data set.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Exhibit F
Agricultural Viability Analysis
Application 251002

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Custom Soil Resource Report
Map—Nonirrigated Capability Class (APN 046-261-26)

Map Scale: 1:1,830 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Capability Class - I
- Capability Class - II
- Capability Class - III
- Capability Class - IV
- Capability Class - V
- Capability Class - VI
- Capability Class - VII
- Capability Class - VIII
- Not rated or not available

Soil Rating Lines

- Capability Class - I
- Capability Class - II
- Capability Class - III
- Capability Class - IV
- Capability Class - V
- Capability Class - VI
- Capability Class - VII
- Capability Class - VIII
- Not rated or not available

Soil Rating Points

- Capability Class - I
- Capability Class - II
- Capability Class - III
- Capability Class - IV
- Capability Class - V
- Capability Class - VI
- Capability Class - VII
- Capability Class - VIII
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
Survey Area Data: Version 18, Sep 8, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 11, 2022—May 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Nonirrigated Capability Class (APN 046-261-26)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
174	Tierra-Watsonville complex, 15 to 30 percent slopes	4	1.1	27.2%
177	Watsonville loam, 2 to 15 percent slopes	3	2.9	72.8%
Totals for Area of Interest			**4.0**	**100.0%**

Rating Options—Nonirrigated Capability Class (APN 046-261-26)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Nonirrigated Capability Subclass (APN 046-261-26)

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels-capability class, subclass, and unit. Only class and subclass are included in this data set.

Capability subclasses are soil groups within one capability class. They are designated by adding a small letter, "e," "w," "s," or "c," to the class numeral, for example, 2e. The letter "e" shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; "w" shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); "s" shows that the soil is limited mainly because it is shallow, droughty, or stony; and "c," used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by "w," "s," or "c" because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, or wildlife habitat.

Map—Nonirrigated Capability Subclass (APN 046-261-26)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Erosion
- Soil limitation within the rooting zone
- Excess water
- Climate condition
- Not rated or not available

Soil Rating Lines
- Erosion
- Soil limitation within the rooting zone
- Excess water
- Climate condition
- Not rated or not available

Soil Rating Points
- Erosion
- Soil limitation within the rooting zone
- Excess water
- Climate condition
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
Survey Area Data: Version 18, Sep 8, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 11, 2022—May 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Nonirrigated Capability Subclass (APN 046-261-26)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
174	Tierra-Watsonville complex, 15 to 30 percent slopes	e	1.1	27.2%
177	Watsonville loam, 2 to 15 percent slopes	e	2.9	72.8%
Totals for Area of Interest			**4.0**	**100.0%**

Rating Options—Nonirrigated Capability Subclass (APN 046-261-26)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Hydric Rating by Map Unit (APN 046-261-26)

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

Exhibit F
Agricultural Viability Analysis
Application 251002

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

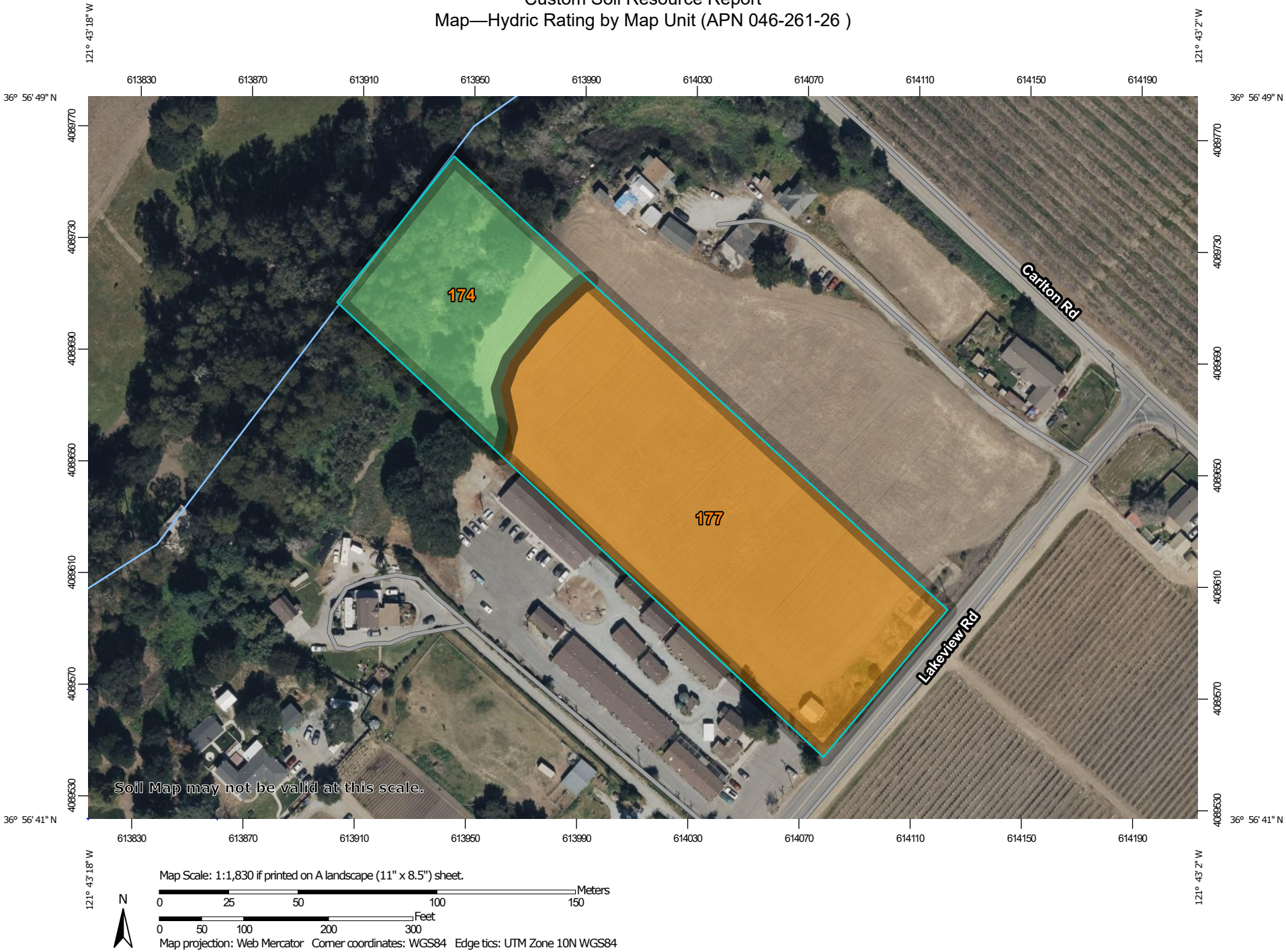
Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Map—Hydric Rating by Map Unit (APN 046-261-26)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
Survey Area Data: Version 18, Sep 8, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 11, 2022—May 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydric Rating by Map Unit (APN 046-261-26)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
174	Tierra-Watsonville complex, 15 to 30 percent slopes	30	1.1	27.2%
177	Watsonville loam, 2 to 15 percent slopes	88	2.9	72.8%
Totals for Area of Interest			**4.0**	**100.0%**

Rating Options—Hydric Rating by Map Unit (APN 046-261-26)

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Exhibit F
Agricultural Viability Analysis
Application 251002

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

Exhibit F
Agricultural Viability Analysis
Application 251002

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Exhibit F
Agricultural Viability Analysis
Application 251002