MEINERS OAKS WATER DISTRICT
VENTURA COUNTY SINCE 1949
(805) 646-2114
"WATER IS PRECIOUS"
202 WEST EL ROBLAR DRIVE

New Meters, Allocations & Expansion of Services Committee Agenda

March 10, 2023 at 9:30 a.m. at District Office

Please join my meeting from your computer, tablet or smartphone.
https://meet.goto.com/434495869
You can also dial in using your phone.
United States (Toll-Free): 1 866 899 4679
Access Code: 434-495-869

Right to be heard: Members of the public have a right to address the Board directly on any item of interest to the public that is within the subject matter jurisdiction of the Board, provided that no action shall be taken on any item not appearing on the agenda unless the action is otherwise authorized by subdivision (b) of Section 54954.2.

Please Note: If you have comments on a specific agenda item(s), please fill out a comment card and return it to the Board Secretary. The Board President will call on you for your comments at the appropriate time, either before or during the Board's consideration of that item.

If you require special accommodations for attendance at or participation in this meeting, please notify our office 24 hours in advance at (805) 646-2114
(Govt. Code Section 94594.1 and 94594.2 (a))

A. Call To Order

B. Public Comments

C. Discussion Items:

a. Consider modification of the MWAC for the Artesian 203 E El Roblar (commercial account) – (Ward/Martinez) - Attachment
b. Will-Serve Letter Requests – Attachments
  i. 142 Felix
  ii. 166 N Encinal
  iii. 260 N Alvarado
  iv. 1186 S Rice

D. Adjourn

MEINERS OAKS WATER DISTRICT
VENTURA COUNTY SINCE 1949
(805) 646-2114
202 WEST EL ROBLAR DRIVE

Modification of Artesian MWAC

Meiners Oaks Water District implemented the new water allocation program in December 2021. It was discovered that the new Artesian (Memory Care) Assisted Living facility at 203 E El Roblar had finally opened. Aside from determining the appropriate allocation, at that time, the Monthly Water Availability Charge (MWAC) was set at 64, as there are 64. The Artesian has individual bedrooms, each with a private bathroom, within 4 buildings. In addition, the facility has shared common areas for dining, activities, and laundry services. The Artesian is classified as Commercial, in alignment with the other assisted living facility in the District. However, the other assisted living facility only has one MWAC per building, but with shared bedrooms. The Area Housing Authority, a residential account, has an MWAC x 34 full apartments.

Fiscal Impact:

Account	Classification	Current MWAC	Proposed MWAC
Artesian	Commercial	$36 x 64 = $2,304/mo	$36 x 4 = $144/mo
Glen Oak 1	Commercial	$36 x 1 = $36	No Change
Glen Oak 2	Commercial	$36 x 1 = $36	No Change
Area Housing Authority	Residential	$36 x 34 = $1,224	No Change

Recommended Action:
Approve the modification of the Artesian MWAC from 64 to 4 dwelling units.

Will-Serve/Proof of Service/Meter Request Form

A "Will-Serve" letter may be issued upon the District's completion of an analysis determining that all conditions of approval are met.

Required Attachments:

1. Drawing/sketch of project (with dimensions)
2. Tax Assessors parcel map that includes the subject property.
3. Subdivision map covering the location of the project.*
4. Documentation of existing permitted dwellings on the property.

   * Clearly indicate all APNs and legal lots involved in the project. Ensure any markups to county documents do not obscure the underlying information.

Applicant Information:

Account Number:	03-[redacted]-03
Name:	C[redacted]
Company:	
Mailing Address:	142 Felix Dr, Ojai, CA 93023
Phone Number:	[redacted]
Email Address:	[redacted]@hotmail.com

Project Information:

New Meter Requested: ☐ Yes ☑ No

Assessor's Parcel #(s):	0170090095
Service Address:	142 Felix Dr
City, State, Zip code:	Ojai, CA 93023
Planning Dept Case #:	ZC23-0005
# of Existing Dwellings:	1
Date Dwellings Permitted:	1951

Type of Construction:

☑ New Construction ☐ Tenant Improvement ☐ ADU ☐ Other

Type of Use:

☑ Single Family Res ☐ Multi-Family Res (# of dwellings _____) ☐ Other

Project Dimensions (Sqft): 461

Continued on Next Page

MEINERS OAKS WATER DISTRICT
(805) 646-2114
202 WEST EL ROBLAR DRIVE

Will-Serve/Proof of Service/Meter Request Form

Detailed Project Description:

CONSTRUCTION OF A 461 S.F. ADDITION TO AN EXISTING 1102 S.F. SINGLE FAMILY SINGLE STORY RESIDENCE.

THE ADDITION WILL ALLOW FOR A NEW BEDROOM AND BATHROOM.

Please allow a minimum of 60 days to evaluate and process Will-Serve letter and new meter requests. The time frame will depend on receipt of satisfactory information from the applicant and schedule of pertinent District Committees and Board of Directors meetings.

☑ ***I acknowledge that MOWD will bill a $100 Administrative Fee for processing this request.***

Applicant Signature [redacted]

Date 2/7/23

Review of Application for Will Serve Letter

New 461 sf addition to an existing 1,102 sf SFR, addition to include 1 bedroom and 1 bathroom for Property with Existing Meter at 142 Felix.

Proposal

The proposed project consists of adding a new 461 sf addition to existing SFR, with one bedroom and one bathroom.

Applicant provided a detailed site plan, showing the location of the proposed structure.

Screening Step 1: Is the proposed building site on a legal lot? YES

Applicant provided a copy of a tax assessor parcel map and a subdivision map that indicate a single 0.34-acre parcel. APN: 017-0-090-095

Screening Step 2. Will the current allocation support an ADU? YES

Allocation Details:

- Allocation Case Identifier: AA-0710
- Allocation Category: 5/8" RES meter, 1 Parcel
- Parcel Size: 0.34 acre
- Current Base Fixed Allocation: 120 HCF/yr
- Current Base Variable Allocation: 168 HCF/yr
- Fixed Base Allocation Needed to Support "Tiny Home" ADU: 60 HCF/yr
- Deduction from Variable Allocation needed to Support "Tiny Home" ADU through drought stages: 70 HCF/yr

If the ADU are provided the customary fixed dwelling allocations, the new allocation for this property would be as follows:

- New Base Fixed Allocation: **180 HCF/yr**
- New Base Variable Allocation: **98 HCF/yr**

Recommendation

If a will serve letter is to be supplied, but must clearly state:

- Letter applies only to the proposed "Tiny Home" ADU as described in the applicant-provided preliminary site plan with the file date 2-7-2023.
- There will be no increase in the total (fixed plus variable) water allocation assigned to the meter Will Serve Letter will expire after 1 year.

Parcel Report

Parcel Information

APN	017009009
APN Suffix	5
Document Date	20210920
Document Number	202109200
Tract Number	
Map Number	
Situs Number	142
Situs Direction	
Situs Street	FELIX
Situs Suffix	DR
Acreage	0.3400

Cities

City Boundary

No

Election Precincts

Election Precinct

Number: MEINERS OAKS NO. 1-021

WARNING: The information contained herein was created by the Ventura County Geographic Information System (GIS), which is designed and operated solely for the convenience of the County and related contract entities. The County does not warrant the accuracy of this information, and no decision involving a risk of economic loss or physical injury should be made in reliance thereon.

Parcel Report

Political Districts

Assembly Districts

Name:	
Ordinal:	38th

Senatorial Districts

No	
Ordinal:	21st

Congressional Districts

No	
Ordinal:	24th

Supervisorial Districts

Name:	Matt Lavere
Ordinal:	1st

School Districts

Elementary School Districts

Name:	OJAI UNIFIED

Secondary School Districts

Name:	OJAI UNIFIED

Land Use

County SOAR

No

2020 County Designated Places

Name:	Meiners Oaks CDP

General Plan

Description:	Very Low Density Residential

Parcel Report

Overlay Zones

Name:	Temporary Rental Units
Name:	Ojai Valley Dark Sky

Zone Designation

Zoning:	Various
Zoning:	Various

Hazards

Earthquake Fault Hazard Zones

No

Liquefaction

No

Military Operations Areas

No

Tsunami Inundation

No

RANCHO OJAI
PORTION TRACT 7

Tax Rate Area
70018

17–09

1" = 200'

Bk 19

EL CONEJO DR.

(U.S.) (MEINERS) HWY.

MEINERS ROAD

LOMITO AV.

LOMITA AVENUE

FELIX AVENUE

FERNANDO DR.

EL ROBLAR

HWY. (HWY. 399)

RANCHO DR. (MEINERS RD.)

CUYAMA RD.

EL ROBLAR DR.

LOMITO

FERNANDO DRIVE

Detail B
1" = 100'

Detail A
1" = 50'

Detail C
1" = 100'

See Detail B

SEE DETAIL A

SEE DETAIL C

NOTE: ASSESSOR PARCELS SHOWN ON THIS PAGE DO NOT NECESSARILY CONSTITUTE LEGAL LOTS. CHECK WITH COUNTY SURVEYOR'S OFFICE OR PLANNING DIVISION TO VERIFY.

UNINCORPORATED AREA
Ventura County Assessor's Map.

Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.
Assessor's Mineral Numbers Shown in Squares.

DRAWN		REVISED	2-9-2011
REDRAWN		CREATED	
INKED	PLOTTED	EFFECTIVE	ROLL
PREVIOUS Bk., Portion Pg.			
Compiled By Ventura County Assessor's Office			

Bard Subdivision, Rancho Ojai, M.R. Bk.5, Pg.25 ½
V.C.O.M. Bk.3, Pg.49

County of Ventura Planning Division

800 S. Victoria Avenue, Ventura, Ca. 93009-1740 • (805) 654-2488 • vcrma.org/divisions/planning

Construction/Demolition ZC23-0005

Assessor's Parcel No.: 0170090095

Date Issued:	01/23/2023
Date Expires:	7/23/2023
Fee:	$626.00
Issued By:	A Sanchez

All Associated APNs:

Property Owner:
[redacted]

Mailing Address:
142 FELIX DR
OJAI, CA 93023

Telephone:

Applicant:
[redacted]

Mailing Address:
P. O. Box [redacted]
Ojai, CA 93024

Telephone: [redacted]

ZONING CLEARANCE TYPE: **Construction/Demolition**

Site Address: 142 FELIX, OJAI 93023
Parent Case No.:
Lot Area Sq Ft: 14850
Lot Area Acres: 0.34
Legal Lot Status:
Map & Lot No:

PROJECT DESCRIPTION: Zoning Clearance to authorize the construction of a 461 s.f. addition to an existing 1102 s.f. single family single story residence. The proposed addition will be constructed along the east elevation of existing residence. The proposed addition will have a side setback of 16'-3", and a front setback of 31'. The height of the proposed addition will be 14' - 3.5", measured from grade to roof pitch. The addition will allow for a new bedroom and bathroom. Lighting to conform to Section 8109-4.7 Dark Sky Overlay.,

APPLICABLE ZONING:

Zoning RE-10,000 sq ft/TRU/DKS
Area Plan: Ojai Valley
General Plan: Very Low Density Residential

Zoning: RE-10,000 sq ft/TRU/DKS
Area Plan Designation: Urban Residential 2-4 DU/AC

Split Zoning:
Zoning: N/A
Area Plan Designation: N/A
General Plan: N/A

BUILDING COVERAGE ALLOWANCE:

Maximum Building Coverage:

Building Coverage	Existing	Proposed	Combined
Prin. Structure(s) sf.	1102	461	1563
Accessory Structure(s) sf.	532	0	532
Total sf.	1634	461	2095
% of Bldg. Coverage	11.03	3.11	14.15

SQUARE FOOTAGE:

Building Coverage	Existing	Proposed	Combined
Principal Dwelling	1102	461	1563
Accessory Structure DU	532	0	532
Acce ory 2nd DU	0	0	0
Principal Structure AG	0	0	0
Acc Structure AG	0	0	0
Other Principal Structure	0	0	0
Other Acc. Structure	0	0	0

Does the cumulative GFA of any of the structures exceed the maximum ministerial allowance?

DEVELOPMENT STANDARDS

Structure No. 1 Existing Principal existing residence
Category: 8105-4-Dwellings
Sub Category: Dwelling: Single Family
Specific Use: N/A
Max Height:
Structure 50 Years and Older:
CHB Review Required:

Structure No. 2 Existing Accessory existing garage
Category: 8105-4-Dwellings
Sub Category: Dwelling, Accessory Structures To
Specific Use: Building For Human Habitation
Max Height:
Structure 50 Years and Older:
CHB Review Required:

Structure No. 3 Proposed Principal proposed addition to existing SFR
Category: 8105-4-Dwellings
Sub Category: Dwelling: Single Family
Specific Use: N/A
Max Height: 15
Structure 50 Years and Older:
CHB Review Required:

BELOW ARE SETBACK EXCEPTIONS THAT MAY APPLY

Allowed Intru ion into Setback

Stairway & balconie , open & unenclo ed	**2 5' front, 4' rear**
Porches & Landings, uncovered/unenclosed, at or below 1st floor:	**6' front, 3' rear and side**
Chimneys/fireplaces, masonry:	**2' into all setbacks; keep min. 3' side setback**
Architectural Features (e.g. eaves, cornices, canopies, etc.):	**2.5' front, 2' side, 4' rear; keep min 2' side/rear setback**

Are There Setback Exceptions?

Setback Exceptions:

Required Setbacks Between:

Habitable Structures:	**10'**
Habitable & Non-habitable Structures:	**6'**
Non-habitable Structures:	**6'**
Setbacks Between:	

FEES: **Total Fees:** **626.00**

ZONING CLEARANCE NO. ZC23-0005 **APN:** 0170090095

ATTACHMENT(S):

Y	Plot/Site Plan	Y	Floor Plans
N	Ordinance Standards	N	Permit Conditions
N	Compliance Agreement	Y	Elevations
N	Declaration	N	Removal Notice and Caveats
N	Cross Sections	N	Arborist Report
N	HOA Approval	N	Affidavit

OTHER:

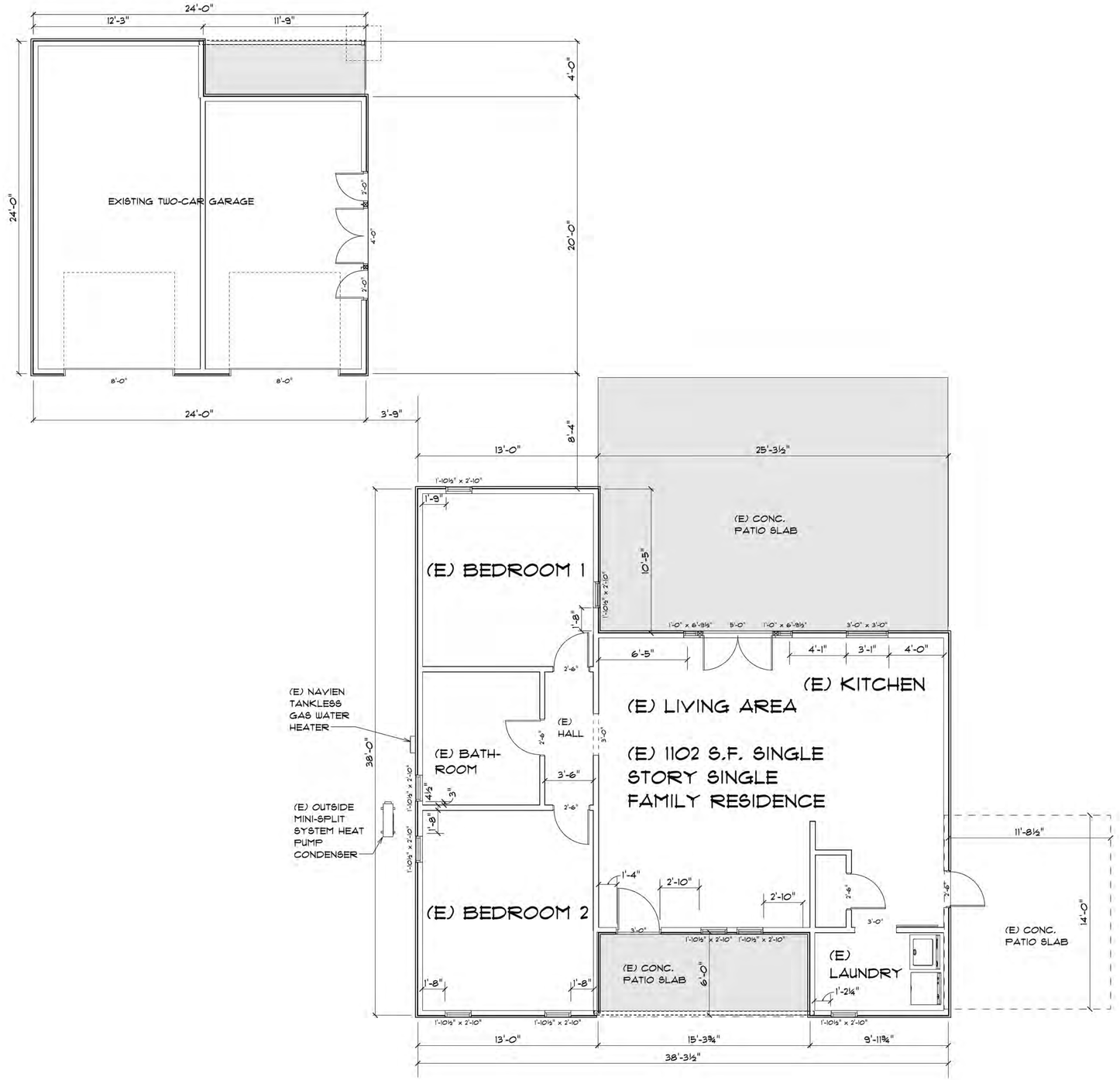
NOTES:

1. This Zoning Clearance will be nullified pursuant to Sec. 8111-2.6 of the Non-Coastal Zoning Ordinance and Sec. 8181-5.3 of the Coastal Zoning Ordinance if the information provided by the applicant was not full, true and correct; it was issued erroneously; or it does not comply with the terms and conditions of the permit originally granting the use.
2. Zoning Clearances for which a Building Permit is required are valid for 180 days following issuance of the Zoning Clearance during which time a complete Building Permit application must be submitted to the Ventura County Building and Safety Division. If a Building Permit application is not submitted within 180 days of issuance of the Zoning Clearance, the Zoning Clearance expires. Zoning Clearances shall expire 360 days from submittal of the Building Permit application even if the Building Permit application is renewed. Once a Building Permit is issued, construction must commence in accordance with the required timeline set forth in the Ventura County Building Code. This Zoning Clearance expires if the related Building Permit expires, is withdrawn, is terminated, is renewed, and/or there is a design change.
3. Zoning Clearances for which a Building Permit is not required are valid for 180 days following issuance of the Zoning Clearance. If the authorized development has not received all other required County entitlements and licenses and/or development activities have not commenced on or before the 180th day, the Zoning Clearance expires. If the development has received all other required County entitlements and licenses and development activities have commenced on or before the 180th day, the Zoning Clearance shall remain valid so long as the development remains consistent with the Zoning Ordinance or the conditions of a previously issued entitlement.
4. An applicant may apply for an extension of the 180-day Zoning Clearance expiration date provided that the request for an extension is submitted in writing no later than 30 days prior to the expiration date of the Zoning Clearance and the required fees are paid. A one-time extension may be granted by the Planning Division for a period of up to 180 days provided that (a) there are no material changes to the project or its constituent structures or development, (b) the project is consistent with all applicable General Plan policies, entitlements, and development standards of the Zoning Ordinance in effect at the time the extension is sought, and (c) the project remains subject to the Zoning Clearance permitting requirement, as opposed to a newly enacted discretionary permitting requirement.
5. The property owner is responsible for identifying all property lines and ensuring that all local and state requirements are complied with.
6. Authorizations and approvals by other County Departments that exceed the allowable limits noted herein do not excuse the property owner from complying with the provisions of this Zoning Clearance. (The stricter provisions apply).
7. The proposed project will not result in the removal of more than 50% of the roof or floor area of a non-conforming structure.
8. Property owners shall submit a Verification of Employment Declaration for Zoning Clearances authorizing Farmworker/Animal Caretaker Dwelling Units by May 15th of each year and any applicable fees demonstrating to the Planning Director's satisfaction that the farmworker/animal caretaker meets the Zoning Ordinances' applicable employment criteria.
9. If the property subject of this Zoning Clearance is within the boundary of a Homeowner's Association or Property Owner's Association, additional review and approval of the project may by required by the HOA/POA's Conditions, Covenants & Restrictions (CC&R's). HOA/POA review and approval is the responsibility of the property owner.
10. If the proposed project is located within the Dark Sky Overlay Zone, all new outdoor lighting shall be installed to be consistent with standards outlined in Sec. 8109-4.7 of the Non-Coastal Zoning Ordinance.

BY SIGNING BELOW I CERTIFY THE FOLLOWING:

- I am the owner of the subject property or I am the authorized agent of the property owner and have his/her permission to obtain this Zoning Clearance. I have illustrated on the attached site plan all of the following applicable attributes: existing and proposed structures, Protected Trees (Oaks, Sycamores, and any 30+" diameter trees), marshes, wetlands, streams, rivers, landslides, edges and toes of slopes, abandoned or active oil wells, septic systems and leach fields. I have accurately illustrated all roads, public and private easements, and utilities on the attached site plan and accept responsibility for any encumbrances, restrictions, or agreements on the subject property.
- The information provided in this Zoning Clearance and attached site plans, floor plans, and elevations and landscape plans (if applicable) are full, true and correct.
- I have been informed that I am responsible for contacting the applicable HOA/POA to ensure compliance with the CC&R's.
- I have reviewed, read, and understand the terms, notes and conditions of this Zoning Clearance and as depicted in related attachments, and agree to abide by them and all other provisions of the Zoning Ordinance. I further understand that this Zoning Clearance can be nullified for cause as noted above.
- I agree to defend, indemnify and hold harmless the County of Ventura, including all of its boards, agencies, departments, officers, employees, agents and volunteers, against any and all claims, lawsuits (whether against property owner, County of Ventura or others), judgments, debts, demands and liability, including those arising from injuries or death of persons and for damages to property, arising directly or indirectly out of the obligations of this Zoning Clearance or undertaken or out of operations conducted or subsidized in whole or in part by property owner, save and except claims or litigations arising through the sole negligence or wrongdoing and/or sole willful misconduct of County of Ventura.

Applicant Signature



AS BUILT FLOOR PLAN

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

LICENSED ARCHITECT
JON DIEGES
C-10466
RENEWAL DATE
STATE OF CALIFORNIA

JON DIEGES, ARCHITECT

[redacted]

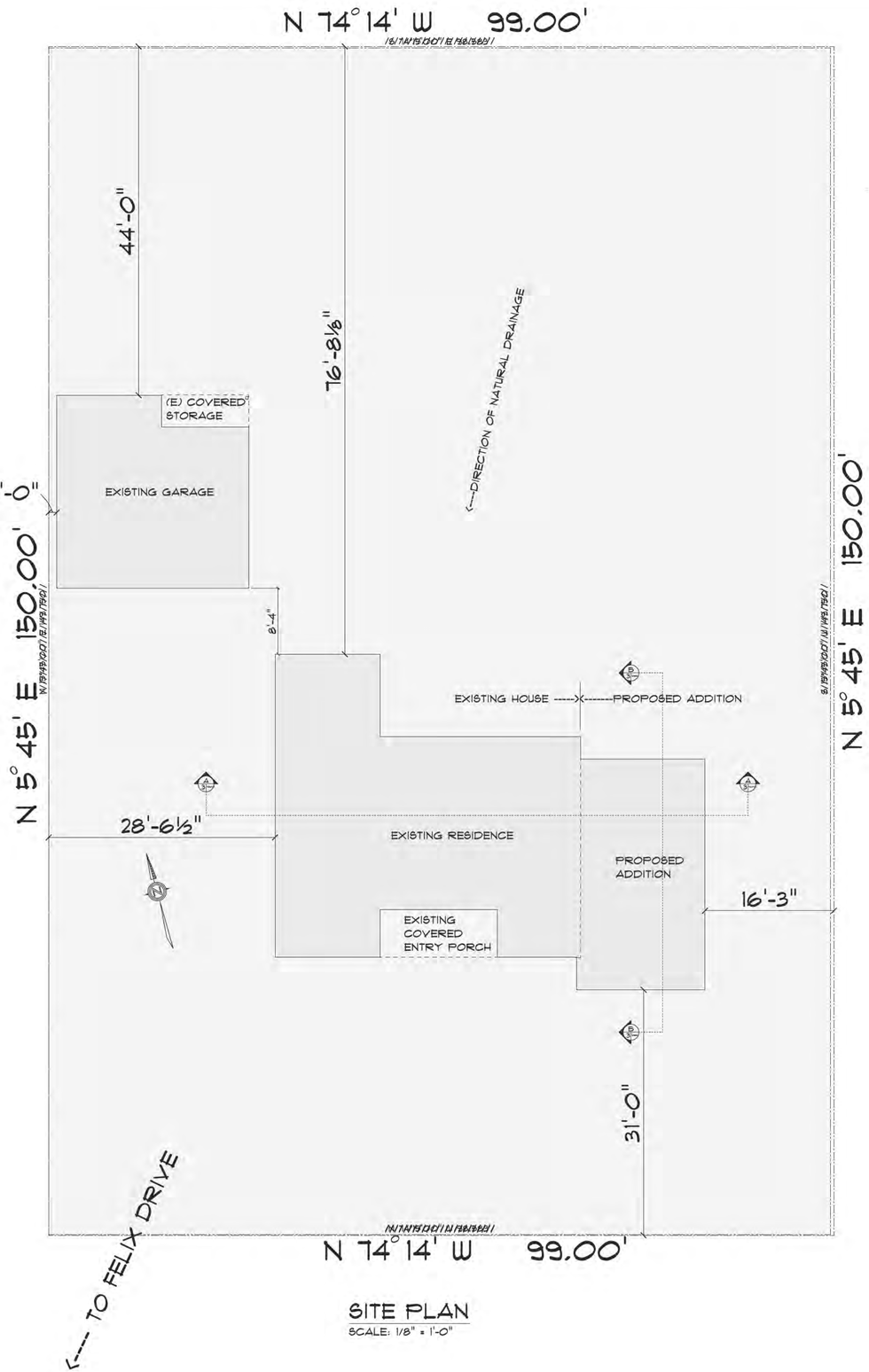
[redacted]

CALCULATIONS AND DRAWING BY JON DIEGES

USING SOFTPLAN 2022 COMPUTER DRAFTING

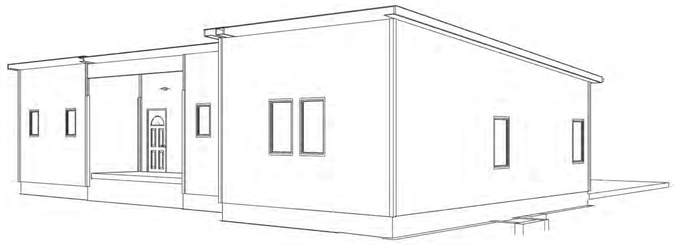
DATE:Friday, February 3, 2023

PAGE: 2/18
AS BUILT PLAN

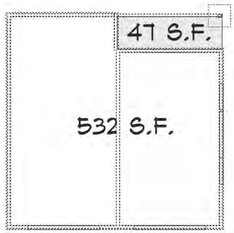


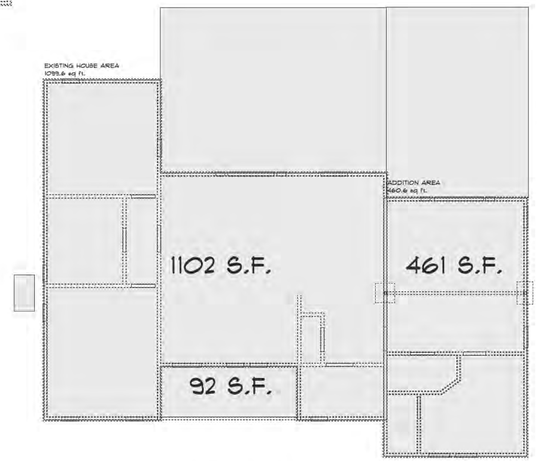
SITE PLAN

SCALE: 1/8" = 1'-0"



3D LOOKING NORTHWEST





AREA ANALYSIS

SCALE: 1/8" = 1'-0"

SCOPE CODES & SITE DATA

CONSTRUCT AN 461 S.F ADDITION TO AN EXISTING 1102 S.F. HOUSE FOR A COMPLETED TOTAL OF 1563 S.F. IN ACCORDANCE WITH THE 2022 CALIFORNIA BUILDING, ELECTRICAL, MECHANICAL, PLUMBING, ENERGY AND GREEN BUILDING CODES AND THE 2022 VENTURA COUNTY BUILDING CODE

DRAWING SCHEDULE	
Site Plan Index & Scope	1
AS BUILT PLAN	2
AS BUILT FOUNDATION	3
ADDITION PLAN	4
ELEVATIONS	5
OPENING SCHEDULE	6
FOUNDATION PLAN	7
FLOOR FRAMING PLAN	8
WALL FRAMING PLAN	9

DRAWING SCHEDULE	
SHEAR WALL ELEVATIONS	10
ROOF FRAMING PLAN	11
ELECTRICAL PLAN	12
TITLE 24 CF1R FORMS PG A	13
TITLE 24 CF1R FORMS PG B	14
MANDATORY MEASURES & SW1	15
GREEN BUILDING PG A	16
GREEN BUILDING PG B	17
NAILING SCHEDULE	18

LICENSED ARCHITECT
JON DIEGES
C-10466
RENEWAL DATE
STATE OF CALIFORNIA

JON DIEGES, ARCHITECT
[redacted]
[redacted]el
93023 (Job#11-1-2021) christopher_odonnell@hotmail.com

CALCULATIONS AND DRAWING BY JON DIEGES
USING SOFTPLAN 2022 COMPUTER DRAFTING
DATE:Friday, February 3, 2023

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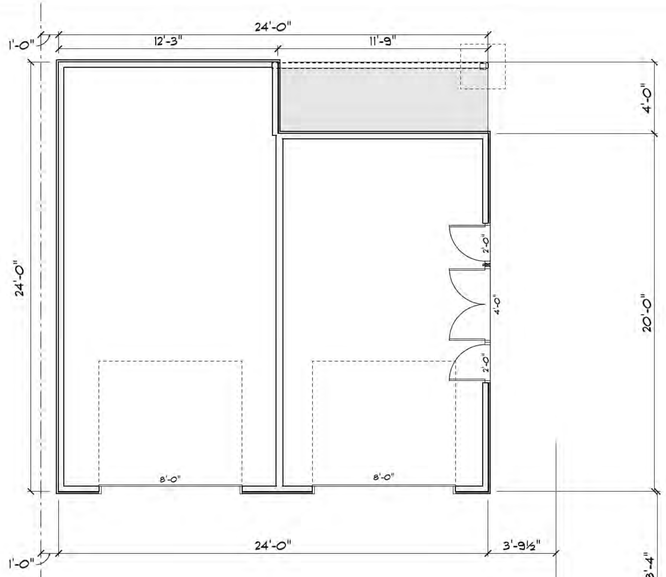
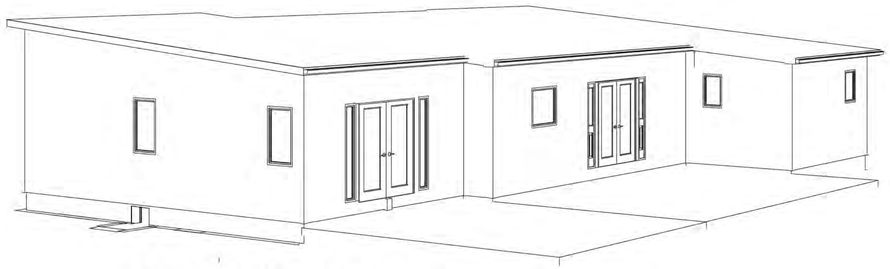
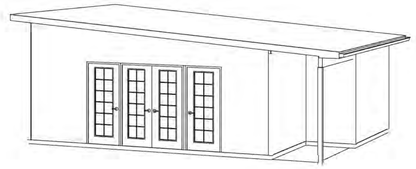
Site Plan Index & Scope

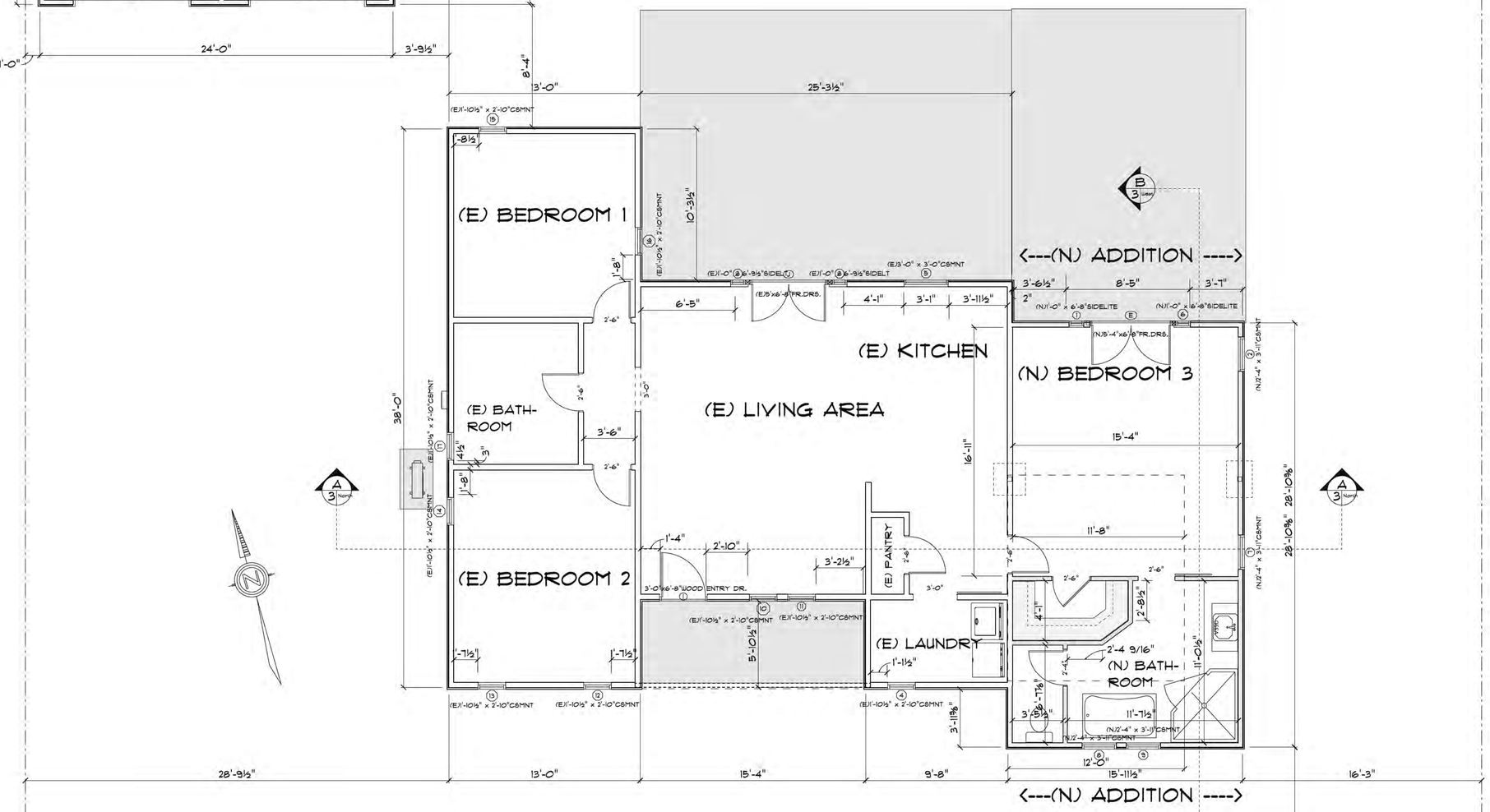




3D LOOKING SOUTHWEST

SCALE: 0.1500" = 1'-0"





ADDITION PLAN

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

LICENSED ARCHITECT
JON DIEGES
C-10466
RENEWAL DATE
STATE OF CALIFORNIA

JON DIEGES, ARCHITECT

[redacted]

[redacted]

CALCULATIONS AND DRAWING BY JON DIEGES

USING SOFTPLAN 2022 COMPUTER DRAFTING

DATE:Friday, February 3, 2023

PAGE: 4/18

ADDITION PLAN

Will-Serve/Proof of Service/Meter Request Form

A "Will-Serve" letter may be issued upon the District's completion of an analysis determining that all conditions of approval are met.

Required Attachments:

1. Drawing/sketch of project (with dimensions)
2. Tax Assessors parcel map that includes the subject property.
3. Subdivision map covering the location of the project.*
4. Documentation of existing permitted dwellings on the property.

   * Clearly indicate all APNs and legal lots involved in the project. Ensure any markups to county documents do not obscure the underlying information.

Applicant Information:

Account Number:	02-[redacted]-05
Name:	J[redacted]
Company:	
Mailing Address:	166 N. Encinal Ave Ojai, CA 93023
Phone Number:	[redacted]
Email Address:	[redacted]@gmail.com

Project Information:

New Meter Requested: ☐ Yes ☑ No

Assessor's Parcel #(s):	017-0-144-090
Service Address:	166 N. Encinal Ave
City, State, Zip code:	Ojai, CA 93023
Planning Dept Case #:	
# of Existing Dwellings:	2 - 2018, 2022

Date Dwellings Permitted: [ ]

Type of Construction:

☐ New Construction ☑ Tenant Improvement ☑ ADU ☐ Other

Type of Use:

☐ Single Family Res ☑ Multi-Family Res (# of dwellings ____) ☐ Other

Project Dimensions (Sqft): 458

Continued on Next Page

Will-Serve/Proof of Service/Meter Request Form

Detailed Project Description:

Greetings. I am seeking a Will Serve letter from MOWD. I am in the process of converting an e

Please allow a minimum of 60 days to evaluate and process Will-Serve letter and new meter requests. The time frame will depend on receipt of satisfactory information from the applicant and schedule of pertinent District Committees and Board of Directors meetings.

☑ ***I acknowledge that MOWD will bill a $100 Administrative Fee for processing this request.***

Applicant Signature [redacted]

Date

Review of Application for Will Serve Letter

Conversion of a 458 sf workshop into an ADU with existing plumbing for toilet, sink and washer, only adding 3x3 shower for Property with Existing Meter at 166 N Encinal.

Proposal

The proposed project consists of converting a 458-sf workshop with existing toilet, sink and washer to an ADU, adding a 3x3 shower. Property was issued a Will-Serve letter in 2017.

Applicant provided a detailed site plan, showing the location of the proposed structure.

Screening Step 1: Is the proposed building site on a legal lot? YES

Applicant provided a copy of a tax assessor parcel map and a subdivision map that indicate a single 0.17-acre parcel. APN: 017-0-144-09

Screening Step 2. Will the current allocation support an ADU? YES

Allocation Details:

- Allocation Case Identifier: AA-0386
- Allocation Category: 5/8" RES meter, 1 Parcel
- Parcel Size: 0.17 acre
- Current Base Fixed Allocation: 120 HCF/yr
- Current Base Variable Allocation: 133 HCF/yr
- Fixed Base Allocation Needed to Support "Tiny Home" ADU: 60 HCF/yr
- Deduction from Variable Allocation needed to Support "Tiny Home" ADU through drought stages: 70 HCF/yr

If the ADU are provided the customary fixed dwelling allocations, the new allocation for this property would be as follows:

- New Base Fixed Allocation: **180 HCF/yr**
- New Base Variable Allocation: **63 HCF/yr**

Recommendation

If a will serve letter is to be supplied, but must clearly state:

- Letter applies only to the proposed "Tiny Home" ADU as described in the applicant-provided preliminary site plan with the file date 2-14-2023.
- There will be no increase in the total (fixed plus variable) water allocation assigned to the meter Will Serve Letter will expire after 1 year.

I am requesting a "Will Serve" letter from MOWD. Ventura County is requiring this letter before they grant final approval for my newly constructed (90% completed), previously permitted (March 2023) 458 sq. ft Workshop.

In order to have a separate electrical meter service to this building, VC B/S will only approve this if the Workshop is converted to an ADU. The VC Planning Department approved this ADU conversion on Jan 5, 2023. However, the ADU conversion requires the addition of a 3'x3' shower. The Workshop is already plumbed for a toilet, washroom sink, washer, and utility sink.

To do this conversion, VC B/S is requiring a completely new building permit. I need to submit a new complete set of plans showing this shower addition. As part of this new permit process, they require a "Will Serve" letter from MOWD.

The currently permitted Workshop is connected to our water meter/ line. We are not applying for a new water meter, increased water allocation, or increasing the size of our current water meter.

MEINERS OAKS WATER DISTRICT
VENTURA COUNTY SINCE 1949
(805) 646-2114
"WATER IS PRECIOUS"
202 WEST EL ROBLAR DRIVE

November 9, 2017,

RE: Will Serve Letter for the existing 5/8" x 3/4" water service

APN: 017-0-144-090

Address: 166 N. Encinal

Ojai, Ca 93023

Dear Customer,

Meiners Oaks Water District organized under Chapter 592 of the Acts of the Fortieth Session of the California Legislature and Amendments and California Water Code Section 30500.1 for the purpose of storing, distribution and selling water.

Property of land is comprised of approximately .17 acres bearing the Assessor's Parcel No.017-0-144-090 .

Property owner on .17 acres of land is currently served by Meiners Oaks Water District to provide water for domestic purposes only. This service is provided by a one (5/8" x 3/4") meter with a maximum flow of **30** gallons per minute (GPM).

It is also Meiners Oaks Water understanding that there is no further need to increase flow to meet any further domestic or agriculture uses or Ventura County Fire protection District requirements for any proposed or existing building.

Any additional water needed above .44 acre feet of water/year of water to serve said property must be purchased from Meiners Oaks Water District and Casitas Municipal Water District according to their Rates and Regulations and water service Policies.

Plumbing devices shall include a maximum **1.2** gallon per flush toilets, **2.5** gpm shower heads and aerators on all faucets inside the structure.

By this letter Meiners Oaks Water certifies that the subject parcel is within the service area of Meiners Oaks Water District. Said certification is subject to all applicable terms and conditions contained within Meiners Oaks Water Districts' Rates and Regulations for water service and/or Meiners Oaks Water Districts water service policy for water service as amended from time to time.

Any construction shall include water efficient plumbing devices as specified by Meiners Oaks Water District. Owner is to provide Meiners Oaks Water with the type of plumbing fixtures, description of

landscaping and total estimated annual requirements and certify that it is under aforementioned allocation.

Mike Hollebrands, General Manager

Meiners Oaks Water District

1-9-17

Date

RANCHO OJAI

Tax Rate Area
70018

17–14

1" = 100'

PADRE DRIVE

JUAN DRIVE

AVENUE

ENCINAL AVENUE

FERNANDO DRIVE

ALVARADO AVENUE

EL ROBLAR DRIVE

MESA DRIVE

ABANDONMENT 847–332

LLA 960095711 Par. A

LLA 910105535 Par. 1

LLA 070710–0136606 Par. A

LLA 890092109 Par. 1

LLA 890092109 Par. 2

UNINCORPORATED AREA
Ventura County Assessor's Map.

DRAWN		REVISED	10–5–2007
REDRAWN	4–1–1962	CREATED	
INKED	PLOTTED	EFFECTIVE	ROLL
PREVIOUS Bk., Portion Pg.			
Compiled By Ventura County Assessor's Office			

NOTE: ASSESSOR PARCELS SHOWN ON THIS PAGE DO NOT NECESSARILY CONSTITUTE LEGAL LOTS. CHECK WITH COUNTY SURVEYOR'S OFFICE OR PLANNING DIVISION TO VERIFY.

Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.
Assessor's Mineral Numbers Shown in Squares.

Meiners Ojai Oaks Sub.1, M.R. Bk.14, Pg.7

[redacted] Accessory Dwelling Unit
166 N. Encinal Ave
Ojai, CA 93023

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ON SITE ALL DIMENSIONS PRIOR TO STARTING WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO PROCEEDING.
2. UNLESS OTHERWISE NOTED OR SHOWN, ALL PHASES OF WORK ARE TO CONFORM TO THE MINIMUM STANDARDS OF THE UNIFORM BUILDING CODE (LATEST GOVERNING EDITION), LOCAL BUILDING CODES AND THOSE ASTM SPECIFICATIONS UPON WHICH THE STANDARDS ARE BASED. WHERE CONFLICTS BETWEEN BUILDING CODES AND SPECIFICATIONS OCCUR, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
3. ALL ASTM DESIGNATIONS REFERRED TO ON THESE DRAWINGS SHALL BE THE LATEST ADOPTED OR REVISED SPECIFICATIONS.
4. ALL DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS.
5. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
6. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE NOTED OR SHOWN. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK TO COMPLETION OF THE PROJECT, AS INDICATED IN THE CONTRACT DOCUMENTS, AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS AND PROCEDURES.
7. DETAILS; CONDITIONS NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED THE SAME AS SIMILAR CONDITIONS DETAILED AND/OR INDICATED ON THE PLANS.
8. NAILING; NAILING NOT SHOWN ON THE PLANS SHALL BE IN ACCORDANCE OF GOVERNING BUILDING CODES. (SEE NAILING SCHEDULE.)
9. PROVIDE ALL TEMPORARY BRACING, SHORING AND GUYING TO AVOID EXCESSIVE STRESSES ON STRUCTURAL ELEMENTS, AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING ERECTION.
10. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARANCE AND EARTHWORK OPERATIONS OR FILLED EXCAVATIONS OR BURRIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNTAINS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
11. DO NOT CUT OR TRIM ANY TREES ON THE PROPERTY UNLESS OTHERWISE NOTED OR DIRECTED BY DESIGNER AND OWNER. AVOID FILLING OR CUTTING AROUND EXISTING TREES TO REMAIN. PROTECT THESE TREES WITH BARRIERS DURING CONSTRUCTION.
12. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF. LOAD SHALL NOT EXCEED DESIGN LIVE LOAD FOR EACH PARTICULAR LEVEL.
13. CONTRACTOR SHALL PROTECT THE ADJOINING PROPERTY DURING EXCAVATION. PROTECTION SHALL BE SUCH THAT ANY EARTH OF THE ADJOINING PROPERTY WILL NOT CAVE-IN OR SETTLE.
14. THE CONTRACTOR SHALL NOTIFY THE "OWNER" OF ANY CONDITION REQUIRING MODIFICATION OR CHANGE, BEFORE PROCEEDING WITH WORK.
15. ALL CONSTRUCTION TO PROVIDE A WATERPROOF, WEATHER TIGHT STRUCTURE. CONTRACTOR SHALL SEAL AND CAULK AS NECESSARY TO ACHIEVE THIS REQUIREMENT
16. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE STATE OF CALIFORNIA.
17. CONTRACTOR SHALL VERIFY IN THE FIELD ALL EXISTING CONDITIONS SHOWN ON THE DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
18. SHEET METAL & FLASHING: PROVIDE AND INSTALL SHEET METAL AND OR COPPER FLASHING AS DETAILED AND REQUIRED TO INSURE WATERTIGHT ASSEMBLY. ALL PIECES SHALL BE FABRICATED IN MAXIMUM PRACTICAL LENGTHS, FREE OF WARPS, BUCKLES AND DENTS AND OTHER DEFECTS. (U.B.C. 1402.2 FLASHING & COUNTERFLASHING: 1508.4 VALLEY FLASHING & 1509, OTHER FLASHING).
19. NO POTABLE WATER MAY BE USED FOR COMPACTION OR DUST CONTROL PURPOSES IN CONSTRUCTION ACTIVITIES WHERE THERE IS A REASONABLE AVAILABLE SOURCE OF RECLAIMED WATER OR OTHER SUB POTABLE WATER APPROVED BY THE VENTURA COUNTY HEALTH DEPARTMENT & APPROPRIATE FOR SUCH USE. ORD 3522, SECTION 6(K).
20. ALL HOSES USED FOR ANY CONSTRUCTION ACTIVITIES SHALL BE EQUIPPED WITH A SHUT OFF NOZZLE. WHEN AN AUTOMATIC SHUT OFF CAN NOT BE PURCHASED OR OTHERWISE OBTAINED FOR THE SIZE & TYPE OF HOSE IN USE, THE NOZZLE SHALL BE AN AUTOMATIC SHUT OFF NOZZLE. ORD 3522 6(K).
21. COPPER WATER LINES SHALL BE TYPE 'L' MIN. SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING TYPE. PLUMBING FIXTURES AND PLUMBING FITTING SHALL MEET THE FOLLOWING STANDARDS:
    A. WATER CLOSET = 1.28 GALLONS PER FLUSH MAX.
    B. SHOWERHEAD = 1.8 GPM MAX.
    C. LAVATORY FAUCETS = 1.2 GPM MAX
    D. SINK FAUCETS = 1.8 GPM MAX, TITLE 24, VCBC, UPC
22. FIRE BLOCK STUD WALLS (@ 10' INTERVALS/HORIZ. & VERT), ENCLOSED AND CONCEALED SPACES, AND AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, ATTIC AND CHIMNEY CHASE, STAIR STRINGERS, AND SIMULAR PLACES AT CEILING AND FLOOR LEVELS (708.2.1 UBC)
23. SAFETY: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON THE JOB SITE AND ADHERE TO ALL FEDERAL, STATE, LOCAL, AND O.S.H.A. REGULATIONS.
24. AFTER COMMENCEMENT OF WORK, ANY FAULTS IN CONSTRUCTION DUE IN PART TO ERRORS IN THE CONSTRUCTION DOCUMENTS, SHALL BE CORRECTED BY CONTRACTOR OR SUBCONTRACTOR.
25. ALL HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS. HANDGRIP PORTION OF ALL HANDRAILS SHALL NOT BE LESS THAN 1-1/4" NOT MORE THAN 2" IN CROSS SECTIONAL DIMENSION, OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE.
26. PROVIDE EMERGENCY EXIT DOOR OR WINDOW FROM BASEMENT AND/OR SLEEPING ROOMS. NET CLEAR WINDOW OPENING AREA SHALL NOT BE LESS THAN 5.7 SQ. FEET (821 SQ. INCHES). MIN. NET WINDOW OPENING HEIGHT DIMENSION. 24" CLEAR; MIN. NET WIDTH DIMENSION, 20" CLEAR. FINSH SILL HEIGHT MAX. 44" ABOVE FLOOR.
27. IN ACCORDANCE WITH PERTINENT ITEMS OF THESE NOTES AND THOSE ITEMS SO INDICATED ON THE DRAWINGS "CAREFULLEY" DEMOLISH AND REMOVE FROM THE JOB SITE THOSE ITEMS SCHEDULED TO BE SO DEMOLISHED AND REMOVED
28. USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK
29. SURFACE CONDITIONS: EXAMINE THE AREAS AND CONDITIONS UNDER WHICH WORK WILL BE PERFORMED. CORRECT CONDITIONS DETRIMENTAL TO TIMELY & PROPER COMPLETION OF THE WORK. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED
30. DEMOLITION: BY CAREFUL STUDY OF THE DRAWINGS, DETERMINE THE LOCATION AND EXTENT OF SELECTIVE DEMOLITION TO BE PERFORMED
31. SEE GRADING PLAN FOR EXACT LOCATION OF THE NEW RESIDENCE. SEE GRADING PLAN FOR PAD ELEVATION.
    SOILS REPORT NO.: N/A
    SOILS REPORT UPDATE NO.: N/A
    GRADING PERMIT NO.: N/A/
    VOLUME OF GRADING: EXCAVATION AND FILL. =50 C.Y.
    EXPANSION INDEX: N/A
32. BEARING CAPACITY: 2500 PSF
33. UNLESS INDICATED OTHERWISE, ALL PORTIONS OF THIS PROJECT SHALL BE SUBJECT TO THE REQUIREMENTS OF THE FOLLOWING:-
    2019 CALIFORNIA BUILDING CODE
    2019 CALIFORNIA PLUMBING CODE
    2019 CALIFORNIA MECHANICAL CODE
    C.C.R. (CA. CODE OF REG.) TITLE 19 AND 24
    2019 AMERICANS WITH DISABILITIES ACT
    2019 CALIFORNIA ELECTRICAL CODE
    ALL OTHER APPLICABLE CODES, REGULATIONS AND ORDINANCES

PROJECT DATA

SCOPE OF WORK:
Conversion of existing 458 sq. ft. workshop to an accessory dwelling unit (ADU)

ZONING DATA:

APN	0170144090
Lot Size	7,500 SF
Zoning	R-1
High Fire Zone	No
Fire Sprinklers	Yes
Type of Construction	V-B
Number of Stories	1
Number of Bedrooms	0
Number of Bathrooms	1/2
Setbacks: Front- 20,' rear 6', sides 5'	
Occupancy Group	R-3
Soils Report	None- see below
Expansion Index	91-130

HFH = NO
Sprinklers = YES
E.I.= 91-130

Notes:
1. Waiver of soils report allowed per approved "Foundation and Soils Investigation Request" by Ventura County Building and Safety Office

BUILDING DATA:
Conditioned Area: 458 SF

PROJECT DIRECTORY:
Owner: Jacob and Keri Setnicka
166 N. Encinal Ave
Ojai, CA 93023

Structural Design:
Laima Reeder
Oxnard, CA 93035
805 985-1700

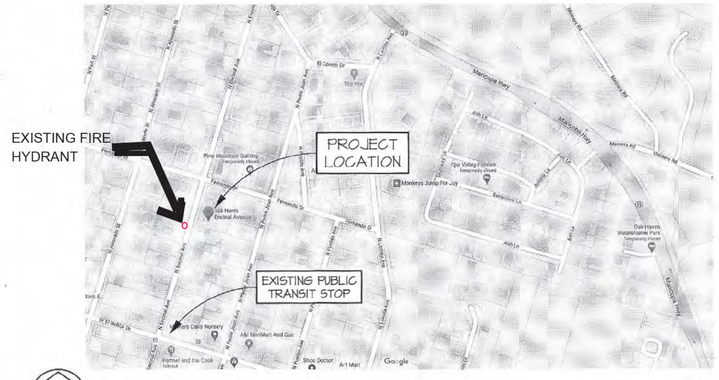
SHEET INDEX

UTILITY COMPANIES

GAS	Southern California Gas PO BOX 1626 MONTEREY PARK CA 91754-8626
ELECTRIC	Southern California Edison Co 10060 Telegraph Road Ventura, CA 93003
TELECOM	Pacific Telephone Co. 2459 Palma Drive Ventura, CA 93003
SEWER	OVSD 1072 Tico Road Ojai, CA 93023
WATER	Meiners Oaks Water 202 W. El Roblar Dr. Ojai, CA 93023

ADDITIONAL NOTES

The discharge of pollutants to any storm drainage system is prohibited per the Ventura Countywide Municipal Storm Water NPDES Permit No. CAS 5004002 No solid waste, petroleum byproducts, soil particulate, construction waste materials, or wastewater generated on the construction site or by construction activities shall be placed, conveyed, or discharged into the street, gutter, or storm drain system.



NORTH

LOCATION MAP
APPROXIMATE SCALE: 1" = 300'
0' 300' 600'

This set of plans and specifications MUST be kept on the job at all times and it is unlawful to make any changes or alterations on same without written permission from the Building Inspection Dept., County of Ventura. The stamping of this plan and specifications SHALL NOT be held to permit or to be an approval of the violation of any provisions of any County Ordinance of State Law.

03/03/2022
APPROVED
COUNTY OF VENTURA CALIFORNIA
Stephanie Medina
Division of Building and Safety

Revisions		
No.	Description	Date
1	Plan check corrections	2-8-22

APN: 017-0-144-090

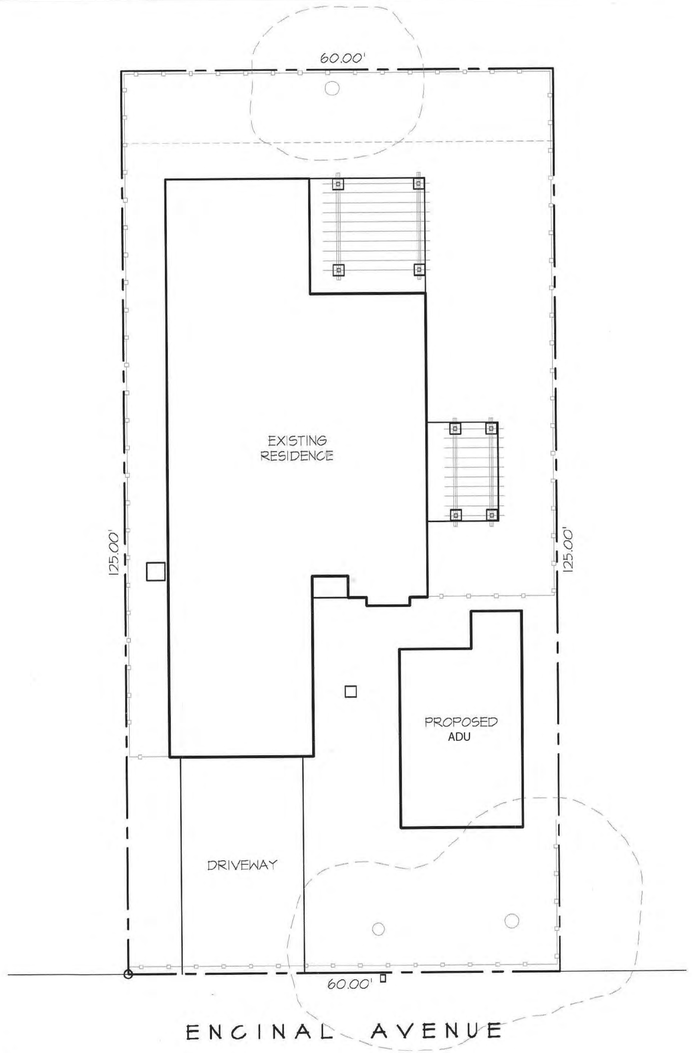
REGISTERED PROFESSIONAL ENGINEER
LAIMA B. REEDER
No. 39402
Exp. 12/31/23
CIVIL
STATE OF CALIFORNIA
2-18-22

TITLE SHEET
C21-001401

PROPOSED CONSTRUCTION

[redacted]

DRAWN: LR and MK
CHECKED:
DATE: 01/05/2023
SCALE: AS NOTED
JOB NO.:
SHEET: 1

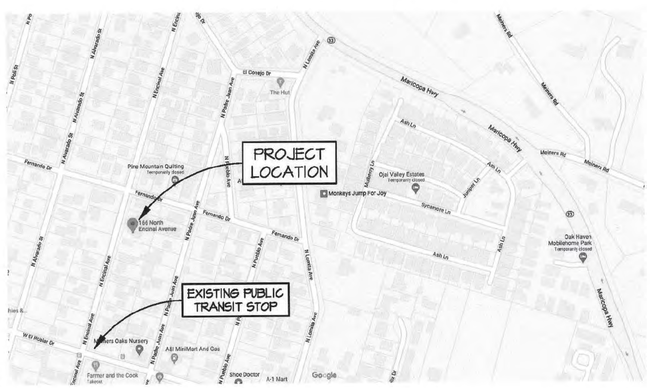


NORTH

SITE PLAN

SCALE: 1" = 10'-0"

10' 0 10' 20'

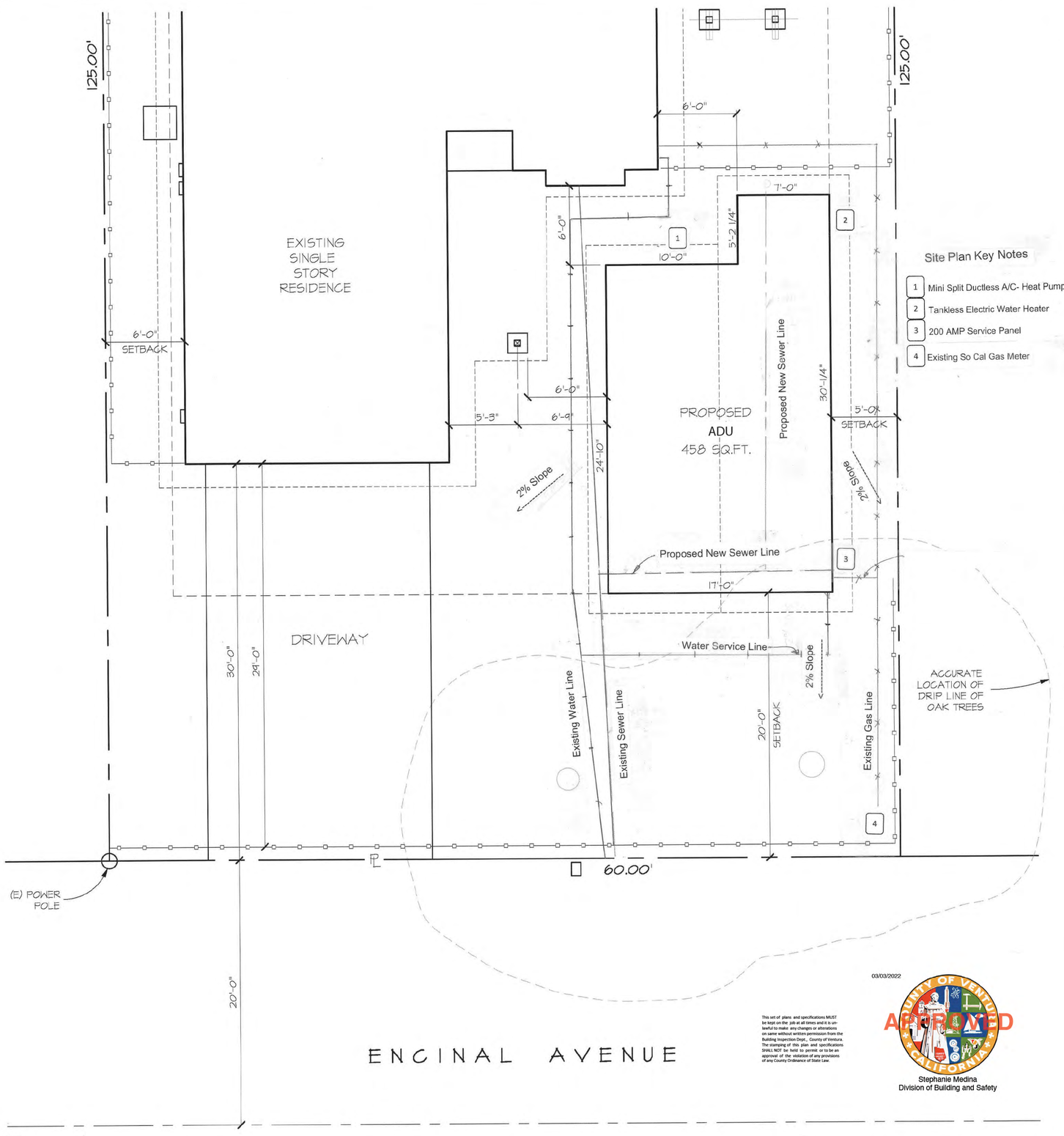


NORTH

LOCATION MAP

APPROXIMATE SCALE: 1" = 300'

0' 300' 600'



Site Plan Key Notes

1. Mini Split Ductless A/C- Heat Pump
2. Tankless Electric Water Heater
3. 200 AMP Service Panel
4. Existing So Cal Gas Meter

NORTH

ENLARGED PORTION OF SITE PLAN

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

4' 0 4' 8'

03/03/2022

APPROVED
COUNTY OF VENTURA CALIFORNIA

Stephanie Medina
Division of Building and Safety

Revisions		
No.	Description	Date

APN: 017-0-144-090

REGISTERED PROFESSIONAL ENGINEER JAMES B. REDDEN No. 39400 Exp. 12/31/23 CIVIL STATE OF CALIFORNIA

2-18-22

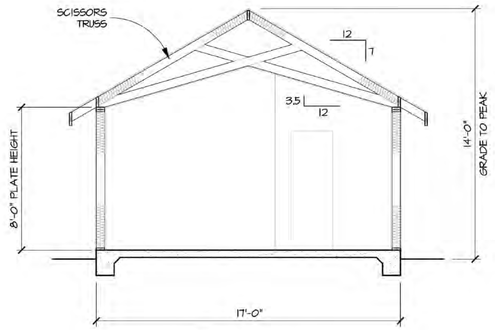
PROPOSED CONSTRUCTION

SITE PLAN

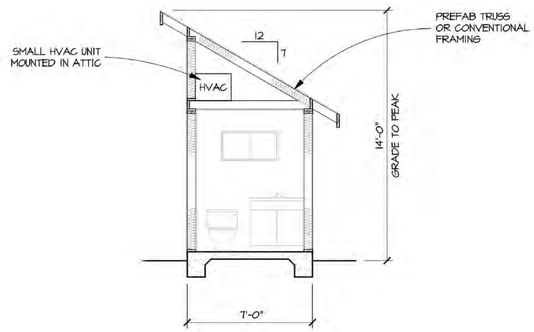
C21-001401

[redacted]

DRAWN	CMS
CHECKED	
DATE	
SCALE	AS NOTED
JOB NO.	-
SHEET	2



(A) LOOKING EAST

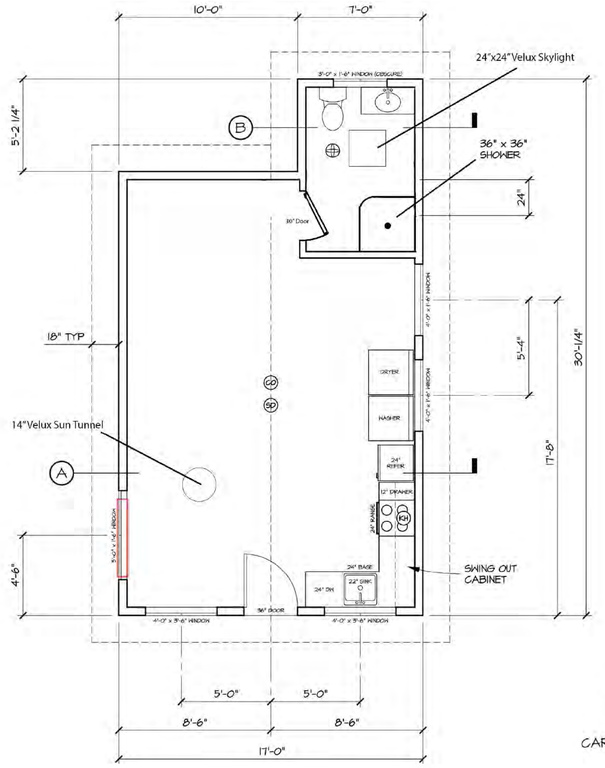


(B) LOOKING EAST

SECTIONS

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

4' 0 4' 8'



KITCHEN EXHAUST FAN (KH)
SMOKE DETECTOR (SD)
CARBON MONOXIDE ALARM (CO)
BATHROOM FAN

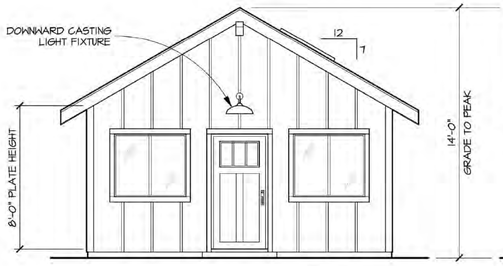
NORTH

FLOOR PLAN

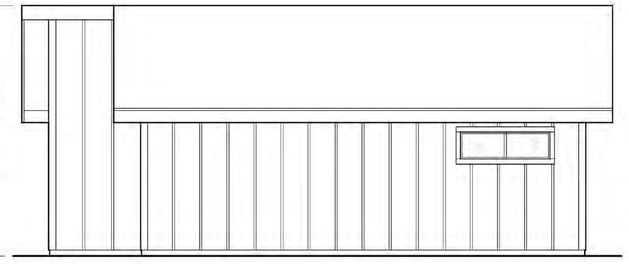
NOTE: ALL WALL DIMENSIONS TO FACE OF STUD

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

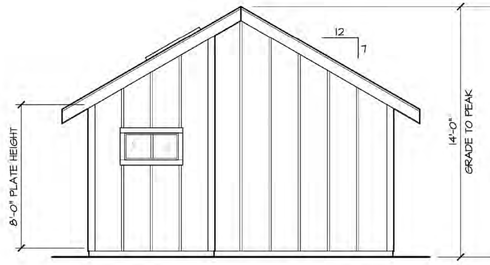
4' 0 4' 8'



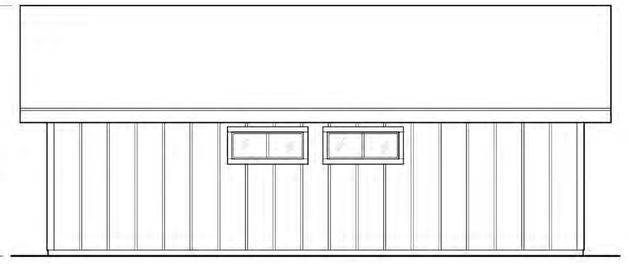
WEST ELEVATION
LOOKING EAST



NORTH ELEVATION
LOOKING SOUTH



EAST ELEVATION
LOOKING WEST



SOUTH ELEVATION
LOOKING NORTH

ELEVATIONS

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

4' 0 4' 8'

Revisions		
No.	Description	Date

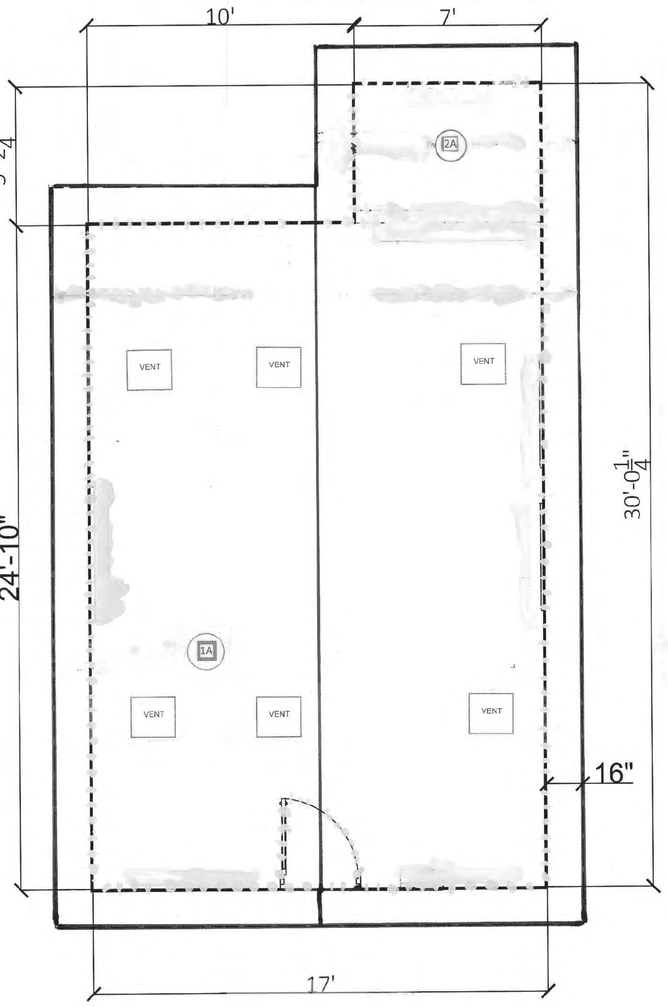
APN: 017-0-144-090

FLOOR PLANS
ELEVATIONS
SECTIONS

PROPOSED CONSTRUCTION

[redacted]

DRAWN: CMS
CHECKED:
DATE:
SCALE: AS NOTED
JOB NO.: –
SHEET: 3



Roof Plan

Scale: 3/8" = 1'0"

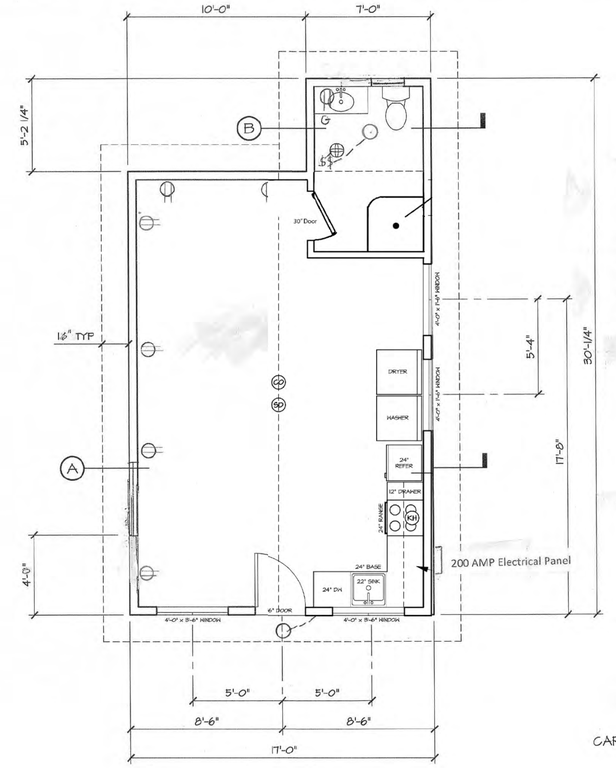
North

GENERAL NOTES
1. New Class A shingle roof
2. O'Hagen Standard Roof Vents
3. Gutters and downspouts provided

Ventilation
1. Mandatory minimum attic ventilation area is 1/300 of the area of the space ventilated for all enclosed rafter spaces. Class I or II vapor retainer is installed on the warm-in-winter side of the ceiling. At least 50% of the required ventilation must be a minimum of three feet above the eave.
2. Provide cross ventilation for each space between rafter openings and have a minimum opening of 1/16" and max 1/4". Minimum of 1" air space shall be provide between the insulation and the roof sheathing.

LIGHT TUBE SCHEDULE

Mark	Size	
1A	14" Dia.	Velux Sun Tube
2A	10" Dia.	Velux Sun Tube



ELECTRICAL GENERAL NOTES
1. All receptacle to be A.F.I. unless specified as G.F.I.
2. Provide bonding grounding electrode conductor per CEC Table 310.15.
3. This plan is not for construction; it is for design purposes only. This is a preliminary layout.
4. All 120v, 15 and 20 amp supplying outlets will be protected by a listed arc-fault circuit interrupter. Lighting circuits in bathroom will be arc fault protected as well.
5. Outlets adjacent to sink to be G.F.I. protected
6. Outlets will be tamper resistant.

Duplex Outlet
GFI Outlet G
Single Pole Switch S
Double Pole Switch S2
Triple Pole Switch S3
SMOKE DETECTOR SD
CARBON MONOXIDE ALARM CO
BATHROOM FAN

NORTH

ELECTRICAL PLAN NOTE: ALL WALL DIMENSIONS TO FACE OF STUD

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

4' 0 4' 8'

03/03/2022

APPROVED

Stephanie Medina
Division of Building and Safety

Revisions

No.	Description	Date

APN:
017-0-144-090

REGISTERED PROFESSIONAL ENGINEER
LINDA B. RIECK
No. 39400
Exp. 12/31/23
CIVIL
STATE OF CALIFORNIA
2-18-22

Roof Plan
ELECTRICAL PLAN
C21-001401

PROPOSED CONSTRUCTION

[redacted]

DRAWN
CHECKED
DATE
SCALE
AS NOTED
JOB NO.
SHEET
4

ELEMENT/CONNECTION		FASTENER	LOCATION
ROOF			
1.	Blocking between ceiling joists, rafters or trusses to top plate or other framing below	3 - 8d common ($2^1/_2$" × 0.131") 3-10d box (3"x0.128") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples, 7/16" crown	Toenail each end
	Blocking between rafters or truss not at the wall top plate, to rafter or truss	2 - 8d common ($2^1/_2$" × 0.131") 2 - 3" × 0.131" nails 2 - 3" 14 gage staples	toenail each end
		2-16d common (3 ½"x0.162") 3-3"x0.131" nails 3-3" 14 gage staples	end nail
	Flat blocking to truss and web filler	16d common (3 ½"x0.162") @6" o.c. 3-3"x0.131" nails @ 6" o.c. 3-3" 14 gage staples @ 9" o.c.	Face nail
2.	Ceiling joists to top plate	3-8d common 3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Toenail each joist
3.	Ceiling joist not attached to parallel rafter, laps over partitions (no thrust) (Table and Section2308.7.3.1)	3-16d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Face nail
4.	Ceiling joists attached to parallel rafter (heel joint) (Table and Section2308.7.3.1)	Table 2308.7.3.1	Face nail
5.	Collar tie to rafter	3-10d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Face nail
6.	Rafter or roof truss to top plate (Table and section 2308.7.5)	3-10 common 3-16d box 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Toenail [c]
7.	Roof rafters to ridge valley	2-16d common	End nail
	or hip rafters; or roof rafter to 2" ridge beam	3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	
		3-10d common 3-16d box 4-10d box 4-3"x0.131" nails 4- 3" 14 gage staples, 7/16" crown	Toenail
WALL			
8.	Stud to Stud (not at braced wall panels)	16d common	24" o.c. face nail
		10d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	16" o.c. face nail
9.	Stud to stud and abutting studs at intersecting wall corners (at **braced wall panels**)	16d common	16" o.c. face nail
		16d box	12" o.c. face nail
		3"x0.131" nails 3" 14 gage staples, 7/16" crown	12" o.c. face nail
10.	Built-up header	16d common	16" o.c. each edge, face nail
		16d box	12" o.c. each edge, face nail
11.	Continuous header to stud	4-8d common 4-10d box	Toenail
12.	Top plate to top plate	16d common	16" o.c. face nail
		10d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	12" o.c. face nail
13.	Top plate to top plate, at end joints	8-16d common 12-10d box 12-3"x0.131" nails 12-3" 14 gage staples, 7/16" crown	Each side of end joint, face nail (min 24" lap splice length each side of end joint)
14.	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common	16" o.c. face nail
		16d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	12" o.c. face nail
15.	Bottom plate to joist, rim joist, band joist or blocking at **braced wall panels**	2-16d common 3-16d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	16" o.c. face nail
16.	Stud to top or bottom plate	4-8d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Toenail
		2-16d common 3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	End nail

ELEMENT/CONNECTION		FASTENER	LOCATION
17.	Top or bottom plate to stud	2-16d common 3-16d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	End nail
18.	Top plates, laps at corners and intersections	2-16d common 3-16d box 3- 3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Face nail
19.	1" brace to each stud and plate	2-8d common 2-10d box 2- 3"x0.131" nails 2- 3" 14 gage staples, 7/16" crown	Face nail
20.	1"x6" sheathing to each bearing	2-8d common 2-10d box	Face nail
21.	1"8" and wider sheathing to each bearing	3-8d common 3-10d box	Face nail
FLOOR			
22.	Joist to sill, top plate, or girder	3-8d common 3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Toenail
23.	Rim joist, band joist, or blocking to top plate, sill or other framing below	8d common 10d box 3"x0.131" nails 3" 14 gage staples. 7/16" crown	6" o.c., toenail
24.	1"x6" subfloor or less to each joist	2-8d common 2-10d box	Face nail
25.	2" subfloor to joist or girder	2-16d common	Face nail
26.	2" plank	2-16d common	Each bearing, face nail
27.	Built up girders and beams, 2" lumber layers	20d common	32" o.c. face nail at top and bottom staggered on opposite sides
		10d box 3"x0.131" nails 3" 14 gage staples. 7/16" crown And 2-20d common 3-10dbox 3- 3"x0.131" nails 3- 3" 14 gage staples, 7/16" crown	24" o.c. face nail at top and bottom staggered on opposite sides Ends and at each splice, face nail
28.	Ledger strip supporting joists or rafters	3-16d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Each joist or rafter, face nail
29.	Joist to band joist or rim joist	3-16d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	End nail
30.	Bridging or blocking to joist, rafter or truss	2-8d common 2-10d box 2-3"x0.131" nails 2-3" 14 gage staples, 7/16" crown	Each end, toenail
WOOD STRUCTURAL PANS, SUB FLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING [a]			
31.	3/8"-1/2"	6d common or deformed (2"x0.113") (subfloor and wall)	6" edge 12" intermediate supports
		8d box or deformed (roof)	
		2 3/8"x0.113" nail (subfloor and wall)	
		1 ½" 16 gage staple, 7/16" crown	4" edge 8" intermediate supports
		2 3/8" x0.113" nail (roof)	
		1 ¾"16 gage staple, 7/16" crown (roof)	3" edge 6" intermediate supports
32.	19/32" -3/4"	8d common 6d deformed	6" edge 12" intermediate supports
		2 3/8"x0.113 nail	4" edge
		2" 16" gage staple. 7//16" crown	8" intermediate supports
33.	7/8" – 1/4"	10d common 8d deformed	6" edge 12" intermediate supports
OTHER EXTERIOR WALL SHEATHING			
34.	1/2" fiberboard sheathing[b]	1 ½" galvanized roof nail 1 ¾" 16 gage staple with 7/16" or 1" crown	3" edge 6" intermediate supports
35.	25/32" fiberboard sheathing [b]	1 ¾" galvanized roof nail 1 ¾" 16 gage staple with 7/16" or 1" crown	3" edge 6" intermediate supports
WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING			
36.	½" and less	8d common 6d deformed	6" edge 12" intermediate supports
37.	7/8"-1"	8d common 8d deformed	6" edge 12" intermediate supports
38.	1 1/8"-1 ¼"	10d common 8d deformed	6" edge 12" intermediate supports
PANEL SIDING TO FRAMING			
39.	½" or less	6d corrosion-resistant siding 6d corrosion-resistant casing	6" edge 12" intermediate supports
40.	5/8"	8d corrosion-resistant siding 8d corrosion-resistant casing	6" edge 12" intermediate supports
INTERIOR PANELING			
41.	½"	4d casing 4d finish	6" edge 12" intermediate supports
42.	3/8"	6d casing 6d finish	6" edge 12" intermediate supports

For SI: 1 inch = 25.4 mm.

a. Nails spaced at 6 inches at intermediate supports where spans are 48" or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing.

b. Spacing shall be 6 inches on center on the edges and 12 inches on center at intermediate supports for nonstructural applications. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked).

c. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule and the ceiling joist is fastened to the top plate in accordance with this schedule, the number of toenails in the rafters shall be permitted to be reduced by one nail.

** See Table 2304.10.1 for more information

FASTENERS USED IN PRESSURE TREATED LUMBER MUST BE APPROVED FOR USE WITH THE SPECIFIC TYPE OF PRESSURE TREATED LUMBER IN PLACE.

NOTES TO THE GENERAL CONTRACTOR/OWNER.

1. THE STRUCTURAL OBSERVATIONS ARE ADVISORY ONLY AND DO NOT BIND THE DEPARTMENT OR CERTIFY THAT THE WORK WILL PASS THE APPROPRIATE DEPARTMENT INSPECTION(S).
2. STRUCTURAL OBSERVATION DOES NOT CERTIFY, GUARANTEE OR ENSURE CONFORMANCE WITH THE APPROVED PLANS. IT DOES NOT PROVIDE THE QUALITY ASSURANCE OF CONTINUOUS INSPECTION. IT DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR PROGRESS, CALLED OR CONTINUOUS INSPECTIONS BY THE BUILDING INSPECTOR OR DEPUTY INSPECTOR. HOWEVER, STRUCTURAL OBSERVATION DOES PROVIDE ADDITIONAL REVIEW OF THE FIELD CONSTRUCTION TO SUBSTANTIALLY INCREASE THE LIKELIHOOD THAT THE STRUCTURAL SYSTEM WILL BE IN GENERAL CONFORMANCE WITH THE APPROVED

GENERAL NOTES

1. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS AS WELL AS CBC 2019 AND ALL APPLICABLE CODES.
2. DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL SAFETY PROVISIONS. ANY DEVIATION MUST BE APPROVED PRIOR TO ERECTION.
3. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED SUBJECT TO REVIEW BY THE ARCHITECT.
4. ALL DETAILS DESIGNATED AS STANDARD OR TYPICAL SHALL OCCUR IN ADDITION TO ANY OTHER SPECIFIC DETAIL CALLED OUT.
5. ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS, THEY SHALL BE REPORTED TO THE ARCHITECT SO THAT THE PROPER REVISIONS MAY BE MADE. MODIFICATION OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE ARCHITECT.
6. AFTER COMMENCEMENT OF WORK, ANY DELAYS, PROBLEMS OR FAULTS IN CONSTRUCTION DUE IN FULL OR PART TO ERRORS OR OMISSIONS IN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE PERSON RESPONSIBLE FOR PREPARING THE CONSTRUCTION DOCUMENTS. THE LIABILITY FOR ERRORS AND OMISSIONS IN THE CONSTRUCTION DOCUMENTS SHALL NOT EXCEED ANY FEES PAID TO THE THE PERSON RESPONSIBLE FOR PREPARING THE CONSTRUCTION DOCUMENTS.

MANUFACTURED LUMBER

1. TJI & TJL: ALL PLYWOOD WEB AND OPEN WEB JOISTS SPECIFIED ARE MANUFACTURED BY THE WEYERHAUSER CORP., ICC–ES ESR #1387, #1153.
2. MICROLLAM LVL: ALL MICROLLAMS SPECIFIED ARE MANUFACTURED BY THE WEYERHAUSER CORPORATION, ICC–ES ESR #1387.
3. PARALLAM PSL: ALL PARALLAMS SPECIFIED ARE MANUFACTURED BY THE TRUS JOIST MACMILLAN CORPORATION. ICC–ES ESR #1387.
4. TIMBERSTRAND LSL: ALL TIMBERSTRAND MEMBERS SPECIFIED ARE MANUFACTURED BY THE TRUS JOIST MACMILLAN CORPORATION, ICC–ES ESR #1387
5. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO THE APPROVAL OF THE ARCHITECT AND THE ENGINEER. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY INFORMATION TO THE ARCHITECT AND ENGINEER FOR APPROVAL.
6. TJI & TJL CROSS BRIDGING AND/OR BRACING SHALL BE PROVIDED AND DETAILED AS REQUIRED TO ADEQUATELY BRACE ALL JOISTS. BRIDGING SHOULD BE INSTALLED AS ERECTION PROCEEDS, AND TEMPORARY BRACING INSTALLED TO MAINTAIN ALIGNMENT AND PREVENT LATERAL MOVEMENT.
7. TJI & TJL TEMPORARILY REMOVING WEB MEMBERS AND DRILLING OR CUTTING CHORDS ARE NOT PERMITTED.
8. SHEATHING SHALL BE SECURELY FASTENED TO THE TOP CHORD. THE NAILING PATTERN SHALL BE STAGGERED TO AVOID SPLITTING AND TO ASSURE NAILING INTO EACH CHORD MEMBER.
9. COORDINATE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION AND WEIGHT OF MECHANICAL UNITS AND DESIGN MEMBERS ACCORDINGLY.

Structural Design Criteria-166 N. Encinal Ave.

CBC 2019, ASCE 7-16
Allowable Soil Bearing Pressure=1500 psf per County of Ventura Soils Waiver

Roof Live Load = 20 psf Dead Load = 12 psf

Wind Design
Ultimate Wind Design Speed= 93 mph, Nominal Wind Design Speed= 85 mph
Risk Category II
Wind Exposure = C
Design Wind Pressure Coefficient Windward Walls = 13.8 psf
Leeward Walls = 9.7 psf
Windward Roof = 9.7 psf
Leeward Roof = 11.04 psf
Internal Pressure Coefficient= GCpi=+0.18,-0.18

Seismic Design
Equivalent Lateral Force Procedure
Seismic Importance Factor I = 1.0
Risk Category = II
Seismic parameters per USGS website
Site Class = D default
Seismic Design Category = D
Sms= 2.24 g Sm1= g Ss=1.867 g S1=.707 g Sds=1.494 g Sd1=.822 g
Fa = 1.2 Fv= null
Basic shear force resisting system- light frame shear panels R=6.5
Cs=Sds/(R/I)= .230 W

FRAMING LUMBER

1. ALL STRUCTURAL LUMBER SHALL BE DOUGLAS FIR OF THE FOLLOWING GRADES, CONFORMING TO STANDARD GRADING RULES FOR WEST COAST LUMBER, NO. 16, UNLESS NOTED OTHERWISE:

   RAFTERS, JOISTS, PLATES NO. 2
   2x BEAMS, STRINGERS, AND HEADERS NO. 2
   4x,6x AND 8x BEAMS, STRINGERS, AND HEADERS NO. 1
   POSTS AND TIMBERS NO. 1
   STUDS CONSTRUCTION GRADE.
   BLOCKING, AND STRIPPING CONSTRUCTION GRADE.
2. PLYWOOD FOR ROOF SHEATHING SHALL BE CDX, UNLESS NOTED OTHERWISE. USE EXTERIOR TYPE, MINIMUM C–C GRADE, WHERE PLYWOOD IS EXPOSED TO WEATHER. PLYWOOD FOR FLOOR SHEATHING SHALL BE CDX, UNLESS NOTED OTHERWISE. ALL PLYWOOD SHALL CONFORM TO U.S. PRODUCT STANDARD PS 1–09. EACH SHEET OF PLYWOOD SHALL BE IDENTIFIED BY A REGISTERED STAMP OR BRAND OF THE DOUGLAS FIR PLYWOOD ASSOCIATION.
3. ALL WOOD BEARING ON CONCRETE SHALL BE BORATE PRESSURE TREATED DOUGLAS FIR.
4. STUDS OVER 10 FEET IN HEIGHT OR SUPPORTING 2 FLOORS AND A ROOF MUST BE 2x6's AT 16" O.C. UNLESS NOTED OTHERWISE. FOR STUDS GREATER THAN 16 FEET, SEE PLAN. STUDS IN CRIPPLE WALLS LESS THAN 4 FEET IN HEIGHT MAY MATCH THE STUDS ABOVE.
5. PROVIDE 2x SOLID BLOCKING BETWEEN JOISTS AND RAFTERS AT ALL SUPPORTS. BLOCKING SHALL BE ONE PIECE AND BE THE FULL DEPTH OF THE JOIST OR RAFTER.
6. CROSS BRIDGING SHALL BE PROVIDED AT 8'–0" ON CENTER MAXIMUM FOR ALL JOISTS AND RAFTERS MORE THAN 8" DEEP.
7. PROVIDE DOUBLE JOISTS UNDER PARTITIONS WHICH ARE PARALLEL TO THE JOISTS.
8. PROVIDE SOLID, FULL BLOCKING UNDER PARTITIONS WHICH ARE PERPENDICULAR TO THE JOISTS.
9. TOP PLATE OF ALL STUD WALLS SHALL BE TWO PIECES THE SAME SIZE AS THE STUDS. SPLICES ARE TO LAP 4'–0" MINIMUM AND BE NAILED WITH 12 16d NAILS MINIMUM EACH SIDE OF JOINT.
10. ALL NAILS SHALL BE COMMON, BOX OR SINKER. NAILING SHALL BE PER SPECIFIED IN CALIFORNIA BUILDING CODE.
11. BOLT HOLES IN WOOD SHALL BE 1/32" TO 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER. ALL BOLTS SHALL HAVE STANDARD CUT WASHER UNDER HEAD AND NUT UNLESS NOTED OTHERWISE.
12. ALL BOLTS SHALL BE RETIGHTENED PRIOR TO THE APPLICATION OF SHEATHING, PLASTER, ETC.
13. STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, ETC. UNLESS SPECIFICALLY DETAILED.
14. WOOD STUDS MAY BE NOTCHED TO A DEPTH OF 25% OF THE WIDTH MAXIMUM, EXCEPT INTERIOR NONBEARING STUDS WHICH MAY BE 40% OF THE WIDTH MAXIMUM. STUDS MAY BE BORED OR NOTCHED TO 40% OF THE WIDTH MAXIMUM, EXCEPT INTERIOR NONBEARING STUDS AND DOUBLED BEARING STUDS (PROVIDED NO MORE THAN TWO 25% SUCCESSIVE DOUBLED STUDS ARE BORED) WHICH MAY BE BORED TO 60% OF THE WIDTH MAXIMUM. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF A STUD AS A CUT OR NOTCH. IN NO CASE SHALL THE EDGE OF A BORED HOLE BE NEARER THAN 5/8" TO THE EDGE OF THE STUD.
15. PROVIDE FIRE STOPS AT ALL INTERSECTIONS OF STUD WALLS AT FLOOR, CEILING, AND ROOF. FIRE STOPS SHALL BE 2x NOMINAL THICKNESS OF WOOD AND SHALL BE THE FULL WIDTH OF THE ENCLOSED SPACE. PLACE FIRE STOPS AT A MAXIMUM SPACING OF 8'–0" IN EACH DIRECTION AND AT THE SAME LINES AS THE FIRE STOPS IN ADJACENT WALLS.
16. SOLID BLK'G SHALL BE PROVIDED AT ALL HORIZONTAL JOINTS OCCURING IN BRACED WALL PANELS

CONCRETE

1. ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL BE REGULAR WEIGHT, HARD ROCK TYPE (150 PCF). AGGREGATES SHALL CONFORM TO ASTM C33 WITH PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN 0.05%
2. ULTIMATE COMPRESSIVE STRENGTHS AT 28 DAYS SHALL BE:
   2500 PSI CONTINUOUS FTGS
   2500 PSI SLAB ON GRADE
   2500 PSI RETAINING WALLS
   2500 PSI PAD FOOTINGS
   3000 PSI GRADE BEAMS
3. CEMENT SHALL CONFORM TO ASTM C150, TYPE II.
4. PLACEMENT OF CONCRETE SHALL CONFORM WITH THE REQUIREMENTS OF ACI 301.
5. CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR A MINIMUM OF (5) FIVE DAYS AFTER PLACEMENT. ALTERNATE METHODS WILL BE APPROVED IF SATISFACTORY PERFORMANCE CAN BE ASSURED.
6. KEYED CONSTRUCTION JOINTS SHALL BE USED IN ALL CASES. ALL LAITANCE SHALL BE REMOVED. ALL VERTICAL JOINTS SHALL BE THOROUGHLY WETTED AND SLUSHED WITH A COAT OF NEAT CEMENT IMMEDIATELY BEFORE PLACING NEW CONCRETE.
7. ALL CONCRETE WITH A DESIGNATED STRENGTH GREATER THAN 2500 PSI SHALL REQUIRE CONTINUOUS INSPECTION BY AN INSPECTOR APPROVED BY THE BUILDING DEPARTMENT AND THE ARCHITECT.
8. MINIMUM CONCRETE COVERAGE OF REINFORCING STEEL SHALL BE AS FOLLOWS:

   CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO SOIL: 3"

   CONCRETE EXPOSED TO SOIL OR WEATHER:
   #5 BARS, W31 OR D31 WIRES, AND SMALLER 1–1/2"
   #6 BARS AND LARGER 2"

   CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH SOIL:
   SLABS, WALLS AND JOISTS:
   #11 BARS AND SMALLER 3/4"
   #14 BARS AND LARGER 1–1/2"

   BEAMS AND COLUMNS 1–1/2"
9. PIPES OTHER THAN ELECTRICAL CONDUITS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED.
10. BEFORE NEW CONCRETE IS DEPOSITED ON OR AGAINST CONCRETE WHICH IS SET, THE SURFACE OF THE SET CONCRETE SHALL BE ROUGHENED SUFFICIENTLY TO EXPOSE THE AGGREGATE APPROXIMATELY 1/4" AND CLEANED. USE EPOXY WHERE REQUIRED.

FOUNDATION NOTES

1. SOILS REPORT NOT REQUIRED. FOUNDATION DESIGN BASED ON CBC 2019, TABLE 1806.2 PRESUMPTIVE LOAD BEARING VALUES
2. ALLOWABLE SOIL BEARING PRESSURE = 1500 psf
3. VERTICAL EXCAVATIONS IN SOIL SHALL BE LIMITED TO 5 FEET. VERTICAL CUTS IN EXCESS OF 5 FT SHALL BE CUT BACK AT 1:1 SLOPE. WHERE IT IS IMPOSSIBLE TO SLOPE AT 1:1, THE A–B–C SLOT CUT PROCEDURES ARE TO BE USED.
4. MINIMUM SLAB ON GRADE CONSTRUCTION UNLESS NOTED OTHERWISE ON THE PLANS SHALL BE 4 INCH CONCRETE REINFORCED WITH #4 @ 18" O.C. OVER 2 INCHES OF SAND OVER 10 mil VISQUEEN MOISTURE BARRIER OVER 4 INCH THICK CALTRANS CLASS 2 BASE LAYER OVER COMPACTED SUBGRADE.

MASONRY AND STONE VENEERS

1. THIS SECTION APPLIES TO VENEERS OF 5" THICKNESS MAXIMUM ACCORDING TO CBC 2019, CHAPTER 14.
2. WHERE ANCHORED VENEER IS APPLIED MORE THAN 25 FEET ABOVE ADJACENT GROUND, IT SHALL BE SUPPORTED BY NONCOMBUSTIBLE, CORROSIVE–RESISTANT, STRUCTURAL FRAMING HAVING HORIZONTAL SUPPORTS SPACED A MAXIMUM OF 12 FEET O.C. VERTICALLY.
3. NONCOMBUSTIBLE, NONCORROSIVE LINTELS AND NONCOMBUSTIBLE SUPPORTS SHALL BE PROVIDED OVER ALL OPENINGS WHERE THE VENEER IS NOT SELF SPANNING.
4. MASONRY SHALL BE ANCHORED DIRECTLY TO STRUCTURAL MASONRY, CONCRETE, OR STUDS ACCORDING TO THE FOLLOWING:
   A. ANCHOR TIES SHALL BE CORROSIVE RESISTANT 22 GA. X 1" WIDE STEEL STRAPS SPACED TO SUPPORT NOT MORE THAN 2 SQUARE FEET OF WALL WITH A MAXIMUM HORIZONTAL SPACING OF 16".
   B. ANCHOR TIES SHALL BE ATTACHED TO NO. 9 GAUGE WIRE HORIZONTAL JOINT REINFORCING.
   C. WOOD STUDS SHALL BE SPACED AT 16" MAXIMUM AND 2 LAYERS OF APPROVED PAPER SHALL FIRST BE APPLIED OVER THE SHEATHING OR WIRES BETWEEN STUDS. MORTAR SHALL BE SLUSHED INTO THE 1" SPACE BETWEEN FACING AND PAPER.

CONCRETE ANCHORS

1. ALL EPOXY ANCHORS SPECIFIED ON THE PLANS SHALL BE BY ONE OF THE FOLLOWING MANUFACTURES AND SHOULD BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS:

   SIMPSON STRONG–TIE "SET XP EPOXY" ADHESIVE ANCHOR
2. CONTINUOUS SPECIAL INSPECTION BY A REGISTERED DEPUTY INSPECTOR ARE REQUIRED FOR ALL EPOXY ANCHOR INSTALLATIONS.
3. POST INSTALLED MECHANICAL ANCHORS SHALL BE SIMPSON TITEN HD, ICC–ER–ES # 2713

REINFORCING STEEL

1. ALL REINFORCING STEEL, DOWELS, AND TIES SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE. #3 BARS SHALL BE ASTM A615, GRADE 40.
2. ALL REINFORCING STEEL SHALL BE LAPPED AS INDICATED ON THE DRAWINGS. WHERE LAPS AND/OR SPLICE LOCATIONS ARE NOT SPECIFICALLY INDICATED, VERIFY WITH THE ENGINEER IF A SPLICE CAN BE PROVIDED. ALL REINFORCING STEEL SHALL BE LAPPED WITH A CLASS "B" LAP UNLESS NOTED OTHERWISE. ALL SPLICE LOCATIONS SHALL BE SHOWN ON SHOP DRAWINGS AND APPROVED PRIOR TO FABRICATION.
3. ALL REINFORCING STEEL IN MASONRY SHALL BE LAPPED 40 BAR DIAMETERS OR TWO (2) FEET MINIMUM, UNLESS NOTED OTHERWISE.

STRUCTURAL STEEL

A. HSS COLUMNS AND BEAMS – ASTM A500 GRADE B
B. W BEAMS – ASTM A992 GRADE 50
C. PLATES, ANGLE – ASTM A36
D. BOLTS – ASTM A307
E. ALL STEEL TO HAVE RUST INHIBITIVE PRIMER
F. ALL WELDING TO COMPLY WITH AWS SPECIFICATIONS. WELDS MUST BE DONE IN A SHOP OF A LICENSED FABRICATOR.
G. CONTINUOUS DEPUTY INSPECTION IS REQUIRED FOR ALL FIELD WELDS.

03/03/2022

APPROVED

Stephanie Medina
Division of Building and Safety

Revisions

No.	Description	Date

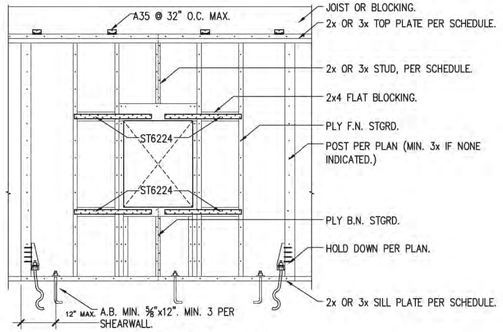
Lama B. Reader P.E.
Structural Design and Consulting
Civil Engineer, C.E. #59400
805 985 1700 reader.lbr@gmail.com

REGISTERED PROFESSIONAL ENGINEER
LAMA B. READER
No. 59400
Exp. 12/31/23
CIVIL
STATE OF CALIFORNIA
2-18-22

STANDARD STRUCTURAL DETAILS

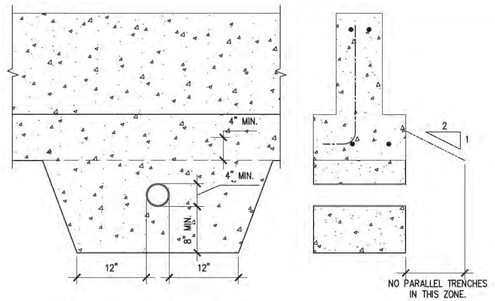
PROPOSED CONSTRUCTION

DRAWN: CMS
CHECKED:
DATE: 11–04–2021
SCALE: AS NOTED
JOB NO.: 21–10–20
SHEET: S0.1



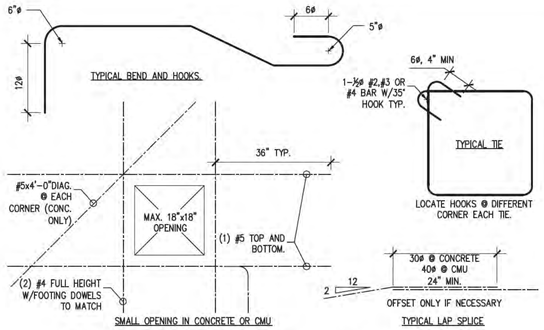
13 TYPICAL SHEARWALL

½"=1'-0"



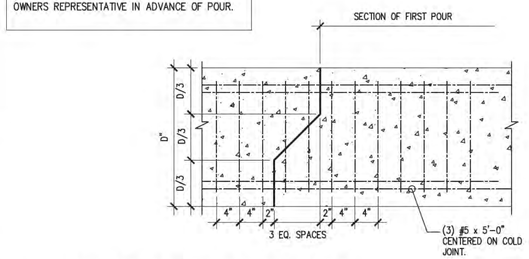
9 PIPE TRENCH AT FOOTING

1"=1'-0"



5 REINF. BENDS, LAPS & SPLICES

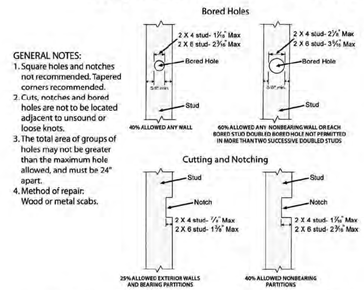
1"=1'-0"



1 GRADE BEAM POUR JOINT

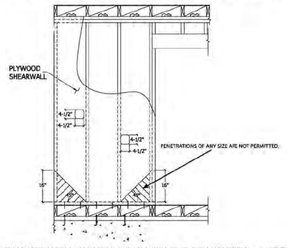
1"=1'-0"

CUTS, NOTCHES AND BORED HOLES IN STUDS



GENERAL NOTES:
1. Square holes and notches not recommended. Tapered corners recommended.
2. Cuts, notches and bored holes are not to be located adjacent to unsound or loose knots.
3. The total area of groups of holes may not be greater than the maximum hole allowed, and must be 24" apart.
4. Method of repair: Wood or metal scabs.

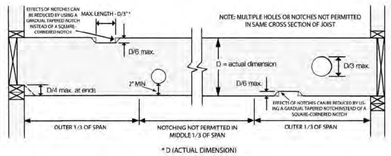
MECHANICAL PENETRATIONS OF WOOD SHEARWALL PANELS:



THE MAXIMUM ACCUMULATED LENGTH OF OPENINGS, IN ANY DIRECTION, IN A SHEARWALL PANEL SHALL NOT EXCEED 20% OF THE WALL LENGTH. IN A 4' PANEL, THE MAXIMUM LENGTH OF EACH OPENING SHALL NOT EXCEED 41/2" IN ANY DIRECTION.

(2) - 41/2" WIDE CUTS = 9" IN A 4' PANEL. THE 20% ALLOWABLE EQUALS 9.6" (NO CUTS OR HOLES IN SHEATHING WITHIN 16" OF CORNERS)

CUTS, NOTCHES AND BORED HOLES IN JOISTS & RAFTERS

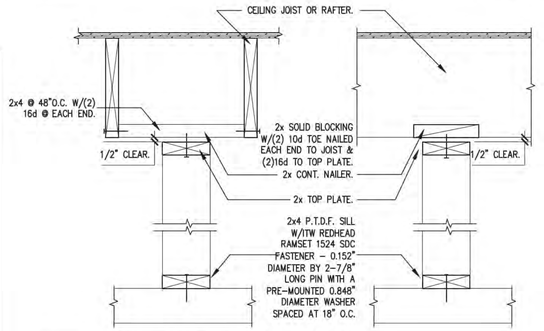


* D (ACTUAL DIMENSION)

MAXIMUM SIZES FOR CUTS IN FLOOR JOISTS

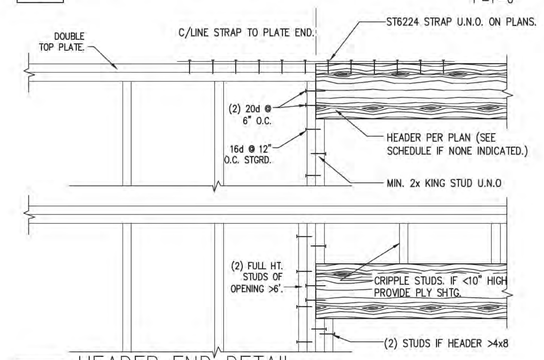
Joist Size	Max. Hole	Max Notch Depth	Max. End Notch
2x4	none	none	none
2x6	1-1/2"	7/8"	1-3/8"
2x8	2-3/8"	1-1/4"	1-7/8"
2x10	3"	1-1/2"	2-3/8"
2x12	3-3/4"	1-7/8"	2-7/8"

GENERAL NOTES:
1. Square holes and notches not recommended. Tapered corners recommended.
2. Cuts, notches and bored holes are not to be located adjacent to unsound or loose knots.
3. The total area of groups of holes may not be greater than the maximum hole allowed, and must be 24" apart.



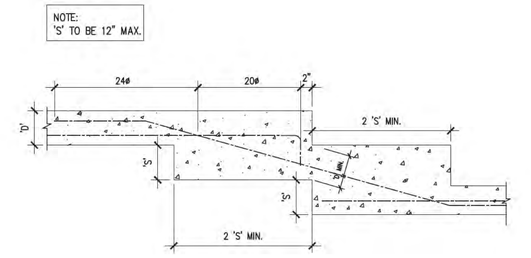
10 NON-BEARING PARTITION

1-½"=1'-0"



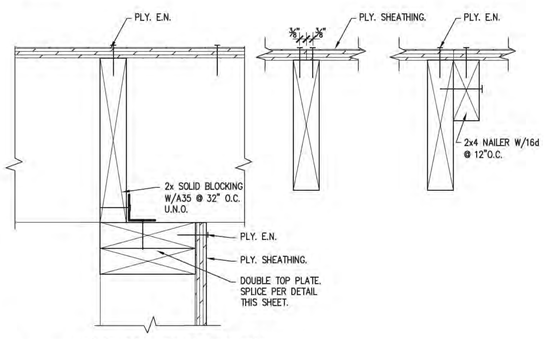
6 HEADER END DETAIL

1"=1'-0"



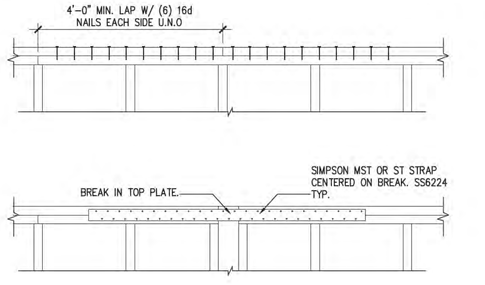
2 STEPPED FOOTING

1"=1'-0"



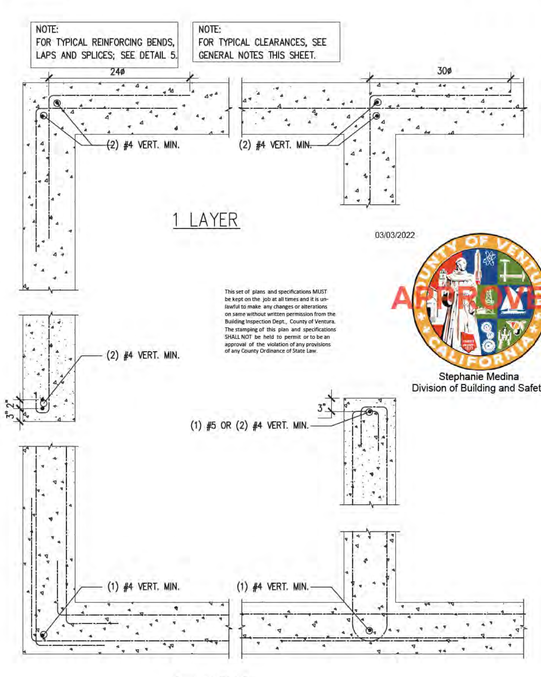
11 SHEAR TRANSFER

3"=1'-0"



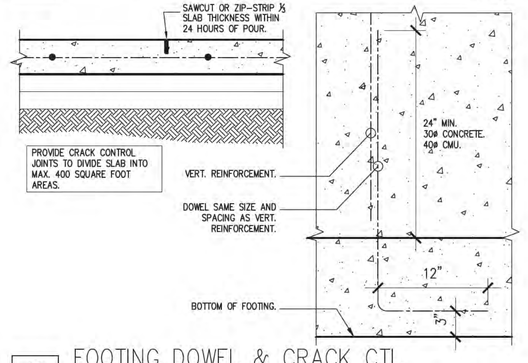
7 TOP PLATE SPLICE

1"=1'-0"



12 TYP. OPENING IN FRAMING

1"=1'-0"



8 FOOTING DOWEL & CRACK CTL

1-½"=1'-0"

4 REINFORCEMENT @ CORNERS

¾"=1'-0"

Revisions		
No.	Description	Date

Laima B. Reeder, P.E.
Structural Design and Consulting
Civil Engineer C.E. #39400
805 985 1700 reederlbr@gmail.com

REGISTERED PROFESSIONAL ENGINEER LAIMA B. REEDER No. 39400 Exp. 12/31/21 CIVIL STATE OF CALIFORNIA

PROPOSED CONSTRUCTION

STANDARD STRUCTURAL DETAILS

C21-001401

DRAWN: CMS
CHECKED:
DATE: 11-04-2021
SCALE: AS NOTED
JOB NO.: 21-10-20
SHEET: S0.2

Shearwall Schedule

Sym	Sheathing and Nailing	Sill Anchorage	A35	Remarks
6	15/32" Struc 1 Ply (32/16) With 10d @ 6,6,12 v allow = 340 plf	5/8" dia. A.B. @ 32" o.c.	16" o.c.	
WSW1	Simpson strongwall WSW 12 x 8 V allow = 1030#	(2)7/8" dia. Std. all-thrd	16" o.c.	Install per ICC-ES ESR 2652

Plywood per PS 1-09 or OSB per PS 2-10. Nails to be 3/8 from edge of ply panel.
All plywood to be APA rated 5-ply. Use full panels wherever possible.
No ply panels less than 24" width allowed.
8d common nails- .131" x 2 1/2"
10d common nails- .148" x 2 3/8"

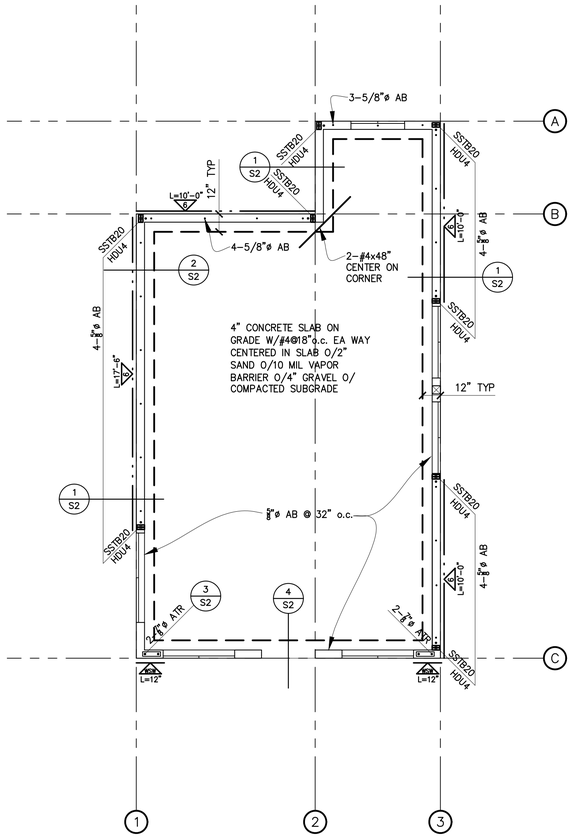
Structural Design Criteria-166 N. Encinal Ave.

CBC 2019, ASCE 7-16
Allowable Soil Bearing Pressure=1500 psf per County of Ventura Soils Waiver

Roof Live Load = 20 psf Dead Load = 12 psf

Wind Design
Ultimate Wind Design Speed= 93 mph, Nominal Wind Design Speed= 85 mph
Risk Category II
Wind Exposure = C
Design Wind Pressure Coefficient Windward Walls = 13.8 psf
Leeward Walls = 9.7 psf
Windward Roof = 9.7 psf
Leeward Roof = 11.04 psf
Internal Pressure Coefficient= GCpi=+0.18,-0.18

Seismic Design
Equivalent Lateral Force Procedure
Seismic Importance Factor I = 1.0
Risk Category = II
Seismic parameters per USGS website
Site Class = D default
Seismic Design Category = D
Sms= 2.24 g Sm1= g Ss=1.867 g S1=.707 g Sds=1.494 g Sd1=.822 g
Fa = 1.2 Fv= null
Basic shear force resisting system- light frame shear panels R=6.5
Cs=Sds/(R/I)= .230 W

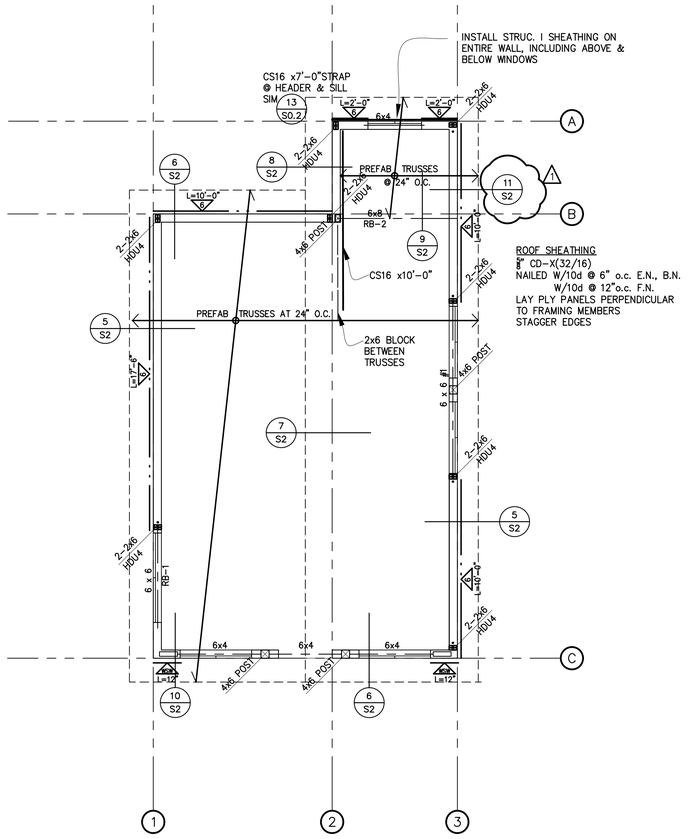


FOUNDATION PLAN

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

FOUNDATION NOTES:

1. PREPARE SITE PER APPROVED "FOUNDATION AND SOILS INVESTIGATION WAIVER REQUEST" FROM VENTURA COUNTY.
   a. PROPOSED FLOOR AREA DOES NOT EXCEED 1000 sf
   b. PROPOSED CONSTRUCTION IS ON AN EXISTING NATURAL, LEVEL LOT WITH NO FILL
2. ALL HOLDOWN ANCHORS TO BE SET IN PLACE BY TEMPLATE PRIOR TO FOUNDATION INSPECTION..



ROOF FRAMING PLAN

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

03/03/2022
APPROVED
Stephanie Medina
Division of Building and Safety

Revisions

No.	Description	Date
1	PLAN CHECK	2.8.22

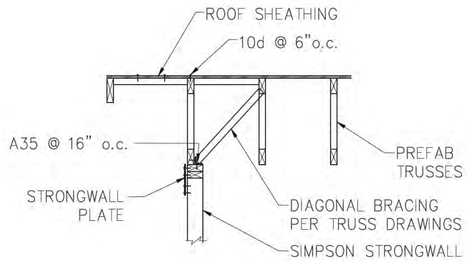
Laima B. Reeder, P.E.
Structural Design and Consulting
Civil Engineer, C.E. #59400
805 985 1700 reeder.lbr@gmail.com

REGISTERED PROFESSIONAL ENGINEER LAIMA B. REEDER No. 39400 Exp. 12/31/23 CIVIL STATE OF CALIFORNIA
2-18-22

FOUNDATION PLAN
C21-001401

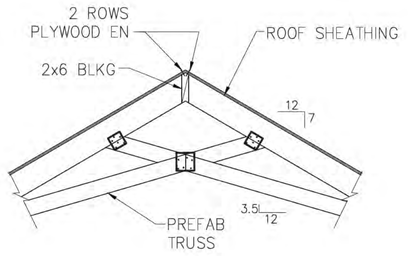
PROPOSED CONSTRUCTION

DRAWN: LMM
CHECKED:
DATE: 11-04-2021
SCALE: AS NOTED
JOB NO.: 21-10-20
SHEET: S1



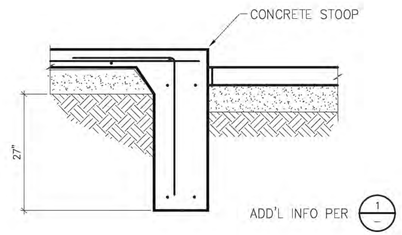
10 STRONGWALL

3/4"=1'-0"



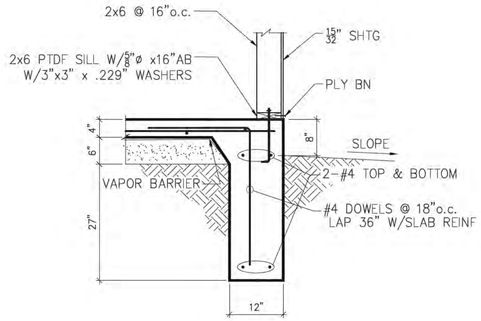
7 RIDGE BOARD

3/4"=1'-0"



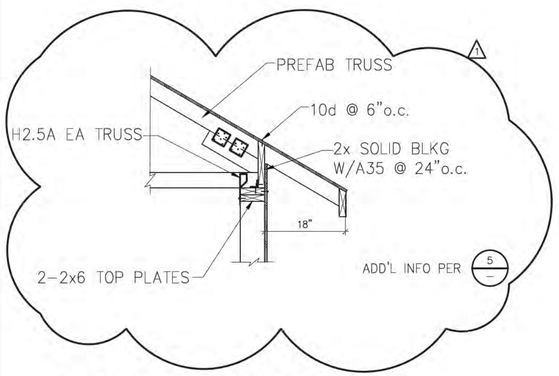
4 EXTERIOR FOOTING

3/4"=1'-0"



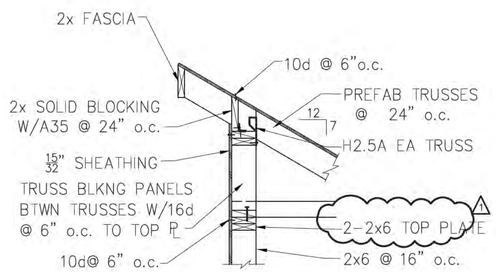
1 EXTERIOR FOOTING

3/4"=1'-0"



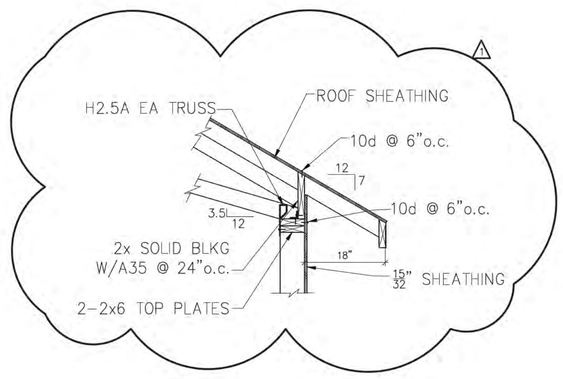
5 EAVE AT SCISSORS TRUSS

3/4"=1'-0"



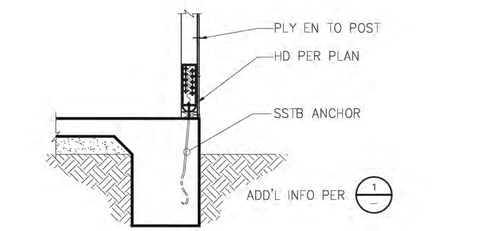
8 EAVE AT HIGH SIDE

3/4"=1'-0"



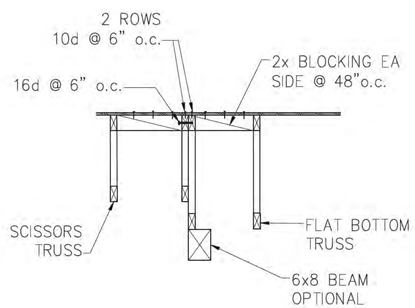
5 EAVE AT SCISSORS TRUSS

3/4"=1'-0"



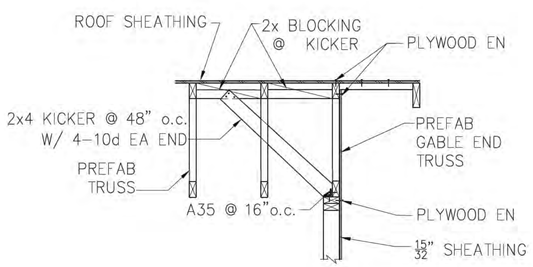
2 HOLDOWN

3/4"=1'-0"



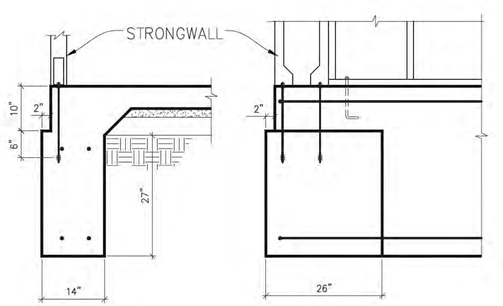
9 ROOF TRANSITION

3/4"=1'-0"



6 TYPICAL RAKE

3/4"=1'-0"



3 STRONGWALL FOUNDATION

3/4"=1'-0"

03/03/2022

APPROVED

COUNTY OF VENTURA CALIFORNIA

Stephanie Medina
Division of Building and Safety

Revisions

No.	Description	Date
1	PLAN CHECK	2.8.22

Laima B. Reeder, P.E.
Structural Design and Consulting
Civil Engineer, C.E. #39400
805 985 1700 reederlbr@gmail.com

REGISTERED PROFESSIONAL ENGINEER
LAIMA B. REEDER
No. 39400
Exp. 12/31/21
CIVIL
STATE OF CALIFORNIA

STRUCTURAL DETAILS

C21-001401

PROPOSED CONSTRUCTION

DRAWN: LMM
CHECKED:
DATE: 11-04-2021
SCALE: AS NOTED
JOB NO.: 21-10-20
SHEET: S2

03/03/2022

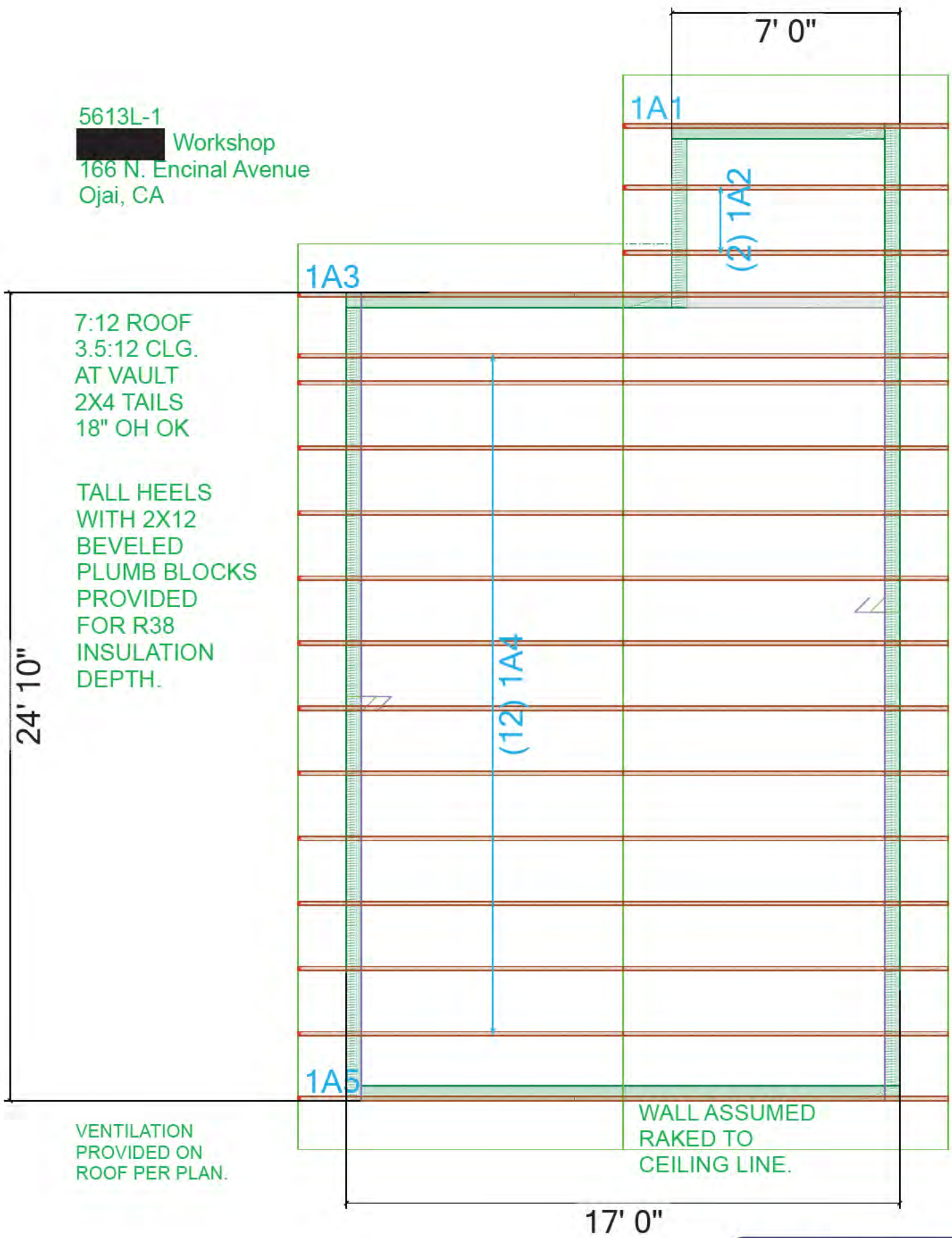
This set of plans and specifications MUST be kept on the job at all times and it is unlawful to make any changes or alterations on same without written permission from the Building Inspection Dept., County of Ventura. The stamping of this plan and specifications SHALL NOT be held to permit or to be an approval of the violation of any provisions of any County Ordinance of State Law.

APPROVED

Stephanie Medina
Division of Building and Safety

C21-001401

5613L-1
[redacted] Workshop
166 N. Encinal Avenue
Ojai, CA



REVIEWED
By Laima Reeder at 3:12 pm, Feb 18, 2022

GENERAL INFORMATION

01	Project Name	New Accessory Structure Unit			
02	Run Title	Title 24 Analysis			
03	Project Location	166 North Encinal Avenue			
04	City	Ojai	05	Standards Version	2019
06	Zip code	93023	07	Software Version	EnergyPro 8.2
08	Climate Zone	16	09	Front Orientation (deg/ Cardinal)	282
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	AdditionOnly	13	Number of Bedrooms	4
14	Addition Cond. Floor Area (ft²)	458	15	Number of Stories	1
16	Existing Cond. Floor Area (ft²)	1815	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft²)	2273	19	Glazing Percentage (%)	15.72%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Is Natural Gas Available?	Yes			

Addition Alone Project Analysis Parameters

01	02	03	04	05	06
Existing Area (excl. new addition) (ft2)	Addition Area (excl. existing) (ft2)	Total Area (ft2)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms
1815	458	2273	4	0	4

COMPLIANCE RESULTS

01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	This building incorporates one or more Special Features shown below

ENERGY USE SUMMARY

Energy Use (kTDV/ft²-yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement
Space Heating	82.65	82.61	0.04	0
Space Cooling	4.49	7.11	-2.62	-58.4
IAQ Ventilation	0	0	0	
Water Heating	45 07	40.65	4.42	9.8
Self Utilization/Flexibility Credit	n/a	0	0	n/a
Compliance Energy Total	**132.21**	**130.37**	**1.84**	**1.4**

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

- Variable capacity heat pump compliance option (verification details from VCHP Staff report, Appendix B, and RA3)

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

Building-level Verifications:
- Quality insulation installation (QII)

Cooling System Verifications:
- Verified Refrigerant Charge
- Airflow in habitable rooms (SC3.1.4.1.7)

Heating System Verifications:
- Verified heat pump rated heating capacity
- Wall-mounted thermostat in zones greater than 150 ft2 (SC3.4 5)
- Ductless indoor units located entirely in conditioned space (SC3.1.4.1.8)

HVAC Distribution System Verifications:
- -- None --

Domestic Hot Water System Verifications:
- -- None --

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
New	Conditioned	Heating/Cooling1	458	10 5	DHW Sys 1	N/A

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status
North Frame Wall	New	R-21 Wall	12	Left	260.8	6	90	none	New
East Frame Wall	New	R-21 Wall	102	Back	177.6	6	90	none	New
South Frame Wall	New	R-21 Wall	192	Right	240.2	12	90	none	New
West Frame Wall	New	R-21 Wall	282	Front	177.6	48	90	none	New

OPAQUE SURFACES - CATHEDRAL CEILINGS

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Area (ft²)	Skylight Area (ft²)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof
R-30 Roof Cathe.	New	R-30 Roof Cathedral	0	n/a	481	0	7	0.1	0.85	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
Window 6 slid	Window	North Frame Wall	Left	12			1	6	0.3	NFRC	0.45	NFRC	Bug Screen
Window 1 sglhg	Window	East Frame Wall	Back	102			1	6	0.3	NFRC	0.45	NFRC	Bug Screen
Window 2 slid	Window	South Frame Wall	Right	192			1	6	0.3	NFRC	0.45	NFRC	Bug Screen
Window 3 slid	Window	South Frame Wall	Right	192			1	6	0.3	NFRC	0.45	NFRC	Bug Screen

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
Window 4 sglhg	Window	West Frame Wall	Front	282			1	14	0.3	NFRC	0.45	NFRC	Bug Screen
Window 5 sglhg	Window	West Frame Wall	Front	282			1	14	0.3	NFRC	0.45	NFRC	Bug Screen
Door A swg	Window	West Frame Wall	Front	282			1	20	0.3	NFRC	0.45	NFRC	Bug Screen

SLAB FLOORS

01	02	03	04	05	06	07	08
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab-on-Grade	New	458	94	none	0	80%	No

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.069	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: 3 Coat Stucco
R-30 Roof Cathedral	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 16 in. O. C.	R-30	None / None	0.037	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-30 / 2x10 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50
Required	Not Required	Not Required	n/a

WATER HEATING SYSTEMS

01	02	03	04	05	06	07
Name	System Type	Distribution Type	Water Heater Name (#)	Solar Heating System	Compact Distribution	HERS Verification
DHW Sys 1	Domestic Hot Water (DHW)	Standard Distribution System	DHW Heater 1 (1)	n/a	None	n/a

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Energy Factor or Efficiency	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	NEEA Heat Pump Brand or Model	Tank Location or Ambient Condition	Status	Verified Existing Condition
DHW Heater 1	Gas	Consumer Instantaneous	1	0	0.93-UEF	<= 200 kBtu/hr	0	n/a	n/a	n/a	n/a	New	n/a

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07	08
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Central DHW Distribution	Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required	Not Required

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Heating Equipment Count	Cooling Equipment Count
Heating/Cooling1	Heat pump heating cooling	Heat Pump System 1	Heat Pump System 1	n/a	n/a	Setback	New	NA	1	1

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Number of Units	Heating		Cooling		Zonally Controlled	Compressor Type	HERS Verification
			HSPF/COP	Cap 47	Cap 17	SEER	EER/CEER			
Heat Pump System 1	VCHP-ductless	1	8 2	17000	12750	14	11.7	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER	Verified SEER	Verified Refrigerant Charge	Verified HSPF	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-htpump	Not Required	0	Not Required	Not Required	Yes	No	Yes	Yes

VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09	10
Name	Certified Low-Static VCHP System	Airflow to Habitable Rooms	Ductless Units in Conditioned Space	Wall Mount Thermostat	Air Filter Sizing & Pressure Drop Rating	Low Leakage Ducts in Conditioned Space	Minimum Airflow per RA3.3.3 and SC3.3.3.4.1	Certified non-continuous Fan	Indoor Fan not Running Continuously
Heat Pump System 1	Not required	Required	Required	Required	Not required	Not required	Not required	Not required	Not required

PROJECT NOTES

TITLE 24 ENERGY ANALYSIS
C21-001401

DRAWN BY
CHECKED BY
DATE
SCALE
JOB NO.
SHEET
T24-1
OF 2 SHEETS

03/03/2022

APPROVED
COUNTY OF VENTURA CALIFORNIA
Stephanie Medina
Division of Building and Safety

This set of plans and specifications MUST be kept on the job at all times and it is unlawful to make any changes or alterations on same without written permission from the Building Inspection Dept., County of Ventura. The stamping of this plan and specifications SHALL NOT be held to permit or to be an approval of the violation of any provisions of any County Ordinance of State Law.

Attached Heating & Cooling load summary is submitted as part of the calculations required by the current regulations. DO NOT USE FOR ACTUAL HEATING & AC DESIGN.

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Marcos Rendon	Marcos Rendon
Company: Solargy, Inc.	**Signature Date:** 12/08/2021
Address: 22028 Ventura Blvd Suite 207	**CEA/ HERS Certification Identification (If applicable):**
City/State/Zip: Woodland Hills, CA 91364	**Phone:** 818-347-6096

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.
2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Responsible Designer Name:	Responsible Designer Signature:
[redacted]	[redacted]
Company: [redacted]	**Date Signed:** 12/08/2021
Address: 166 North Encinal Avenue	**License:**
City/State/Zip: Ojai, CA 93023	**Phone:** [redacted]

Digitally signed by ConSol Home Energy Efficiency Rating System Services, Inc. (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

Registration Number: 421-P010175709A-000-000-0000000-0000
Registration Date/Time: 12/08/2021 14:11
HERS Provider: CHEERS
NOTICE: This document has been generated by ConSol Home Energy Efficiency Rating System Services, Inc. (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
CA Building Energy Efficiency Standards - 2019 Residential Compliance
Report Version: 2019.1.300
Report Generated: 2021-12-08 13:17:14
Schema Version: rev 20200901

RESIDENTIAL MEASURES SUMMARY — RMS-1

Project Name	Building Type			Date
New Accessory Structure Unit	☑ Single Family ☑ Addition Alone ☐ Multi Family ☐ Existing+ Addition/Alteration			*12/8/2021*
Project Address	**California Energy Climate Zone**	**Total Cond. Floor Area**	**Addition**	**# of Units**
166 North Encinal Avenue Ojai	*CA Climate Zone 16*	*458*	*458*	*1*

INSULATION

Construction	Type	Cavity	Area (ft^2)	Special Features	Status
Roof	*Wood Framed Rafter*	*R 30*	*481*		*New*
Wall	*Wood Framed*	*R 21*	*784*		*New*
Slab	*Unheated Slab-on-Grade*	*- no insulation*	*458*	*Perim = 94*	*New*

FENESTRATION — Total Area: *72* | Glazing Percentage: *15.7%* | New/Altered Average U-Factor: *0.30*

Orientation	Area(ft^2)	U-Fac	SHGC	Overhang	Sidefins	Exterior Shades	Status
Left (N)	*6.0*	*0.300*	*0.45*	*none*	*none*	*N/A*	*New*
Rear (E)	*6.0*	*0.300*	*0.45*	*none*	*none*	*N/A*	*New*
Right (S)	*12.0*	*0.300*	*0.45*	*none*	*none*	*N/A*	*New*
Front (W)	*28.0*	*0.300*	*0.45*	*none*	*none*	*N/A*	*New*
Front (W)	*20.0*	*0.300*	*0.45*	*none*	*none*	*N/A*	*New*

HVAC SYSTEMS

Qty.	Heating	Min. Eff	Cooling	Min. Eff	Thermostat	Status
1	*Split Heat Pump*	*8.20 HSPF*	*Split Heat Pump*	*14.0 SEER*	*Setback*	*New*

HVAC DISTRIBUTION

Location	Heating	Cooling	Duct Location	Duct R-Value	Status
Heating/Cooling	*Ductless / with Fan*	*Ductless*	*n/a*	*n/a*	*New*

WATER HEATING

Qty.	Type	Gallons	Min. Eff	Distribution	Status
1	*Small Instantaneous Gas*	*0*	*0.93*	*Standard*	*New*

TITLE 24 ENERGY ANALYSIS

C21-001401

DRAWN BY
CHECKED BY
DATE
SCALE
JOB NO.
SHEET

T24-2

OF 2 SHEETS

General Notes

1. Compliance information The builder shall leave in the building, copies of the completed, signed and submitted compliance documents for the building owner at occupancy. For low-rise residential buildings, such information shall, at a minimum, include copies of all Certificate of Compliance, Certificate of Installation, and Certificate of Verification documentation submitted. . [10-103(b)1]

2. Operating information. The builder shall provide the building owner at occupancy, operating information for all applicable features, materials, components, and mechanical devices installed in the building. Operating information shall include instructions on how to operate the features, materials, components, and mechanical devices correctly and efficiently. The instructions shall be consistent with specifications set forth by the Executive Director. For residential buildings, such information shall be contained in a folder or manual which provides all Certificate of Compliance, Certificate of Installation, and Certificate of Verification documentations. This operating information shall be in paper or electronic format. [10-103(b)2]

3. Maintenance information. The builder shall provide to the building owner at occupancy, maintenance information for all features, materials, components, and manufactured devices that require routine maintenance for efficient operation. Required routine maintenance actions shall be clearly stated and incorporated on a readily accessible label. The label may be limited to identifying, by title and/or publication number, the operation and maintenance manual for that particular model and type of feature, material, component or manufactured device. [10-103(b)3]

4. Ventilation information. The builder shall provide to the building owner at occupancy, a description of the quantities of outdoor air that the ventilation system(s) are designed to provide to the building's conditioned space, and instructions for proper operation and maintenance of the ventilation system. [10-103(b)4]

5. All systems, equipment, appliances and building components shall comply with the applicable manufacturing, construction, and installation provisions of Sections 110.0 through 110.11 for newly constructed buildings.

6. Any appliance regulated by the Appliance Efficiency Regulations, Title 20 California Code of Regulations, Section 1601 et seq., may be installed only if the appliance fully complies with Section 1608(a) of those regulations. [110.1(a)]

7. Service water-heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use as listed in Table 3, Chapter 50 of the ASHRAE Handbook, HVAC Applications Volume. [110.3(a)1]

8. On systems that have a total capacity greater than 167,000 Btu/hr, outlets that require higher than service water temperatures as listed in the ASHRAE Handbook, Applications Volume, shall have separate remote heaters, heat exchangers, or boosters to supply the outlet with the higher temperature. [110.3(c)1]

9. Service hot water systems with circulating pumps or with electrical heat trace systems shall be capable of automatically turning off the system. [110.3(c)2]

10. Controls for service water-heating systems shall limit the outlet temperature at public lavatories to 110°F. [110.3(c)3]

11. Unfired service water-heater storage tanks and backup tanks for solar water-heating systems shall have:

a. External insulation with an installed R-value of at least R-12, or

b. Internal and external insulation with a combined R-value of at least R-16, or

c. The heat loss of the tank surface based on an 80°F water-air temperature difference shall be less than 6.5 Btu/hr per square foot. [110.3 (c)c4]

12. For Nonresidential, high-rise residential, and hotel/motel buildings, space conditioning systems shall meet the efficiency standards specified Section 120.2.

13. Continuously burning pilot light shall be prohibited for the following natural gas system or equipment listed below: [110.5]

a. Fan-type central furnaces

b. Household cooking appliances, except for household cooking appliances without an electrical supply voltage connection and in which each pilot consumes less than 150 Btu/hr

c. Pool heaters d. Spa heaters

14. Any pool or spa heating system or equipment shall: [110.4]

a. A thermal efficiency that complies with the Appliance Efficiency Regulations

b. Have a readily accessible on-off switch, mounted on the outside of the heater that allows shutting off the heater without adjusting the thermostat setting.

c. Not utilize electric resistance heating.

d. Have a cover for outdoor pools or spas that have a heat pump or gas heater.

e. Have a permanent, easily readable, and weatherproof instruction card that gives instructions for the energy efficient operation of the pool or spa heater and for the proper care of pool or spa water when a cover is used.

f. Have at least 36 inches of pipe installed between the filter and heater or dedicated suction and return lines, or built-in or built-up connections shall be installed to allow for the future addition of solar heating equipment.

g. Have directional inlets for the pool or spa that adequately mix the pool water.

h. A time switch or similar control mechanism shall be installed as part of a pool water circulation control system that will allow all pumps to be set or programmed to run only during the off-peak electric demand period and for the minimum time necessary to maintain the water in the condition required by applicable public health standards.

15. Manufactured fenestration products & exterior doors shall have air infiltration rates not exceeding 0.3 cfm/ft2 of window area, 0.3 cfm/ft2 of residential door area, 0.3 cfm/ft2 of nonresidential single door area, & 1.0 cfm/ft2 of nonres double door area. [110.6(a)1]

16. Fenestration products shall be rated in accordance with NFRC 100 for U-factor, NFRC 200 for SHGC, and VT or use the applicable default value. Fenestration products shall have a temporary label for manufactured fenestration products or a label certificate when the Component Modeling Approach is used and for site-built fenestration meeting the requirements of Section 10-111(a)1. [110.6(a)2, 110.6(a)3, 110.6(a)4, 110.6(a)5]

17. Field-fabricated fenestration products and exterior doors, other than unframed glass doors and fire doors, shall be caulked between the fenestration products or exterior door and the building, & shall be weatherstripped. [110.6(b)]

18. Joints, penetrations & openings in building envelope may be potential sources of air leakage shall be caulked, gasketed, weather stripped or otherwise sealed to limit infiltration & exfiltration. [110.7]

19. Insulation shall be certified by Department of Consumer Affairs, Bureau of Home Furnishing and Thermal Insulation that the insulation conductive thermal performance is approved pursuant to the California Code of Regulations, Title 24, Part 12, Chapter 12-13, Article 3, "Standards for Insulating Material." [110.8(a)]

20. Urea formaldehyde foam insulation may only be used in exterior side walls, & requires a four-mil-thick plastic polyethylene vapor barrier between the urea formaldehyde foam insulation & the interior space in all applications. [110.8(b)]

21. Insulating material shall be installed in compliance with the flame spread rating and smoke density requirements of the CBC. [110.8(c)]

22. Insulation installed on an existing space conditioning duct, it shall comply with Section 604.0 of the CMC. [110.8(d)3]

23. External insulation installed on an existing unfired water storage tank or on an existing back-up tank for a solar water-heating system, it shall have an R-value of at least R-12, or the heat loss of the tank surface based on an 80 EF water-air temperature difference shall be less than 6.5 Btu per hour per square foot. . [110.8(d)2] E.

Residential Notes:

1. A masonry or factory-built fireplace shall have the following: [150.0(e)1]

a. Closeable metal or glass doors covering the entire opening of the firebox;

b. A combustion air intake to draw air from the outside of the building directly into the firebox, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device (Exception: An outside combustion-air intake is not required if the fireplace will be installed over concrete slab flooring and the fireplace will not be located on an exterior wall.); and

c. A flue damper with a readily accessible control. [150.0 (e)C]

2. Heating or cooling systems shall be equipped with a setback thermostat that meet the requirements of Section 110.2(c). [150.0(i)]

3. Gas or propane water heaters shall have: [150.0(n)]

a. A 120V electrical receptacle that is within 3 feet from the water heater.

b. A Category III or IV vent, or a Type B vent with straight pipe.

c. Condensate drain that is no more than 2 inches higher than the base.

d. A gas supply line with a capacity of at least 200,000 Btu/hr

4. All pumps and pump motors installed shall be listed in the Commission's directory of certified equipment and shall comply with the Appliance Efficiency Regulations. [150.0(p)1.A]

5. The minimum installed weight per square foot of any loose-fill insulation shall conform with the insulation manufacturer's labeled R-value. [150.0 (b)]

6. The minimum depth of concrete-slab floor perimeter insulation shall be 16 inches or the depth of the footing of the building, whichever is less. [150.1(c)(1)(D)]

7. The crawl space shall be covered with a vapor retarder over the entire floor. [150.1(c)1.D]

8. Insulations are required for: [150.0(j)2.A]

a. All hot water pipes from the heating source to the kitchen fixtures.

b. All piping with a nominal diameter of 3/4 inch or larger.

c. The first 5 feet (1.5 meters) of hot and cold water pipes from the storage tank.

d. All piping associated with a domestic hot water recirculation system.

e. Piping from the heating source to storage tank or between tanks.

f. Piping buried below grade.

9. Insulation shall be provided for water heaters as follows:

a. Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, shall be externally wrapped with insulation having an installed thermal resistance of R-12 or greater or have internal insulation of at least R-16 and a label on the exterior of the tank showing the insulation R-value. [150.0 (j)1]

10. Lighting [150.0(k)]

a. Installed luminaires shall be classified as high-efficacy in accordance with TABLE 150.0-A.

b. Exhaust fans shall be switched separately from lighting systems.

c. Luminaries shall be switched with readily accessible controls that permit the luminaries to be manually switched ON and OFF.

d. Lighting installed in attached and detached garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces shall be controlled by vacancy sensors.

e. Dimmers or vacancy sensors shall control all luminaires required to have light sources compliant with Reference Joint Appendix JA8.

EXCEPTION 1: Luminaires in closets less than 70 square feet.

EXCEPTION 2: Luminaires in hallways.

f. A. In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building shall be high efficacy luminaires or controlled by an occupant sensor.

g. In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting in that building shall:

i) Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and

ii) Lighting installed in corridors and stairwells shall be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors shall be capable of turning the light fully On and Off from all designed paths of ingress and egress.

2019 Low-Rise Residential Mandatory Measures Summary

*NOTE: Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. *Exceptions may apply* (01/2020)

Building Envelope Measures:	
§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	**Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4 5 for exterior doors. They must be caulked and/or weather-stripped.*
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs
§ 150.0(a):	**Ceiling and Rafter Roof Insulation.** Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.*
§ 150.0(b):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0 .102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B.*
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent, have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration, and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Fireplaces, Decorative Gas Appliances, and Gas Log Measures:	
§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox
§ 150.0(e)2:	**Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.*
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
Space Conditioning, Water Heating, and Plumbing System Measures:	
§ 110.0-§ 110.3:	**Certification.** Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.*
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.*
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone, and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.*
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.*
§ 110.3(c)4:	**Water Heating Recirculation Loops Serving Multiple Dwelling Units.** Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)4.
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.
§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters.*
§ 150.0(h)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.

2019 Low-Rise Residential Mandatory Measures Summary

Requirements for Ventilation and Indoor Air Quality:	
§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality**. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.
§ 150.0(o)1C:	**Single Family Detached Dwelling Units.** Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C:
§ 150.0(o)1E:	**Multifamily Attached Dwelling Units.** Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be ≤ 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
§ 150.0(o)1F:	**Multifamily Building Central Ventilation Systems.** Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflows must be within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required airflow rate needed for compliance.
§ 150.0(o)1G:	**Kitchen Range Hoods.** Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
Pool and Spa Systems and Equipment Measures:	
§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations, an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.*
§ 110.4(b)1:	**Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.*
Lighting Measures:	
§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
§ 150.0(k)1A.	**Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A.
§ 150.0(k)1B:	**Blank Electrical Boxes.** The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C.
§ 150.0(k)1D:	**Electronic Ballasts for Fluorescent Lamps**. Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 150.0(k)1E:	**Night Lights, Step Lights, and Path Lights.** Night lights, step lights and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).*
§ 150.0(k)1G:	**Screw based luminaires**. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems.*
§ 150.0(k)2C:	**Interior Switches and Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.*
§ 150.0(k)2D:	**Interior Switches and Controls.** Controls and equipment must be installed in accordance with manufacturer's instructions.
§ 150.0(k)2E:	**Interior Switches and Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the control is installed to comply with § 150.0(k).
§ 150.0(k)2F:	**Interior Switches and Controls.** Lighting controls must comply with the applicable requirements of § 110.9.

2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(h)3A:	**Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer
§ 150.0(h)3B:	**Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	**Storage Tank Insulation.** Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation**. All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of one inch or a minimum insulation R-value of 7.7: the first five feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than one inch; all hot water piping with a nominal diameter less than 3/4 inch that is: associated with a domestic hot water recirculation system, from the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures.*
§ 150.0(j)3:	**Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	**Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125 volt, 20 amp electrical receptacle connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within three feet of the water heater without obstruction. Both ends of the unused conductor must be labeled with the word "spare" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than two inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu per hour.
§ 150.0(n)2:	**Recirculating Loops.** Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fans Measures:	
§ 110.8(d)3:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance**. All air-distribution system ducts and plenums must meet the requirements of the CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-5.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area.*
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures, joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage, sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11 and Reference Residential Appendix RA3.
§ 150.0(m)12:	**Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Pressure drops and labeling must meet the requirements in § 150.0(m)12. Filters must be accessible for regular service.*
§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3 3.*

2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(k)2G:	**Interior Switches and Controls.** An energy management control system (EMCS) may be used to comply with control requirements if it: provides functionality of the specified control according to § 110 9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.0(e); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	**Interior Switches and Controls.** A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2.
§ 150.0(k)2I:	**Interior Switches and Controls.** In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must be controlled by an occupant sensor or a vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it must be initially configured to manual-on operation using the manual control required under Section 150.0(k)2C.
§ 150.0(k)2J:	**Interior Switches and Controls.** Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for dimming, and that are not controlled by occupancy or vacancy sensors, must have dimming controls.*
§ 150.0(k)2K:	**Interior Switches and Controls.** Under cabinet lighting must be controlled separately from ceiling-installed lighting systems.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either § 150.0(k)3Aii (photocell and either a motion sensor or automatic time switch control) or § 150.0(k)3Aiii (astronomical time clock), or an EMCS.
§ 150.0(k)3B:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, entrances, balconies, and porches; and residential parking lots and carports with less than eight vehicles per site must comply with either § 150.0(k)3A or with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3C:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, any outdoor lighting for residential parking lots or carports with a total of eight or more vehicles per site and any outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must comply with § 140.8; or must consume no more than 5 watts of power as determined according to § 130.0(c).
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in Sections 110 9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	**Interior Common Areas of Low-rise Multifamily Residential Buildings.** In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building must be comply with Table 150.0-A and be controlled by an occupant sensor.
§ 150.0(k)6B:	**Interior Common Areas of Low-rise Multifamily Residential Buildings.** In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting for the interior common areas in that building must: i. Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and ii. Lighting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress.
Solar Ready Buildings:	
§ 110.10(a)1:	**Single Family Residences.** Single family residences located in subdivisions with 10 or more single family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e).
§ 110.10(a)2:	**Low-rise Multifamily Buildings.** Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total area no less than 15 percent of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy.*
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.*
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.*
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through § 110.10(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric".

TITLE 24 ENERGY ANALYSIS

C21-001401

DRAWN BY

CHECKED BY

DATE

SCALE

JOB NO.

SHEET

T24-3

OF 2 SHEETS

Setnicka Workshop Accessory Building

166 N. Encinal Ave
Ojai, CA 93023

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ON SITE ALL DIMENSIONS PRIOR TO STARTING WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO PROCEEDING.
2. UNLESS OTHERWISE NOTED OR SHOWN, ALL PHASES OF WORK ARE TO CONFORM TO THE MINIMUM STANDARDS OF THE UNIFORM BUILDING CODE (LATEST GOVERNING EDITION), LOCAL BUILDING CODES AND THOSE ASTM SPECIFICATIONS UPON WHICH THE STANDARDS ARE BASED. WHERE CONFLICTS BETWEEN BUILDING CODES AND SPECIFICATIONS OCCUR, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
3. ALL ASTM DESIGNATIONS REFERRED TO ON THESE DRAWINGS SHALL BE THE LATEST ADOPTED OR REVISED SPECIFICATIONS.
4. ALL DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS.
5. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
6. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE NOTED OR SHOWN, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK TO COMPLETION OF THE PROJECT, AS INDICATED IN THE CONTRACT DOCUMENTS, AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS AND PROCEDURES.
7. DETAILS; CONDITIONS NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED THE SAME AS SIMILAR CONDITIONS DETAILED AND/OR INDICATED ON THE PLANS.
8. NAILING; NAILING NOT SHOWN ON THE PLANS SHALL BE IN ACCORDANCE OF GOVERNING BUILDING CODES. (SEE NAILING SCHEDULE.)
9. PROVIDE ALL TEMPORARY BRACING, SHORING AND GUYING TO AVOID EXCESSIVE STRESSES ON STRUCTURAL ELEMENTS, AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING ERECTION.
10. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARANCE AND EARTHWORK OPERATIONS OR FILLED EXCAVATIONS OR BURRIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNTAINS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
11. DO NOT CUT OR TRIM ANY TREES ON THE PROPERTY UNLESS OTHERWISE NOTED OR DIRECTED BY DESIGNER AND OWNER. AVOID FILLING OR CUTTING AROUND EXISTING TREES TO REMAIN. PROTECT THESE TREES WITH BARRIERS DURING CONSTRUCTION.
12. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF. LOAD SHALL NOT EXCEED DESIGN LIVE LOAD FOR EACH PARTICULAR LEVEL.
13. CONTRACTOR SHALL PROTECT THE ADJOINING PROPERTY DURING EXCAVATION. PROTECTION SHALL BE SUCH THAT ANY EARTH OF THE ADJOINING PROPERTY WILL NOT CAVE-IN OR SETTLE.
14. THE CONTRACTOR SHALL NOTIFY THE "OWNER" OF ANY CONDITION REQUIRING MODIFICATION OR CHANGE, BEFORE PROCEEDING WITH WORK.
15. ALL CONSTRUCTION TO PROVIDE A WATERPROOF, WEATHER TIGHT STRUCTURE. CONTRACTOR SHALL SEAL AND CAULK AS NECESSARY TO ACHIEVE THIS REQUIREMENT
16. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE STATE OF CALIFORNIA.
17. CONTRACTOR SHALL VERIFY IN THE FIELD ALL EXISTING CONDITIONS SHOWN ON THE DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
18. SHEET METAL & FLASHING: PROVIDE AND INSTALL SHEET METAL AND OR COPPER FLASHING AS DETAILED AND REQUIRED TO INSURE WATERTIGHT ASSEMBLY. ALL PIECES SHALL BE FABRICATED IN MAXIMUM PRACTICAL LENGTHS, FREE OF WARPS, BUCKLES AND DENTS AND OTHER DEFECTS. (U.B.C. 1402.2 FLASHING & COUNTERFLASHING: 1508.4 VALLEY FLASHING & 1509, OTHER FLASHING).
19. NO POTABLE WATER MAY BE USED FOR COMPACTION OR DUST CONTROL PURPOSES IN CONSTRUCTION ACTIVITIES WHERE THERE IS A REASONABLE AVAILABLE SOURCE OF RECLAIMED WATER OR OTHER SUB POTABLE WATER APPROVED BY THE VENTURA COUNTY HEALTH DEPARTMENT & APPROPRIATE FOR SUCH USE. ORD 3522, SECTION 6(K).
20. ALL HOSES USED FOR ANY CONSTRUCTION ACTIVITIES SHALL BE EQUIPPED WITH A SHUT OFF NOZZLE. WHEN AN AUTOMATIC SHUT OFF CAN NOT BE PURCHASED OR OTHERWISE OBTAINED FOR THE SIZE & TYPE OF HOSE IN USE, THE NOZZLE SHALL BE AN AUTOMATIC SHUT OFF NOZZLE. ORD 3522 6(K).
21. COPPER WATER LINES SHALL BE TYPE 'L' MIN. SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING TYPE. PLUMBING FIXTURES AND PLUMBING FITTING SHALL MEET THE FOLLOWING STANDARDS:
    - A. WATER CLOSET = 1.28 GALLONS PER FLUSH MAX.
    - B. SHOWERHEAD = 1.8 GPM MAX.
    - C. LAVATORY FAUCETS = 1.2 GPM MAX
    - D. SINK FAUCETS = 1.8 GPM MAX, TITLE 24, VCBC, UPC
22. FIRE BLOCK STUD WALLS @ 10' INTERVALS/HORIZ. & VERT), ENCLOSED AND CONCEALED SPACES, AND AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS,ATTIC AND CHIMNEY CHASE, STAIR STRINGERS, AND SIMULAR PLACES AT CEILING AND FLOOR LEVELS (708.2.1 UBC)
23. SAFETY: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON THE JOB SITE AND ADHERE TO ALL FEDERAL, STATE, LOCAL, AND O.S.H.A. REGULATIONS.
24. AFTER COMMENCEMENT OF WORK, ANY FAULTS IN CONSTRUCTION DUE IN PART TO ERRORS IN THE CONSTRUCTION DOCUMENTS, SHALL BE CORRECTED BY CONTRACTOR OR SUBCONTRACTOR.
25. ALL HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS. HANDGRIP PORTION OF ALL HANDRAILS SHALL NOT BE LESS THAN 1-1/4" NOT MORE THAN 2" IN CROSS SECTIONAL DIMENSION, OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE.
26. PROVIDE EMERGENCY EXIT DOOR OR WINDOW FROM BASEMENT AND/OR SLEEPING ROOMS. NET CLEAR WINDOW OPENING AREA SHALL NOT BE LESS THAN 5.7 SQ. FEET (821 SQ. INCHES). MIN. NET WINDOW OPENING HEIGHT DIMENSION. 24" CLEAR; MIN. NET WIDTH DIMENSION, 20" CLEAR. FINSH SILL HEIGHT MAX. 44" ABOVE FLOOR.
27. IN ACCORDANCE WITH PERTINENT ITEMS OF THESE NOTES AND THOSE ITEMS SO INDICATED ON THE DRAWINGS "CAREFULLEY" DEMOLISH AND REMOVE FROM THE JOB SITE THOSE ITEMS SCHEDULED TO BE SO DEMOLISHED AND REMOVED
28. USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ABE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK
29. SURFACE CONDITIONS: EXAMINE THE AREAS AND CONDITIONS UNDER WHICH WORK WILL BE PERFORMED CORRECT CONDITIONS DETRIMENTAL TO TIMELY & PROPER COMPLETION OF THE WORK. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED
30. DEMOLITION: BY CAREFUL STUDY OF THE DRAWINGS, DETERMINE THE LOCATION AND EXTENT OF SELECTIVE DEMOLITION TO BE PERFORMED
31. SEE GRADING PLAN FOR EXACT LOCATION OF THE NEW RESIDENCE. SEE GRADING PLAN FOR PAD ELEVATION.

SOILS REPORT NO.:	N/A
SOILS REPORT UPDATE NO.:	N/A
GRADING PERMIT NO.:	N/A/
VOLUME OF GRADING:EXCAVATION AND FILL	=50 C.Y.
EXPANSION INDEX:	N/A
BEARING CAPACITY:	2500 PSF

32. UNLESS INDICATED OTHERWISE, ALL PORTIONS OF THIS PROJECT SHALL BE SUBJECT TO THE REQUIREMENTS OF THE FOLLOWING:
    - 2019 CALIFORNIA BUILDING CODE
    - 2019 CALIFORNIA PLUMBING CODE
    - 2019 CALIFORNIA MECHANICAL CODE
    - C.C.R. (CA. CODE OF REG.) TITLE 19 AND 24
    - 2019 AMERICANS WITH DISABILITIES ACT
    - 2019 CALIFORNIA ELECTRICAL CODE
    - ALL OTHER APPLICABLE CODES, REGULATIONS AND ORDINANCES

PROJECT DATA

SCOPE OF WORK:
new, detached 458 sq. ft. habitable single story workshop accessory building

ZONING DATA:

APN	0170144090
Lot Size	7,500 SF
Zoning	R-1
High Fire Zone	No
Fire Sprinklers	Yes
Type of Construction	V-B
Number of Stories	1
Number of Bedrooms	0
Number of Bathrooms	1/2
Setbacks: Front- 20,' rear 6', sides 5'	
Occupancy Group	R-3
Soils Report	None- see below
Expansion Index	91-130

HFH = NO
Sprinklers = YES
E.I.= 91-130

Notes:
1. Waiver of soils report allowed per approved "Foundation and Soils Investigation Request" by Ventura County Building and Safety Office

BUILDING DATA:
Conditioned Area: 458 SF

PROJECT DIRECTORY:
Owner: Jacob and Keri Setnicka
166 N. Encinal Ave
Ojai, CA 93023

Structural Design:
Laima Reeder
Oxnard, CA 93035
805 985-1700

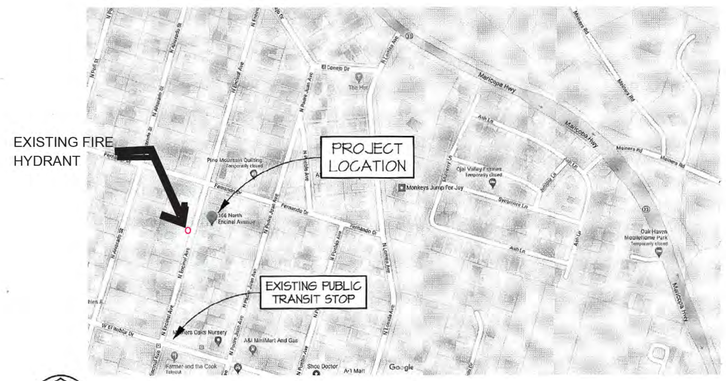
SHEET INDEX

UTILITY COMPANIES

GAS	Southern California Gas PO BOX 1626 MONTEREY PARK CA 91754-8626
ELECTRIC	Southern California Edison Co 10060 Telegraph Road Ventura, CA 93003
TELECOM	Pacific Telephone Co. 2459 Palma Drive Ventura, CA 93003
SEWER	OVSD 1072 Tico Road Ojai, CA 93023
WATER	Meiners Oaks Water 202 W. El Roblar Dr. Ojai, CA 93023

ADDITIONAL NOTES

The discharge of pollutants to any storm drainage system is prohibited per the Ventura Countywide Municipal Storm Water NPDES Permit No. CAS 5004002 No solid waste, petroleum byproducts, soil particulate, construction waste materials, or wastewater generated on the construction site or by construction activities shall be placed, conveyed, or discharged into the street, gutter, or storm drain system.



NORTH

LOCATION MAP
APPROXIMATE SCALE: 1" = 300'

0' 300' 600'

03/03/2022

APPROVED
COUNTY OF VENTURA CALIFORNIA

Stephanie Medina
Division of Building and Safety

Revisions

No.	Description	Date
1	Plan check corrections	2-8-22

APN:
017-0-144-090

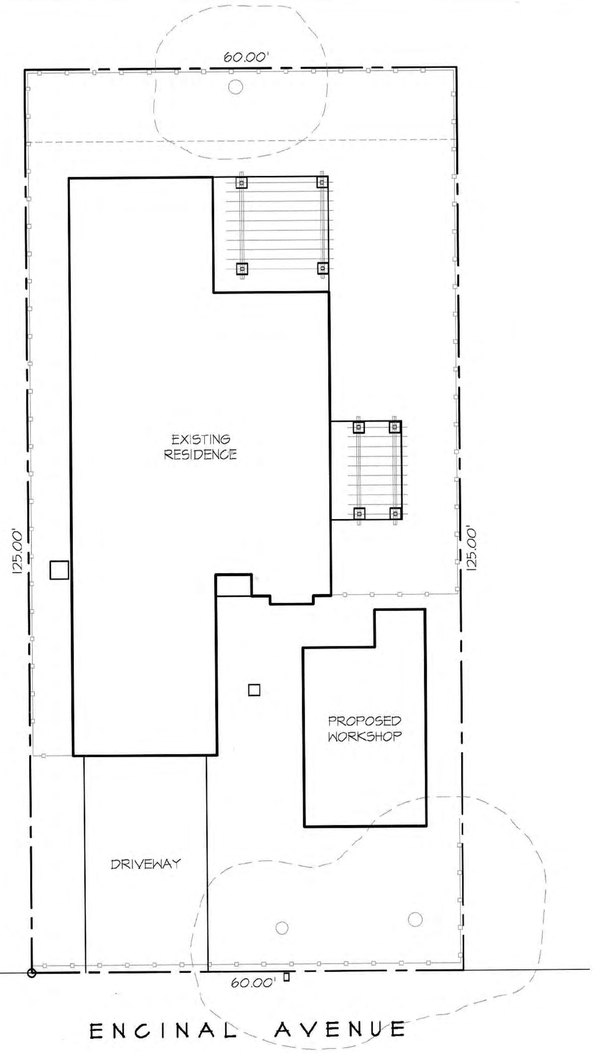
REGISTERED PROFESSIONAL ENGINEER
LAIMA B. REEDER
No. 39400
Exp. 12/31/23
CIVIL
STATE OF CALIFORNIA
2-18-22

TITLE SHEET

C21-001401

PROPOSED CONSTRUCTION

DRAWN
LR and MK
CHECKED
DATE
Nov.-10. 2021.
SCALE
AS NOTED
JOB NO.
SHEET
1

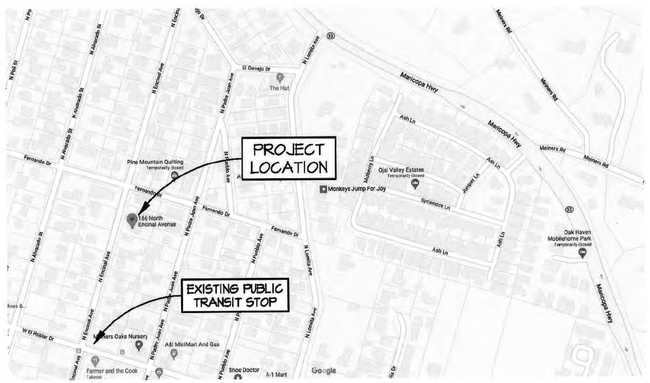


NORTH

SITE PLAN

SCALE: 1" = 10'-0"

10' 0 10' 20'

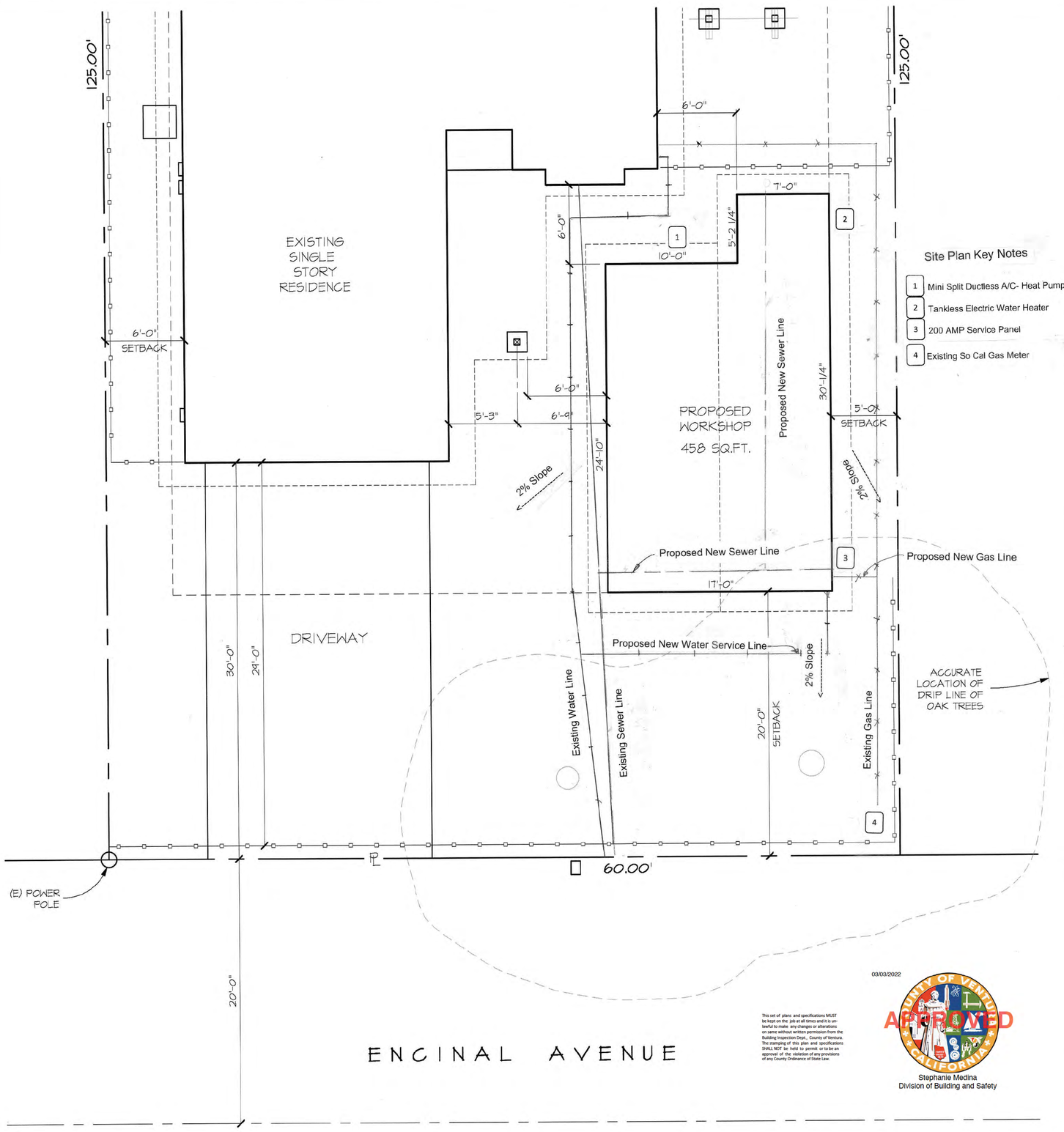


NORTH

LOCATION MAP

APPROXIMATE SCALE: 1" = 300'

0' 300' 600'



Site Plan Key Notes

1. Mini Split Ductless A/C- Heat Pump
2. Tankless Electric Water Heater
3. 200 AMP Service Panel
4. Existing So Cal Gas Meter

NORTH

ENLARGED PORTION OF SITE PLAN

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

4' 0 4' 8'

This set of plans and specifications MUST be kept on the job at all times and it is unlawful to make any changes or alterations on same without written permission from the Building Inspection Dept., County of Ventura. The stamping of this plan and specifications SHALL NOT be held to permit or to be an approval of the violation of any provisions of any County Ordinance of State Law.

03/03/2022

APPROVED

Stephanie Medina
Division of Building and Safety

Revisions		
No.	Description	Date

APN: 017-0-144-090

REGISTERED PROFESSIONAL ENGINEER JAMES B. REDDEN No. 39400 Exp. 12/31/23 CIVIL STATE OF CALIFORNIA

2-18-22

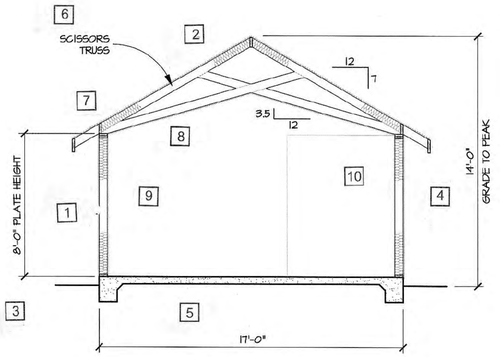
PROPOSED CONSTRUCTION

SITE PLAN

C21-001401

[redacted]

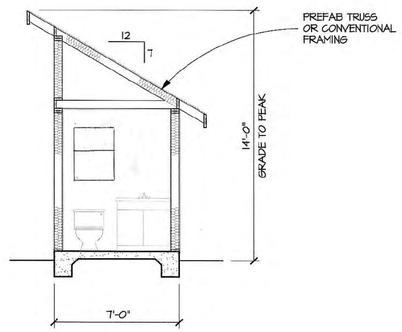
DRAWN	CMG
CHECKED	
DATE	
SCALE	AS NOTED
JOB NO.	-
SHEET	2



(A) LOOKING EAST

SECTION KEY NOTES ☐

1. Board and Batten siding exterior walls, horizontal siding in gable ends.
2. Class A Fire rated asphalt shingles
3.Grading to be sloped away from building
4. Wood trim around door and windows
5. Tile over concrete slab
6. Truss per structural drawings
7. Ceiling joists per structural drawings
8. Insulation- Ceiling: R-38 Batt; see Title 24
9. Insulation- Walls: R-21 Batt; see Title 24
10. 1/2" drywall on ceiling, wall; water resistant drywall in sink, bathroom as typical.



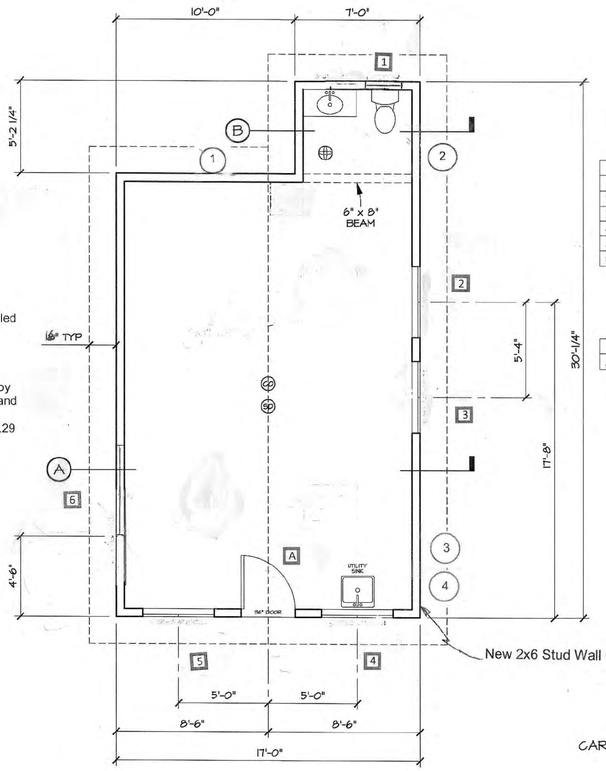
(B) LOOKING EAST

SECTIONS

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

4' 0 4' 8'

1. Mini Split Ductless A/C- Heat Pump
2. Tankless Water Heater
3. 200 AMP Service Pane
4. New Gas Line and Shut Off



FLOORPLAN GENERAL NOTES

1. Interior walls/ceiling to be finished with 5/8 drywall, taped, sanded, painted
2. At water heater location, a 120v electrical receptacle to be installed within 3' of unit
3. 5/8" water resistant type drywall to be installed in bathroom and sink area walls
4. Concrete floor to be natural, colored, or covered with porcelain floor tile as specified by owner
5. Bathroom shall be mechanically ventilated by an energy star compliant fan which is ducted and terminates on the exterior of the structure
6. All windows to have a minimum U value of .29 and SHGC .21
7. Exterior doors to have a minimum U value of .42 and SHGC .28
8. Exterior walls to be insulated per Title 24 requirements as specified on Sheet T-24

WINDOW SCHEDULE

	Size	Style	Material
1	2'0" x 3'0"	single hung	Vinyl- Energy Star Rated
2	4'0" x 1'6"	slider	Vinyl- Energy Star Rated
3	4'0" x 1'x6"	slider	Vinyl- Energy Star Rated
4	4'0" x 3'6"	single hung	Vinyl- Energy Star Rated
5	4'0" x 3'6"	single hung	Vinyl- Energy Star Rated
6	4'0" x 1'x6"	slider	Vinyl- Energy Star Rated

DOOR SCHEDULE

Mark	Size	Material
A	3'0" x 6'8" x 1 3/8"	Fiberglass- Exterior

SMOKE DETECTOR (SD)

CARBON MONOXIDE ALARM (CO)

BATHROOM FAN

NORTH

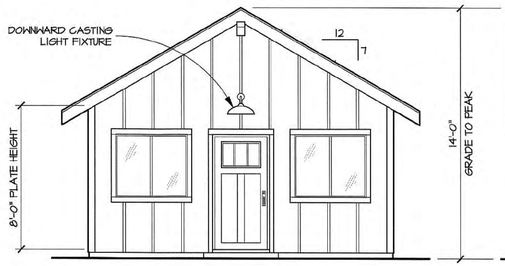
FLOOR PLAN NOTE: ALL WALL DIMENSIONS TO FACE OF STUD

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

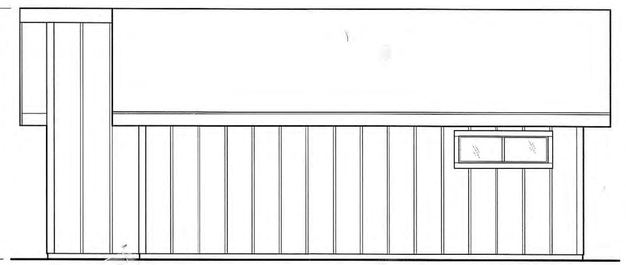
4' 0 4' 8'

ELEVATION GENERAL NOTES

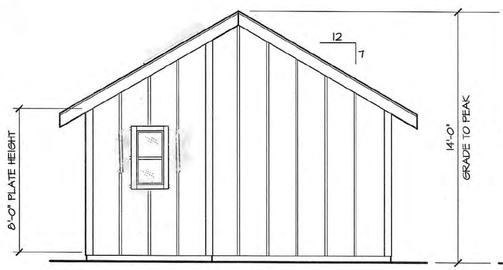
1.Board and Batten siding exterior walls, horizontal siding in gable ends
2.Class A Fire rated asphalt shingles
3.Grading to be sloped away from building
4. Wood trim around door and windows



WEST ELEVATION
LOOKING EAST



NORTH ELEVATION
LOOKING SOUTH



EAST ELEVATION
LOOKING WEST

SOUTH ELEVATION
LOOKING NORTH

ELEVATIONS

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

4' 0 4' 8'

03/03/2022

APPROVED

Stephanie Medina
Division of Building and Safety

Revisions		
No.	Description	Date

APN: 017-0-144-090

REGISTERED PROFESSIONAL ENGINEER LAURA B. RIDER No. 39400 Exp. 12/31/23 CIVIL STATE OF CALIFORNIA

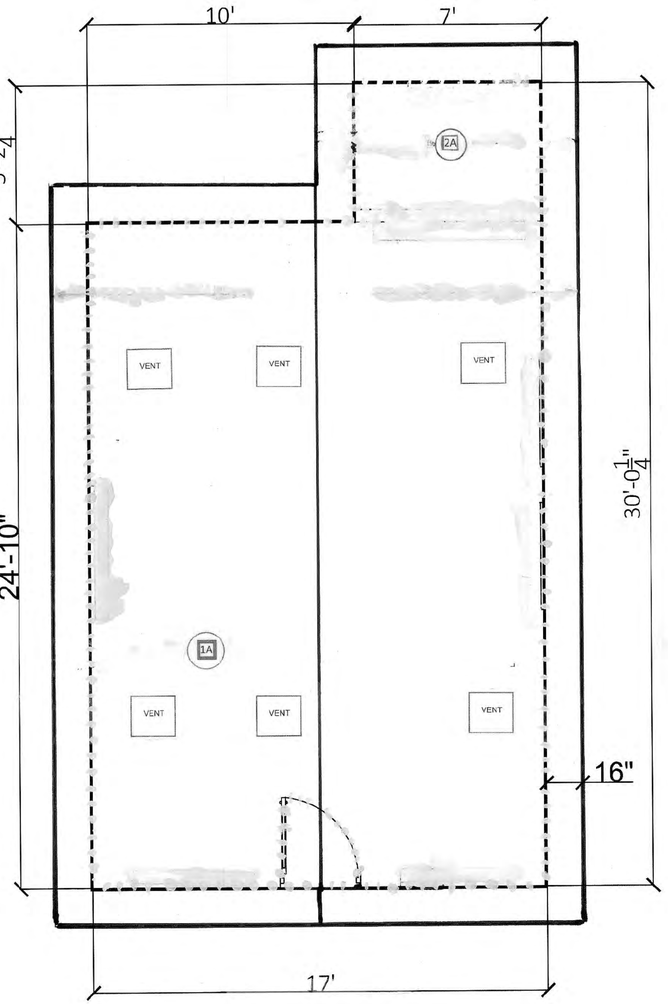
2-18-22

FLOOR PLANS
ELEVATIONS
SECTIONS

C21-001401

PROPOSED CONSTRUCTION

DRAWN: CMS
CHECKED
DATE
SCALE: AS NOTED
JOB NO. –
SHEET: 3



Roof Plan

Scale: 3/8" = 1'0"

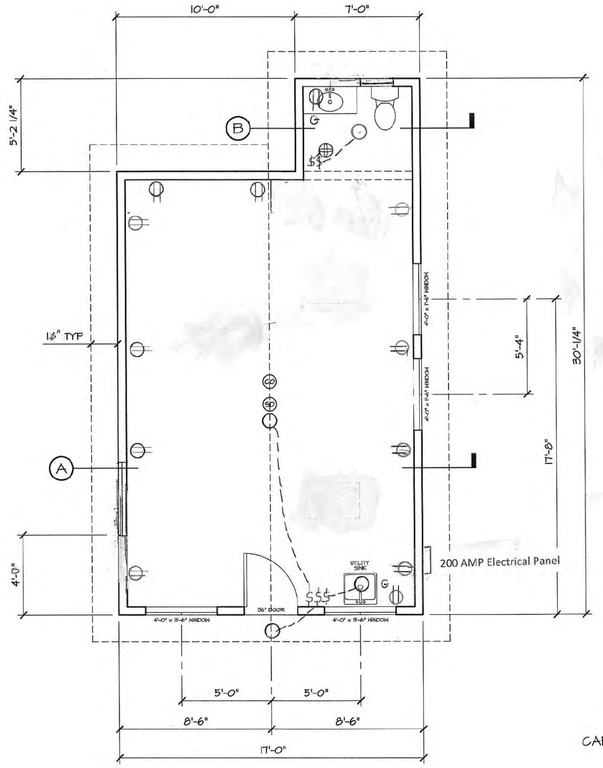
North

GENERAL NOTES
1. New Class A shingle roof
2. O'Hagen Standard Roof Vents
3. Gutters and downspouts provided

Ventilation
1. Mandatory minimum attic ventilation area is 1/300 of the area of the space ventilated for all enclosed rafter spaces. Class I or II vapor retainer is installed on the warm-in-winter side of the ceiling. At least 50% of the required ventilation must be a minimum of three feet above the eave.
2. Provide cross ventilation for each space between rafter openings and have a minimum opening of 1/16" and max 1/4". Minimum of 1" air space shall be provide between the insulation and the roof sheathing.

LIGHT TUBE SCHEDULE

Mark	Size	
1A	14" Dia.	Velux Sun Tube
2A	10" Dia.	Velux Sun Tube



ELECTRICAL GENERAL NOTES
1. All receptacle to be A.F.I. unless specified as G.F.I.
2. Provide bonding grounding electrode conductor per CEC Table 310.15.
3. This plan is not for construction; it is for design purposes only. This is a preliminary layout.
4. All 120v, 15 and 20 amp supplying outlets will be protected by a listed arc-fault circuit interrupter. Lighting circuits in bathroom will be arc fault protected as well.
5. Outlets adjacent to sink to be G.F.I. protected
6. Outlets will be tamper resistant.

Duplex Outlet
GFI Outlet G
Single Pole Switch S
Double Pole Switch S2
Triple Pole Switch S3
SMOKE DETECTOR SD
CARBON MONOXIDE ALARM CO
BATHROOM FAN

NORTH

ELECTRICAL PLAN NOTE: ALL WALL DIMENSIONS TO FACE OF STUD

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

4' 0 4' 8'

03/03/2022

APPROVED

Stephanie Medina
Division of Building and Safety

Revisions		
No.	Description	Date

APN: 017-0-144-090

REGISTERED PROFESSIONAL ENGINEER LINDA B. RIVETT No. 39400 Exp. 12/31/23 CIVIL STATE OF CALIFORNIA
2-18-22

Roof Plan
ELECTRICAL PLAN
C21-00140

PROPOSED CONSTRUCTION

DRAWN
CHECKED
DATE
SCALE AS NOTED
JOB NO.
SHEET 4

Setnicka Workshop Accessory Building

166 N. Encinal Ave
Ojai, CA 93023

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ON SITE ALL DIMENSIONS PRIOR TO STARTING WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO PROCEEDING.
2. UNLESS OTHERWISE NOTED OR SHOWN, ALL PHASES OF WORK ARE TO CONFORM TO THE MINIMUM STANDARDS OF THE UNIFORM BUILDING CODE (LATEST GOVERNING EDITION), LOCAL BUILDING CODES AND THOSE ASTM SPECIFICATIONS UPON WHICH THE STANDARDS ARE BASED. WHERE CONFLICTS BETWEEN BUILDING CODES AND SPECIFICATIONS OCCUR, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
3. ALL ASTM DESIGNATIONS REFERRED TO ON THESE DRAWINGS SHALL BE THE LATEST ADOPTED OR REVISED SPECIFICATIONS.
4. ALL DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS.
5. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
6. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE NOTED OR SHOWN. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK TO COMPLETION OF THE PROJECT, AS INDICATED IN THE CONTRACT DOCUMENTS, AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS AND PROCEDURES.
7. DETAILS; CONDITIONS NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED THE SAME AS SIMILAR CONDITIONS DETAILED AND/OR INDICATED ON THE PLANS.
8. NAILING; NAILING NOT SHOWN ON THE PLANS SHALL BE IN ACCORDANCE OF GOVERNING BUILDING CODES. (SEE NAILING SCHEDULE.)
9. PROVIDE ALL TEMPORARY BRACING, SHORING AND GUYING TO AVOID EXCESSIVE STRESSES ON STRUCTURAL ELEMENTS, AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING ERECTION.
10. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARANCE AND EARTHWORK OPERATIONS OR FILLED EXCAVATIONS OR BURRIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNTAINS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
11. DO NOT CUT OR TRIM ANY TREES ON THE PROPERTY UNLESS OTHERWISE NOTED OR DIRECTED BY DESIGNER AND OWNER. AVOID FILLING OR CUTTING AROUND EXISTING TREES TO REMAIN. PROTECT THESE TREES WITH BARRIERS DURING CONSTRUCTION.
12. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF. LOAD SHALL NOT EXCEED DESIGN LIVE LOAD FOR EACH PARTICULAR LEVEL.
13. CONTRACTOR SHALL PROTECT THE ADJOINING PROPERTY DURING EXCAVATION. PROTECTION SHALL BE SUCH THAT ANY EARTH OF THE ADJOINING PROPERTY WILL NOT CAVE-IN OR SETTLE.
14. THE CONTRACTOR SHALL NOTIFY THE "OWNER" OF ANY CONDITION REQUIRING MODIFICATION OR CHANGE, BEFORE PROCEEDING WITH WORK.
15. ALL CONSTRUCTION TO PROVIDE A WATERPROOF, WEATHER TIGHT STRUCTURE. CONTRACTOR SHALL SEAL AND CAULK AS NECESSARY TO ACHIEVE THIS REQUIREMENT
16. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE STATE OF CALIFORNIA.
17. CONTRACTOR SHALL VERIFY IN THE FIELD ALL EXISTING CONDITIONS SHOWN ON THE DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
18. SHEET METAL & FLASHING: PROVIDE AND INSTALL SHEET METAL AND OR COPPER FLASHING AS DETAILED AND REQUIRED TO INSURE WATERTIGHT ASSEMBLY. ALL PIECES SHALL BE FABRICATED IN MAXIMUM PRACTICAL LENGTHS, FREE OF WARPS, BUCKLES AND DENTS AND OTHER DEFECTS. (U.B.C. 1402.2 FLASHING & COUNTERFLASHING: 1508.4 VALLEY FLASHING & 1509, OTHER FLASHING).
19. NO POTABLE WATER MAY BE USED FOR COMPACTION OR DUST CONTROL PURPOSES IN CONSTRUCTION ACTIVITIES WHERE THERE IS A REASONABLE AVAILABLE SOURCE OF RECLAIMED WATER OR OTHER SUB POTABLE WATER APPROVED BY THE VENTURA COUNTY HEALTH DEPARTMENT & APPROPRIATE FOR SUCH USE. ORD 3522, SECTION 6(K).
20. ALL HOSES USED FOR ANY CONSTRUCTION ACTIVITIES SHALL BE EQUIPPED WITH A SHUT OFF NOZZLE. WHEN AN AUTOMATIC SHUT OFF CAN NOT BE PURCHASED OR OTHERWISE OBTAINED FOR THE SIZE & TYPE OF HOSE IN USE, THE NOZZLE SHALL BE AN AUTOMATIC SHUT OFF NOZZLE. ORD 3522 6(K).
21. COPPER WATER LINES SHALL BE TYPE 'L' MIN. SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING TYPE. PLUMBING FIXTURES AND PLUMBING FITTING SHALL MEET THE FOLLOWING STANDARDS:
    - A. WATER CLOSET = 1.28 GALLONS PER FLUSH MAX.
    - B. SHOWERHEAD = 1.8 GPM MAX.
    - C. LAVATORY FAUCETS = 1.2 GPM MAX
    - D. SINK FAUCETS = 1.8 GPM MAX, TITLE 24, VCBC, UPC
22. FIRE BLOCK STUD WALLS @ 10' INTERVALS/HORIZ. & VERTI, ENCLOSED AND CONCEALED SPACES, AND AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS,ATTIC AND CHIMNEY CHASE, STAIR STRINGERS, AND SIMULAR PLACES AT CEILING AND FLOOR LEVELS (708.2.1 UBC)
23. SAFETY: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON THE JOB SITE AND ADHERE TO ALL FEDERAL, STATE, LOCAL, AND O.S.H.A. REGULATIONS.
24. AFTER COMMENCEMENT OF WORK, ANY FAULTS IN CONSTRUCTION DUE IN PART TO ERRORS IN THE CONSTRUCTION DOCUMENTS, SHALL BE CORRECTED BY CONTRACTOR OR SUBCONTRACTOR.
25. ALL HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS. HANDGRIP PORTION OF ALL HANDRAILS SHALL NOT BE LESS THAN 1-1/4" NOT MORE THAN 2" IN CROSS SECTIONAL DIMENSION, OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE.
26. PROVIDE EMERGENCY EXIT DOOR OR WINDOW FROM BASEMENT AND/OR SLEEPING ROOMS. NET CLEAR WINDOW OPENING AREA SHALL NOT BE LESS THAN 5.7 SQ. FEET (821 SQ. INCHES). MIN. NET WINDOW OPENING HEIGHT DIMENSION. 24" CLEAR; MIN. NET WIDTH DIMENSION, 20" CLEAR. FINSH SILL HEIGHT MAX. 44" ABOVE FLOOR.
27. IN ACCORDANCE WITH PERTINENT ITEMS OF THESE NOTES AND THOSE ITEMS SO INDICATED ON THE DRAWINGS "CAREFULLEY" DEMOLISH AND REMOVE FROM THE JOB SITE THOSE ITEMS SCHEDULED TO BE SO DEMOLISHED AND REMOVED
28. USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK
29. SURFACE CONDITIONS: EXAMINE THE AREAS AND CONDITIONS UNDER WHICH WORK WILL BE PERFORMED. CORRECT CONDITIONS DETRIMENTAL TO TIMELY & PROPER COMPLETION OF THE WORK. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED
30. DEMOLITION: BY CAREFUL STUDY OF THE DRAWINGS, DETERMINE THE LOCATION AND EXTENT OF SELECTIVE DEMOLITION TO BE PERFORMED
31. SEE GRADING PLAN FOR EXACT LOCATION OF THE NEW RESIDENCE. SEE GRADING PLAN FOR PAD ELEVATION.
    - SOILS REPORT NO.: N/A
    - SOILS REPORT UPDATE NO.: N/A
    - GRADING PERMIT NO.: N/A/
    - VOLUME OF GRADING:EXCAVATION AND FILL ~50 C.Y.
    - EXPANSION INDEX: N/A
    - BEARING CAPACITY: 2500 PSF
32.
33. UNLESS INDICATED OTHERWISE, ALL PORTIONS OF THIS PROJECT SHALL BE SUBJECT TO THE REQUIREMENTS OF THE FOLLOWING:
    - 2019 CALIFORNIA BUILDING CODE
    - 2019 CALIFORNIA PLUMBING CODE
    - 2019 CALIFORNIA MECHANICAL CODE
    - C.C.R. (CA. CODE OF REG.) TITLE 19 AND 24
    - 2019 AMERICANS WITH DISABILITIES ACT
    - 2019 CALIFORNIA ELECTRICAL CODE
    - ALL OTHER APPLICABLE CODES, REGULATIONS AND ORDINANCES

PROJECT DATA

SCOPE OF WORK:
new, detached 458 sq. ft. habitable single story workshop accessory building

ZONING DATA:

APN	0170144090
Lot Size	7,500 SF
Zoning	R-1
High Fire Zone	No
Fire Sprinklers	Yes
Type of Construction	V-B
Number of Stories	1
Number of Bedrooms	0
Number of Bathrooms	1/2
Setbacks: Front- 20,' rear 6', sides 5'	
Occupancy Group	R-3
Soils Report	None- see below
Expansion Index	91-130

HFH = NO
Sprinklers = YES
E.I.= 91-130

Notes:
1. Waiver of soils report allowed per approved "Foundation and Soils Investigation Request" by Ventura County Building and Safety Office

BUILDING DATA:
Conditioned Area: 458 SF

PROJECT DIRECTORY:
Owner: Jacob and Keri Setnicka
166 N. Encinal Ave
Ojai, CA 93023

Structural Design:
Laima Reeder
Oxnard, CA 93035
805 985-1700

SHEET INDEX

UTILITY COMPANIES

GAS	Southern California Gas PO BOX 1626 MONTEREY PARK CA 91754-8626
ELECTRIC	Southern California Edison Co 10060 Telegraph Road Ventura, CA 93003
TELECOM	Pacific Telephone Co. 2459 Palma Drive Ventura, CA 93003
SEWER	OVSD 1072 Tico Road Ojai, CA 93023
WATER	Meiners Oaks Water 202 W. El Roblar Dr. Ojai, CA 93023

ADDITIONAL NOTES

The discharge of pollutants to any storm drainage system is prohibited per the Ventura Countywide Municipal Storm Water NPDES Permit No. CAS 5004002 No solid waste, petroleum byproducts, soil particulate, construction waste materials, or wastewater generated on the construction site or by construction activities shall be placed, conveyed, or discharged into the street, gutter, or storm drain system.

03/03/2022

APPROVED
COUNTY OF VENTURA CALIFORNIA

Stephanie Medina
Division of Building and Safety

Revisions		
No.	Description	Date
1	Plan check corrections	2-8-22

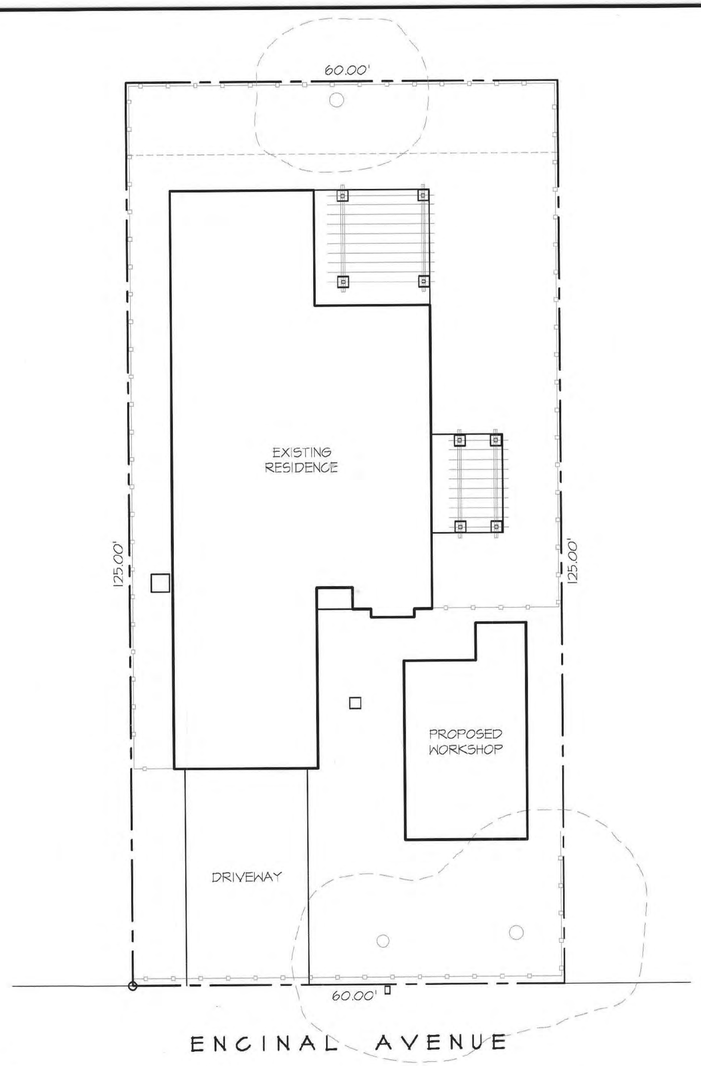
APN:
017-0-144-090

REGISTERED PROFESSIONAL ENGINEER
LAIMA B. REEDER
No. 39400
Exp. 12/31/23
CIVIL
STATE OF CALIFORNIA
2-18-22

TITLE SHEET
C21-001401

PROPOSED CONSTRUCTION

DRAWN
LR and MK
CHECKED
DATE
Nov. 10, 2021
SCALE
AS NOTED
JOB NO.
SHEET
1

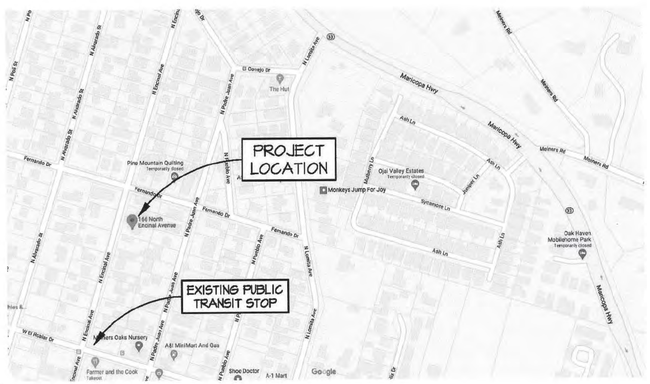


NORTH

SITE PLAN

SCALE: 1" = 10'-0"

10' 0 10' 20'

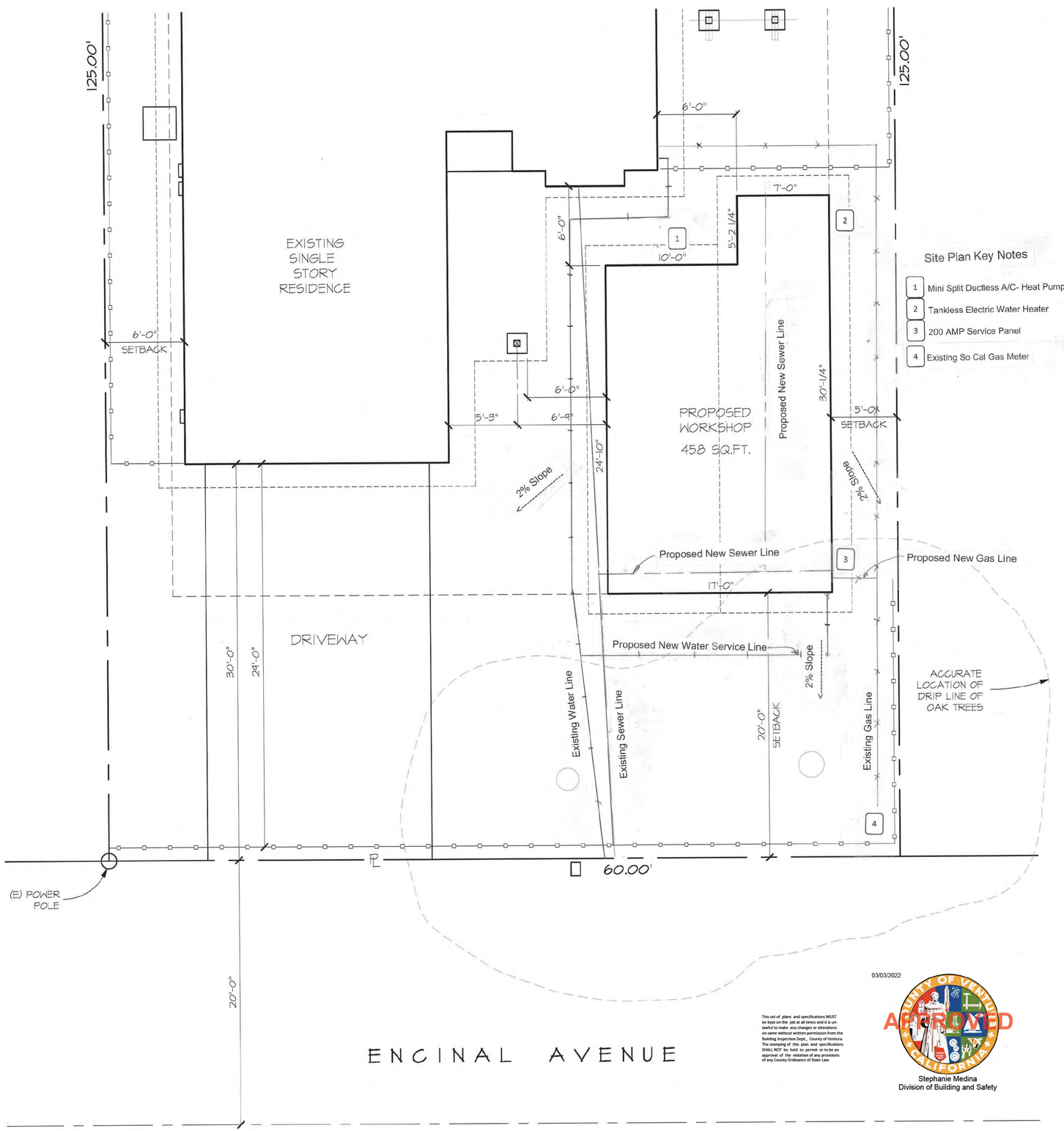


NORTH

LOCATION MAP

APPROXIMATE SCALE: 1" = 300'

0' 300' 600'



Site Plan Key Notes

1. Mini Split Ductless A/C- Heat Pump
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3. 200 AMP Service Panel
4. Existing So Cal Gas Meter

NORTH

ENLARGED PORTION OF SITE PLAN

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

4' 0 4' 8'

03/03/2022

APPROVED

Stephanie Medina
Division of Building and Safety

Revisions		
No.	Description	Date

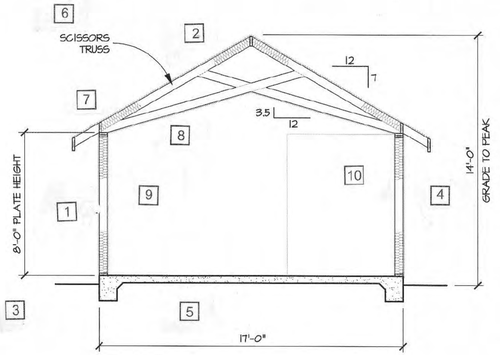
APN: 017-0-144-090

PROPOSED CONSTRUCTION

SITE PLAN

C21-001401

DRAWN	CMG
CHECKED	
DATE	
SCALE	AS NOTED
JOB NO.	-
SHEET	2



(A) LOOKING EAST

SECTION KEY NOTES ☐

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2. Class A Fire rated asphalt shingles
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5. Tile over concrete slab
6. Truss per structural drawings
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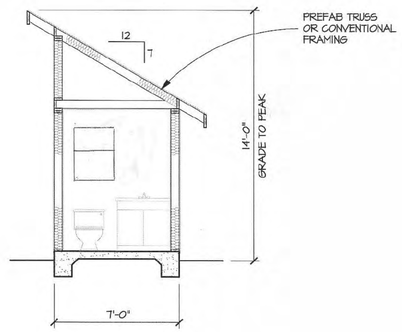

(B) LOOKING EAST

SECTIONS

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

4' 0 4' 8'

1. Mini Split Ductless A/C- Heat Pump
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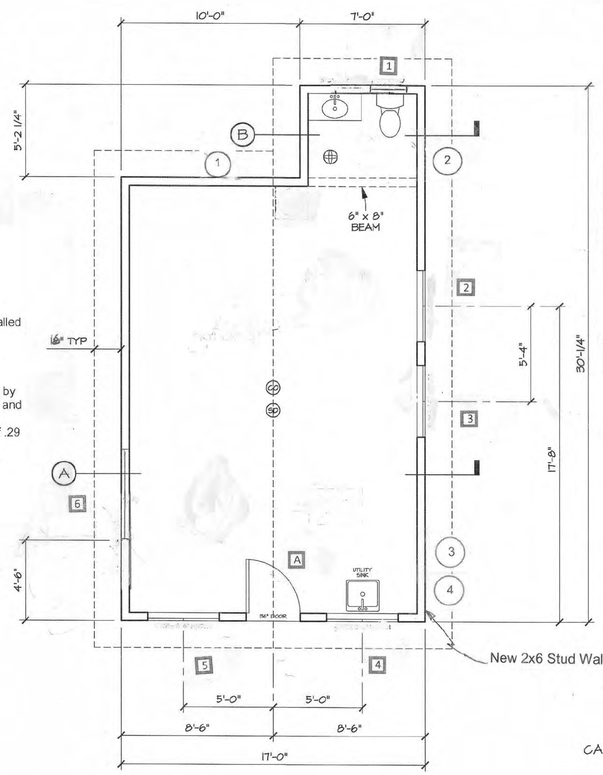

SMOKE DETECTOR (SD)

CARBON MONOXIDE ALARM (CO)

BATHROOM FAN

WINDOW SCHEDULE

	Size	Style	Material
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4	4'0" x 3'6"	single hung	Vinyl- Energy Star Rated
5	4'0" x 3'6"	single hung	Vinyl- Energy Star Rated
6	4'0" x 1'x6"	slider	Vinyl- Energy Star Rated

DOOR SCHEDULE

Mark	Size	Material
A	3'0" x 6'8" x 1 3/8"	Fiberglass- Exterior

FLOORPLAN GENERAL NOTES

1. Interior walls/ceiling to be finished with 5/8 drywall, taped, sanded, painted
2. At water heater location, a 120v electrical receptacle to be installed within 3' of unit
3. 5/8" water resistant type drywall to be installed in bathroom and sink area walls
4. Concrete floor to be natural, colored, or covered with porcelain floor tile as specified by owner
5. Bathroom shall be mechanically ventilated by an energy star compliant fan which is ducted and terminates on the exterior of the structure
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NORTH

FLOOR PLAN

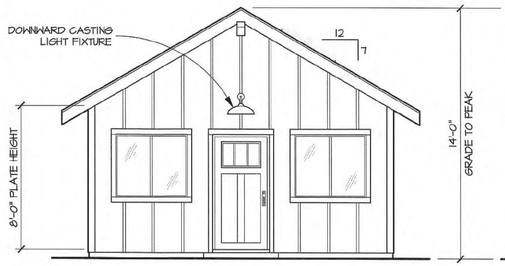
NOTE: ALL WALL DIMENSIONS TO FACE OF STUD

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

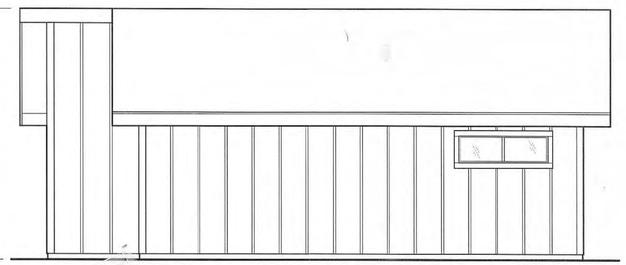
4' 0 4' 8'

ELEVATION GENERAL NOTES

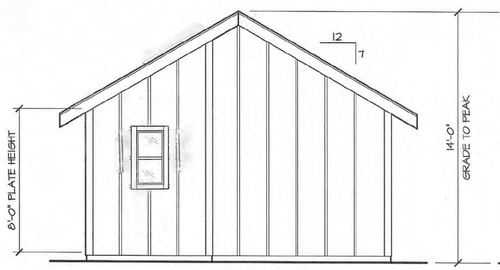
1.Board and Batten siding exterior walls, horizontal siding in gable ends
2.Class A Fire rated asphalt shingles
3.Grading to be sloped away from building
4. Wood trim around door and windows



WEST ELEVATION
LOOKING EAST



NORTH ELEVATION
LOOKING SOUTH



EAST ELEVATION
LOOKING WEST

SOUTH ELEVATION
LOOKING NORTH

ELEVATIONS

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

4' 0 4' 8'

This set of plans and specifications MUST be kept on the job at all times and it is unlawful to make any changes or alterations on same without written permission from the Building Inspection Dept., County of Ventura. The stamping of this plan and specifications SHALL NOT be held to permit or to be an approval of the violation of any provisions of any County Ordinance of State Law.

03/03/2022

APPROVED

Stephanie Medina
Division of Building and Safety

Revisions

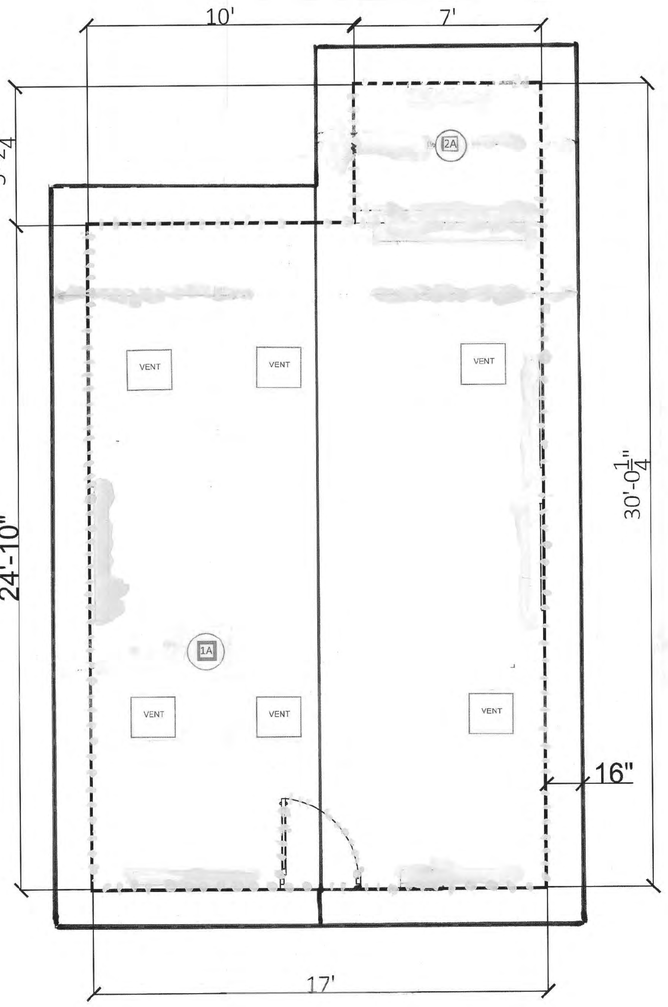
No.	Description	Date

APN: 017-0-144-090

FLOOR PLANS
ELEVATIONS
SECTIONS
C21-001401

PROPOSED CONSTRUCTION

DRAWN: CMS
CHECKED
DATE
SCALE: AS NOTED
JOB NO. -
SHEET: 3



Roof Plan

Scale: 3/8" = 1'0"

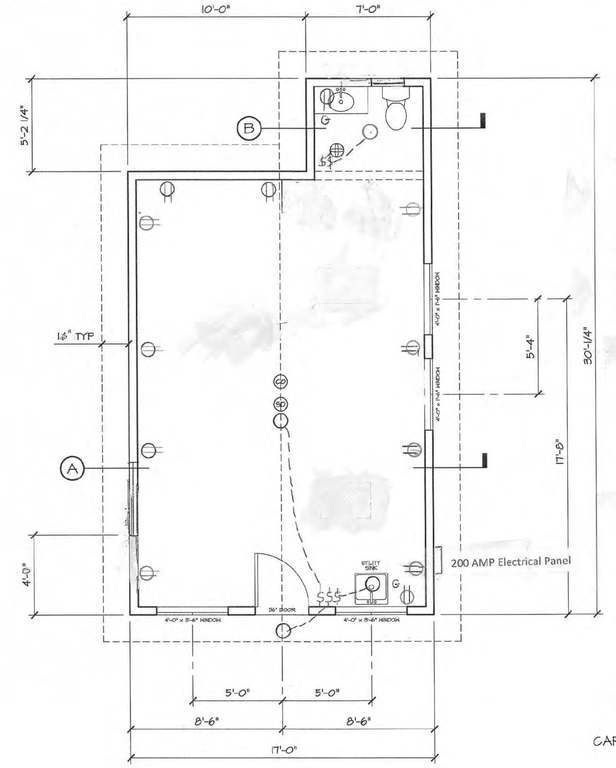
North

GENERAL NOTES
1. New Class A shingle roof
2. O'Hagen Standard Roof Vents
3. Gutters and downspouts provided

Ventilation
1. Mandatory minimum attic ventilation area is 1/300 of the area of the space ventilated for all enclosed rafter spaces. Class I or II vapor retainer is installed on the warm-in-winter side of the ceiling. At least 50% of the required ventilation must be a minimum of three feet above the eave.
2. Provide cross ventilation for each space between rafter openings and have a minimum opening of 1/16" and max 1/4". Minimum of 1" air space shall be provide between the insulation and the roof sheathing.

LIGHT TUBE SCHEDULE

Mark	Size	
1A	14" Dia.	Velux Sun Tube
2A	10" Dia.	Velux Sun Tube



ELECTRICAL GENERAL NOTES
1. All receptacle to be A.F.I. unless specified as G.F.I.
2. Provide bonding grounding electrode conductor per CEC Table 310.15.
3. This plan is not for construction; it is for design purposes only. This is a preliminary layout.
4. All 120v, 15 and 20 amp supplying outlets will be protected by a listed arc-fault circuit interrupter. Lighting circuits in bathroom will be arc fault protected as well.
5. Outlets adjacent to sink to be G.F.I. protected
6. Outlets will be tamper resistant.

Duplex Outlet
GFI Outlet
Single Pole Switch
Double Pole Switch
Triple Pole Switch
SMOKE DETECTOR
CARBON MONOXIDE ALARM
BATHROOM FAN

NORTH

ELECTRICAL PLAN NOTE: ALL WALL DIMENSIONS TO FACE OF STUD

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

4' 0 4' 8'

03/03/2022

APPROVED

Stephanie Medina
Division of Building and Safety

Revisions

No.	Description	Date

APN:
017-0-144-090

Roof Plan
ELECTRICAL PLAN
C21-0014010401

PROPOSED CONSTRUCTION

[redacted]

DRAWN
[redacted]
CHECKED
DATE
[redacted]
SCALE
AS NOTED
JOB NO.
[redacted]
SHEET
4

	ELEMENT/CONNECTION	FASTENER	LOCATION
	ROOF		
1.	Blocking between ceiling joists, rafters or trusses to top plate or other framing below	3 - 8d common (2½" × 0.131") 3-10d box (3"x0.128") 3 - 3"= 0.131" nails 3 - 3" 14 gage staples, 7/16" crown	Toenail each end
	Blocking between rafters or truss not at the wall top plate, to rafter or truss	2 - 8d common (2½" × 0.131") 2 - 3"= 0.131" nails 2 - 3" 14 gage staples	toenail each end
		2-16d common (3 ½"x0.162") 3-3"x0.131" nails 3-3" 14 gage staples	end nail
	Flat blocking to truss and web filler	16d common (3 ½"x0.162") @6" o.c. 3-3"x0.131" nails @ 6" o.c. 3-3" 14 gage staples @ 6" o.c.	Face nail
2.	Ceiling joists to top plate	3-8d common 3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Toenail each joist
3.	Ceiling joist not attached to parallel rafter, laps over partitions (no thrust) (Table and Section2308.7.3.1)	3-16d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Face nail
4.	Ceiling joists attached to parallel rafter (heel joint) (Table and Section2308.7.3.1)	Table 2308.7.3.1	Face nail
5.	Collar tie to rafter	3-10d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Face nail
6.	Rafter or roof truss to top plate (Table and section 2308.7.5)	3-10 common 3-16d box 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Toenail [c]
7.	Roof rafters to ridge valley	2-16d common	End nail
	or hip rafters; or roof rafter to 2" ridge beam	3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	
		3-10d common 3-16d box 4-10d box 4-3"x0.131" nails 4- 3" 14 gage staples, 7/16" crown	Toenail
	WALL		
8.	Stud to Stud (not at braced wall panels)	16d common	24" o.c. face nail
		10d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	16" o.c. face nail
9.	Stud to stud and abutting studs at intersecting wall corners (at **braced wall panels**)	16d common	16" o.c. face nail
		16d box	12" o.c. face nail
		3"x0.131" nails 3" 14 gage staples, 7/16" crown	12" o.c. face nail
10.	Built-up header	16d common	16" o.c. each edge, face nail
		16d box	12" o.c. each edge, face nail
11.	Continuous header to stud	4-8d common 4-10d box	Toenail
12.	Top plate to top plate	16d common	16" o.c. face nail
		10d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	12" o.c. face nail
13.	Top plate to top plate, at end joints	8-16d common 12-10d box 12-3"x0.131" nails 12-3" 14 gage staples, 7/16" crown	Each side of end joint, face nail (min 24" lap splice length each side of end joint)
14.	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common	16" o.c. face nail
		16d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	12" o.c. face nail
15.	Bottom plate to joist, rim joist, band joist or blocking at **braced wall panels**	2-16d common 3-16d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	16" o.c. face nail
16.	Stud to top or bottom plate	4-8d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Toenail
		2-16d common 3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	End nail

	ELEMENT/CONNECTION	FASTENER	LOCATION
17.	Top or bottom plate to stud	2-16d common 3-16d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	End nail
18.	Top plates, laps at corners and intersections	2-16d common 3-16d box 3- 3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Face nail
19.	1" brace to each stud and plate	2-8d common 2-10d box 2- 3"x0.131" nails 2- 3" 14 gage staples, 7/16" crown	Face nail
20.	1"x6" sheathing to each bearing	2-8d common 2-10d box	Face nail
21.	1"8" and wider sheathing to each bearing	3-8d common 3-10d box	Face nail
	FLOOR		
22.	Joist to sill, top plate, or girder	3-8d common 3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Toenail
23.	Rim joist, band joist, or blocking to top plate, sill or other framing below	8d common 10d box 3"x0.131" nails 3" 14 gage staples. 7/16" crown	6" o.c., toenail
24.	1"x6" subfloor or less to each joist	2-8d common 2-10d box	Face nail
25.	2" subfloor to joist or girder	2-16d common	Face nail
26.	2" plank	2-16d common	Each bearing, face nail
27.	Built up girders and beams, 2" lumber layers	20d common	32" o.c. face nail at top and bottom staggered on opposite sides
		10d box 3"x0.131" nails 3" 14 gage staples. 7/16" crown	24" o.c. face nail at top and bottom staggered on opposite sides
		And 2-20d common 3-10dbox 3- 3"x0.131" nails 3- 3" 14 gage staples, 7/16" crown	Ends and at each splice, face nail
28.	Ledger strip supporting joists or rafters	3-16d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Each joist or rafter, face nail
29.	Joist to band joist or rim joist	3-16d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	End nail
30.	Bridging or blocking to joist, rafter or truss	2-8d common 2-10d box 2-3"x0.131" nails 2-3" 14 gage staples, 7/16" crown	Each end, toenail
	WOOD STRUCTURAL PANS, SUB FLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING [a]		
31.	3/8"-1/2"	6d common or deformed (2"x0.113") (subfloor and wall)	6" edge 12" intermediate supports
		8d box or deformed (roof)	
		2 3/8"x0.113" nail (subfloor and wall)	
		1 ½" 16 gage staple, 7/16" crown	4" edge 8" intermediate supports
		2 3/8" x0.113" nail (roof)	
		1 ¾"16 gage staple, 7/16" crown (roof)	3" edge 6" intermediate supports
32.	19/32" -3/4"	8d common 6d deformed	6" edge 12" intermediate supports
		2 3/8"x0.113 nail	4" edge
		2" 16" gage staple. 7/16" crown	8" intermediate supports
33.	7/8" – 1/4"	10d common 8d deformed	6" edge 12" intermediate supports
	OTHER EXTERIOR WALL SHEATHING		
34.	1/2" fiberboard sheathing [b]	1 ½" galvanized roof nail 1 ¾" 16 gage staple with 7/16" or 1" crown	3" edge 6" intermediate supports
35.	25/32" fiberboard sheathing [b]	1 ¾" galvanized roof nail 1 ¾" 16 gage staple with 7/16" or 1" crown	3" edge 6" intermediate supports
	WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING		
36.	½" and less	8d common 6d deformed	6" edge 12" intermediate supports
37.	7/8"-1"	8d common 8d deformed	6" edge 12" intermediate supports
38.	1 1/8"-1 ¼"	10d common 8d deformed	6" edge 12" intermediate supports
	PANEL SIDING TO FRAMING		
39.	½" or less	6d corrosion-resistant siding 6d corrosion-resistant casing	6" edge 12" intermediate supports
40.	5/8"	8d corrosion-resistant siding 8d corrosion-resistant casing	6" edge 12" intermediate supports
	INTERIOR PANELING		
41.	½"	4d casing 4d finish	6" edge 12" intermediate supports
42.	3/8"	6d casing 6d finish	6" edge 12" intermediate supports

For SI: 1 inch = 25.4 mm.

a. Nails spaced at 6 inches at intermediate supports where spans are 48" or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing.

b. Spacing shall be 6 inches on center on the edges and 12 inches on center at intermediate supports for nonstructural applications. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked).

c. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule and the ceiling joist is fastened to the top plate in accordance with this schedule, the number of toenails in the rafters shall be permitted to be reduced by one nail.

** See Table 2304.10.1 for more information

FASTENERS USED IN PRESSURE TREATED LUMBER MUST BE APPROVED FOR USE WITH THE SPECIFIC TYPE OF PRESSURE TREATED LUMBER IN PLACE.

NOTES TO THE GENERAL CONTRACTOR/OWNER.

1. THE STRUCTURAL OBSERVATIONS ARE ADVISORY ONLY AND DO NOT BIND THE DEPARTMENT OR CERTIFY THAT THE WORK WILL PASS THE APPROPRIATE DEPARTMENT INSPECTION(S).
2. STRUCTURAL OBSERVATION DOES NOT CERTIFY, GUARANTEE OR ENSURE CONFORMANCE WITH THE APPROVED PLANS. IT DOES NOT PROVIDE THE QUALITY ASSURANCE OF CONTINUOUS INSPECTION. IT DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR PROGRESS, CALLED OR CONTINUOUS INSPECTIONS BY THE BUILDING INSPECTOR OR DEPUTY INSPECTOR. HOWEVER, STRUCTURAL OBSERVATION DOES PROVIDE ADDITIONAL REVIEW OF THE FIELD CONSTRUCTION TO SUBSTANTIALLY INCREASE THE LIKELIHOOD THAT THE STRUCTURAL SYSTEM WILL BE IN GENERAL CONFORMANCE WITH THE APPROVED

GENERAL NOTES

1. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS AS WELL AS CBC 2019 AND ALL APPLICABLE CODES.
2. DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL SAFETY PROVISIONS. ANY DEVIATION MUST BE APPROVED PRIOR TO ERECTION.
3. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED SUBJECT TO REVIEW BY THE ARCHITECT.
4. ALL DETAILS DESIGNATED AS STANDARD OR TYPICAL SHALL OCCUR IN ADDITION TO ANY OTHER SPECIFIC DETAIL CALLED OUT.
5. ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS, THEY SHALL BE REPORTED TO THE ARCHITECT SO THAT THE PROPER REVISIONS MAY BE MADE. MODIFICATION OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE ARCHITECT.
6. AFTER COMMENCEMENT OF WORK, ANY DELAYS, PROBLEMS OR FAULTS IN CONSTRUCTION DUE IN FULL OR PART TO ERRORS OR OMISSIONS IN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE PERSON RESPONSIBLE FOR PREPARING THE CONSTRUCTION DOCUMENTS. THE LIABILITY FOR ERRORS AND OMISSIONS IN THE CONSTRUCTION DOCUMENTS SHALL NOT EXCEED ANY FEES PAID TO THE THE PERSON RESPONSIBLE FOR PREPARING THE CONSTRUCTION DOCUMENTS.

MANUFACTURED LUMBER

1. TJI & TJL: ALL PLYWOOD WEB AND OPEN WEB JOISTS SPECIFIED ARE MANUFACTURED BY THE WEYERHAUSER CORP., ICC–ES ESR #1387, #1153.
2. MICROLLAM LVL: ALL MICROLLAMS SPECIFIED ARE MANUFACTURED BY THE WEYERHAUSER CORPORATION, ICC–ES ESR #1387.
3. PARALLAM PSL: ALL PARALLAMS SPECIFIED ARE MANUFACTURED BY THE TRUS JOIST MACMILLAN CORPORATION. ICC–ES ESR #1387.
4. TIMBERSTRAND LSL: ALL TIMBERSTRAND MEMBERS SPECIFIED ARE MANUFACTURED BY THE TRUS JOIST MACMILLAN CORPORATION, ICC–ES ESR #1387
5. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO THE APPROVAL OF THE ARCHITECT AND THE ENGINEER. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY INFORMATION TO THE ARCHITECT AND ENGINEER FOR APPROVAL.
6. TJI & TJL CROSS BRIDGING AND/OR BRACING SHALL BE PROVIDED AND DETAILED AS REQUIRED TO ADEQUATELY BRACE ALL JOISTS. BRIDGING SHOULD BE INSTALLED AS ERECTION PROCEEDS, AND TEMPORARY BRACING INSTALLED TO MAINTAIN ALIGNMENT AND PREVENT LATERAL MOVEMENT.
7. TJI & TJL TEMPORARILY REMOVING WEB MEMBERS AND DRILLING OR CUTTING CHORDS ARE NOT PERMITTED.
8. SHEATHING SHALL BE SECURELY FASTENED TO THE TOP CHORD. THE NAILING PATTERN SHALL BE STAGGERED TO AVOID SPLITTING AND TO ASSURE NAILING INTO EACH CHORD MEMBER.
9. COORDINATE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION AND WEIGHT OF MECHANICAL UNITS AND DESIGN MEMBERS ACCORDINGLY.

Structural Design Criteria-166 N. Encinal Ave.

CBC 2019, ASCE 7-16
Allowable Soil Bearing Pressure=1500 psf per County of Ventura Soils Waiver

Roof Live Load = 20 psf Dead Load = 12 psf

Wind Design
Ultimate Wind Design Speed= 93 mph, Nominal Wind Design Speed= 85 mph
Risk Category II
Wind Exposure = C
Design Wind Pressure Coefficient Windward Walls = 13.8 psf
Leeward Walls = 9.7 psf
Windward Roof = 9.7 psf
Leeward Roof = 11.04 psf
Internal Pressure Coefficient= GCpi=+0.18,-0.18

Seismic Design
Equivalent Lateral Force Procedure
Seismic Importance Factor I = 1.0
Risk Category = II
Seismic parameters per USGS website
Site Class = D default
Seismic Design Category = D
Sms= 2.24 g Sm1= g Ss=1.867 g S1=.707 g Sds=1.494 g Sd1=.822 g
Fa = 1.2 Fv= null
Basic shear force resisting system- light frame shear panels R=6.5
Cs=Sds/(R/I)= .230 W

FRAMING LUMBER

1. ALL STRUCTURAL LUMBER SHALL BE DOUGLAS FIR OF THE FOLLOWING GRADES, CONFORMING TO STANDARD GRADING RULES FOR WEST COAST LUMBER, NO. 16, UNLESS NOTED OTHERWISE:

   RAFTERS, JOISTS, PLATES NO. 2
   2x BEAMS, STRINGERS, AND HEADERS NO. 2
   4x,6x AND 8x BEAMS, STRINGERS, AND HEADERS NO. 1
   POSTS AND TIMBERS NO. 1
   STUDS CONSTRUCTION GRADE.
   BLOCKING, AND STRIPPING CONSTRUCTION GRADE.
2. PLYWOOD FOR ROOF SHEATHING SHALL BE CDX, UNLESS NOTED OTHERWISE. USE EXTERIOR TYPE, MINIMUM C–C GRADE, WHERE PLYWOOD IS EXPOSED TO WEATHER. PLYWOOD FOR FLOOR SHEATHING SHALL BE CDX, UNLESS NOTED OTHERWISE. ALL PLYWOOD SHALL CONFORM TO U.S. PRODUCT STANDARD PS 1–09. EACH SHEET OF PLYWOOD SHALL BE IDENTIFIED BY A REGISTERED STAMP OR BRAND OF THE DOUGLAS FIR PLYWOOD ASSOCIATION.
3. ALL WOOD BEARING ON CONCRETE SHALL BE BORATE PRESSURE TREATED DOUGLAS FIR.
4. STUDS OVER 10 FEET IN HEIGHT OR SUPPORTING 2 FLOORS AND A ROOF MUST BE 2x6's AT 16" O.C. UNLESS NOTED OTHERWISE. FOR STUDS GREATER THAN 16 FEET, SEE PLAN. STUDS IN CRIPPLE WALLS LESS THAN 4 FEET IN HEIGHT MAY MATCH THE STUDS ABOVE.
5. PROVIDE 2x SOLID BLOCKING BETWEEN JOISTS AND RAFTERS AT ALL SUPPORTS. BLOCKING SHALL BE ONE PIECE AND BE THE FULL DEPTH OF THE JOIST OR RAFTER.
6. CROSS BRIDGING SHALL BE PROVIDED AT 8'–0" ON CENTER MAXIMUM FOR ALL JOISTS AND RAFTERS MORE THAN 8" DEEP.
7. PROVIDE DOUBLE JOISTS UNDER PARTITIONS WHICH ARE PARALLEL TO THE JOISTS.
8. PROVIDE SOLID, FULL BLOCKING UNDER PARTITIONS WHICH ARE PERPENDICULAR TO THE JOISTS.
9. TOP PLATE OF ALL STUD WALLS SHALL BE TWO PIECES THE SAME SIZE AS THE STUDS. SPLICES ARE TO LAP 4'–0" MINIMUM AND BE NAILED WITH 12 16d NAILS MINIMUM EACH SIDE OF JOINT.
10. ALL NAILS SHALL BE COMMON, BOX OR SINKER. NAILING SHALL BE PER SPECIFIED IN CALIFORNIA BUILDING CODE.
11. BOLT HOLES IN WOOD SHALL BE 1/32" TO 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER. ALL BOLTS SHALL HAVE STANDARD CUT WASHER UNDER HEAD AND NUT UNLESS NOTED OTHERWISE.
12. ALL BOLTS SHALL BE RETIGHTENED PRIOR TO THE APPLICATION OF SHEATHING, PLASTER, ETC.
13. STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, ETC. UNLESS SPECIFICALLY DETAILED.
14. WOOD STUDS MAY BE NOTCHED TO A DEPTH OF 25% OF THE WIDTH MAXIMUM, EXCEPT INTERIOR NONBEARING STUDS WHICH MAY BE 40% OF THE WIDTH MAXIMUM. STUDS MAY BE BORED OR NOTCHED TO 40% OF THE WIDTH MAXIMUM, EXCEPT INTERIOR NONBEARING STUDS AND DOUBLED BEARING STUDS (PROVIDED NO MORE THAN TWO 25% SUCCESSIVE DOUBLED STUDS ARE BORED) WHICH MAY BE BORED TO 60% OF THE WIDTH MAXIMUM. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF A STUD AS A CUT OR NOTCH. IN NO CASE SHALL THE EDGE OF A BORED HOLE BE NEARER THAN 5/8" TO THE EDGE OF THE STUD.
15. PROVIDE FIRE STOPS AT ALL INTERSECTIONS OF STUD WALLS AT FLOOR, CEILING, AND ROOF. FIRE STOPS SHALL BE 2x NOMINAL THICKNESS OF WOOD AND SHALL BE THE FULL WIDTH OF THE ENCLOSED SPACE. PLACE FIRE STOPS AT A MAXIMUM SPACING OF 8'–0" IN EACH DIRECTION AND AT THE SAME LINES AS THE FIRE STOPS IN ADJACENT WALLS.
16. SOLID BLK'G SHALL BE PROVIDED AT ALL HORIZONTAL JOINTS OCCURING IN BRACED WALL PANELS

CONCRETE

1. ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL BE REGULAR WEIGHT, HARD ROCK TYPE (150 PCF). AGGREGATES SHALL CONFORM TO ASTM C33 WITH PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN 0.05%
2. ULTIMATE COMPRESSIVE STRENGTHS AT 28 DAYS SHALL BE:
   2500 PSI CONTINUOUS FTGS
   2500 PSI SLAB ON GRADE
   2500 PSI RETAINING WALLS
   2500 PSI PAD FOOTINGS
   3000 PSI GRADE BEAMS
3. CEMENT SHALL CONFORM TO ASTM C150, TYPE II.
4. PLACEMENT OF CONCRETE SHALL CONFORM WITH THE REQUIREMENTS OF ACI 301.
5. CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR A MINIMUM OF (5) FIVE DAYS AFTER PLACEMENT. ALTERNATE METHODS WILL BE APPROVED IF SATISFACTORY PERFORMANCE CAN BE ASSURED.
6. KEYED CONSTRUCTION JOINTS SHALL BE USED IN ALL CASES. ALL LAITANCE SHALL BE REMOVED. ALL VERTICAL JOINTS SHALL BE THOROUGHLY WETTED AND SLUSHED WITH A COAT OF NEAT CEMENT IMMEDIATELY BEFORE PLACING NEW CONCRETE.
7. ALL CONCRETE WITH A DESIGNATED STRENGTH GREATER THAN 2500 PSI SHALL REQUIRE CONTINUOUS INSPECTION BY AN INSPECTOR APPROVED BY THE BUILDING DEPARTMENT AND THE ARCHITECT.
8. MINIMUM CONCRETE COVERAGE OF REINFORCING STEEL SHALL BE AS FOLLOWS:

   CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO SOIL: 3"

   CONCRETE EXPOSED TO SOIL OR WEATHER:
   #5 BARS, W31 OR D31 WIRES, AND SMALLER 1–1/2"
   #6 BARS AND LARGER 2"

   CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH SOIL:
   SLABS, WALLS AND JOISTS:
   #11 BARS AND SMALLER 3/4"
   #14 BARS AND LARGER 1–1/2"

   BEAMS AND COLUMNS 1–1/2"
9. PIPES OTHER THAN ELECTRICAL CONDUITS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED.
10. BEFORE NEW CONCRETE IS DEPOSITED ON OR AGAINST CONCRETE WHICH IS SET, THE SURFACE OF THE SET CONCRETE SHALL BE ROUGHENED SUFFICIENTLY TO EXPOSE THE AGGREGATE APPROXIMATELY 1/4" AND CLEANED. USE EPOXY WHERE REQUIRED.

FOUNDATION NOTES

1. SOILS REPORT NOT REQUIRED. FOUNDATION DESIGN BASED ON CBC 2019, TABLE 1806.2 PRESUMPTIVE LOAD BEARING VALUES
2. ALLOWABLE SOIL BEARING PRESSURE = 1500 psf
3. VERTICAL EXCAVATIONS IN SOIL SHALL BE LIMITED TO 5 FEET. VERTICAL CUTS IN EXCESS OF 5 FT SHALL BE CUT BACK AT 1:1 SLOPE. WHERE IT IS IMPOSSIBLE TO SLOPE AT 1:1, THE A–B–C SLOT CUT PROCEDURES ARE TO BE USED.
4. MINIMUM SLAB ON GRADE CONSTRUCTION UNLESS NOTED OTHERWISE ON THE PLANS SHALL BE 4 INCH CONCRETE REINFORCED WITH #4 @ 18" O.C. OVER 2 INCHES OF SAND OVER 10 mil VISQUEEN MOISTURE BARRIER OVER 4 INCH THICK CALTRANS CLASS 2 BASE LAYER OVER COMPACTED SUBGRADE.

MASONRY AND STONE VENEERS

1. THIS SECTION APPLIES TO VENEERS OF 5" THICKNESS MAXIMUM ACCORDING TO CBC 2019, CHAPTER 14.
2. WHERE ANCHORED VENEER IS APPLIED MORE THAN 25 FEET ABOVE ADJACENT GROUND, IT SHALL BE SUPPORTED BY NONCOMBUSTIBLE, CORROSIVE–RESISTANT, STRUCTURAL FRAMING HAVING HORIZONTAL SUPPORTS SPACED A MAXIMUM OF 12 FEET O.C. VERTICALLY.
3. NONCOMBUSTIBLE, NONCORROSIVE LINTELS AND NONCOMBUSTIBLE SUPPORTS SHALL BE PROVIDED OVER ALL OPENINGS WHERE THE VENEER IS NOT SELF SPANNING.
4. MASONRY SHALL BE ANCHORED DIRECTLY TO STRUCTURAL MASONRY, CONCRETE, OR STUDS ACCORDING TO THE FOLLOWING:
   A. ANCHOR TIES SHALL BE CORROSIVE RESISTANT 22 GA. X 1" WIDE STEEL STRAPS SPACED TO SUPPORT NOT MORE THAN 2 SQUARE FEET OF WALL WITH A MAXIMUM HORIZONTAL SPACING OF 16".
   B. ANCHOR TIES SHALL BE ATTACHED TO NO. 9 GAUGE WIRE HORIZONTAL JOINT REINFORCING.
   C. WOOD STUDS SHALL BE SPACED AT 16" MAXIMUM AND 2 LAYERS OF APPROVED PAPER SHALL FIRST BE APPLIED OVER THE SHEATHING OR WIRES BETWEEN STUDS. MORTAR SHALL BE SLUSHED INTO THE 1" SPACE BETWEEN FACING AND PAPER.

CONCRETE ANCHORS

1. ALL EPOXY ANCHORS SPECIFIED ON THE PLANS SHALL BE BY ONE OF THE FOLLOWING MANUFACTURES AND SHOULD BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS:
   SIMPSON STRONG–TIE "SET XP EPOXY" ADHESIVE ANCHOR
2. CONTINUOUS SPECIAL INSPECTION BY A REGISTERED DEPUTY INSPECTOR ARE REQUIRED FOR ALL EPOXY ANCHOR INSTALLATIONS.
3. POST INSTALLED MECHANICAL ANCHORS SHALL BE SIMPSON TITEN HD, ICC–ER–ES # 2713

REINFORCING STEEL

1. ALL REINFORCING STEEL, DOWELS, AND TIES SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE. #3 BARS SHALL BE ASTM A615, GRADE 40.
2. ALL REINFORCING STEEL SHALL BE LAPPED AS INDICATED ON THE DRAWINGS. WHERE LAPS AND/OR SPLICE LOCATIONS ARE NOT SPECIFICALLY INDICATED, VERIFY WITH THE ENGINEER IF A SPLICE CAN BE PROVIDED. ALL REINFORCING STEEL SHALL BE LAPPED WITH A CLASS "B" LAP UNLESS NOTED OTHERWISE. ALL SPLICE LOCATIONS SHALL BE SHOWN ON SHOP DRAWINGS AND APPROVED PRIOR TO FABRICATION.
3. ALL REINFORCING STEEL IN MASONRY SHALL BE LAPPED 40 BAR DIAMETERS OR TWO (2) FEET MINIMUM, UNLESS NOTED OTHERWISE.

STRUCTURAL STEEL

A. HSS COLUMNS AND BEAMS – ASTM A500 GRADE B
B. W BEAMS – ASTM A992 GRADE 50
C. PLATES, ANGLE – ASTM A36
D. BOLTS – ASTM A307
E. ALL STEEL TO HAVE RUST INHIBITIVE PRIMER
F. ALL WELDING TO COMPLY WITH AWS SPECIFICATIONS. WELDS MUST BE DONE IN A SHOP OF A LICENSED FABRICATOR.
G. CONTINUOUS DEPUTY INSPECTION IS REQUIRED FOR ALL FIELD WELDS.

03/03/2022

APPROVED

COUNTY OF VENTURA CALIFORNIA

Stephanie Medina
Division of Building and Safety

Revisions

No.	Description	Date

Lama B. Reader P.E.
Structural Design and Consulting
Civil Engineer, C.E. #59400
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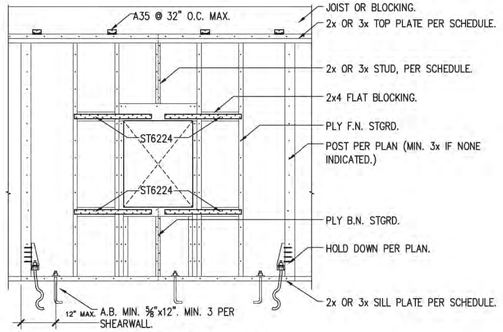
REGISTERED PROFESSIONAL ENGINEER
LAMA B. READER
No. 39400
Exp. 12/31/21
CIVIL
STATE OF CALIFORNIA

STANDARD STRUCTURAL DETAILS

PROPOSED CONSTRUCTION

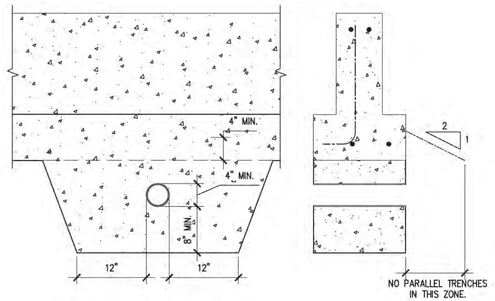
C21-001401

DRAWN: CMS
CHECKED:
DATE: 11–04–2021
SCALE: AS NOTED
JOB NO.: 21–10–20
SHEET: S0.1



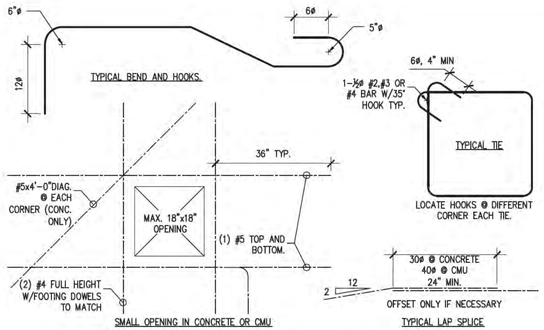
13 TYPICAL SHEARWALL

½"=1'-0"



9 PIPE TRENCH AT FOOTING

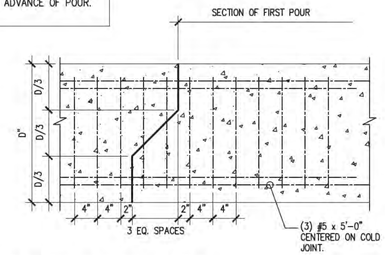
1"=1'-0"



5 REINF. BENDS, LAPS & SPLICES

1"=1'-0"

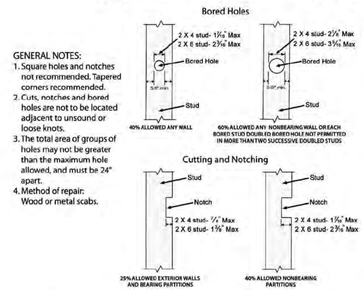
NOTE:
POUR JOINT TO BE IN MIDDLE THIRD OF GRADE BEAM SPAN. LOCATION OF ALL GRADE BEAM POUR JOINTS TO BE DETERMINED AND ACCEPTED BY OWNERS REPRESENTATIVE IN ADVANCE OF POUR.



1 GRADE BEAM POUR JOINT

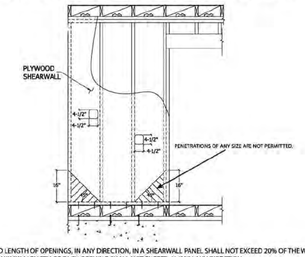
1"=1'-0"

CUTS, NOTCHES AND BORED HOLES IN STUDS



GENERAL NOTES:
1. Square holes and notches not recommended. Tapered corners recommended.
2. Cuts, notches and bored holes are not to be located adjacent to unsound or loose knots.
3. The total area of groups of holes may not be greater than the maximum hole allowed, and must be 24" apart.
4. Method of repair: Wood or metal scabs.

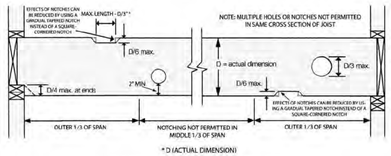
MECHANICAL PENETRATIONS OF WOOD SHEARWALL PANELS:



THE MAXIMUM ACCUMULATED LENGTH OF OPENINGS, IN ANY DIRECTION, IN A SHEARWALL PANEL SHALL NOT EXCEED 20% OF THE WALL LENGTH. IN A 4' PANEL, THE MAXIMUM LENGTH OF EACH OPENING SHALL NOT EXCEED 41/2" IN ANY DIRECTION.

(2) - 41/2" WIDE CUTS = 9" IN A 4' PANEL. THE 20% ALLOWABLE EQUALS 9.6" (NO CUTS OR HOLES IN SHEATHING WITHIN 16" OF CORNERS)

CUTS, NOTCHES AND BORED HOLES IN JOISTS & RAFTERS

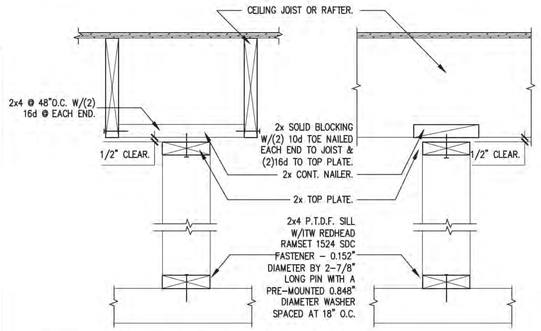


* D (ACTUAL DIMENSION)

MAXIMUM SIZES FOR CUTS IN FLOOR JOISTS

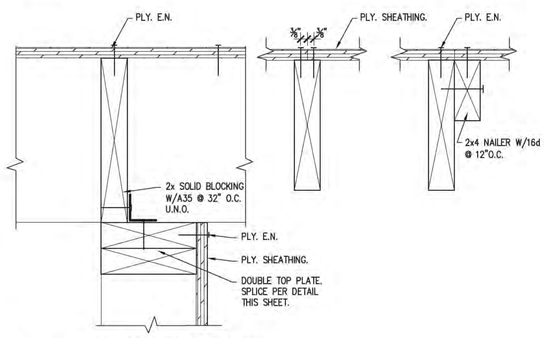
Joist Size	Max. Hole	Max Notch Depth	Max. End Notch
2x4	none	none	none
2x6	1-1/2"	7/8"	1-3/8"
2x8	2-3/8"	1-1/4"	1-7/8"
2x10	3"	1-1/2"	2-3/8"
2x12	3-3/4"	1-7/8"	2-7/8"

GENERAL NOTES:
1. Square holes and notches not recommended. Tapered corners recommended.
2. Cuts, notches and bored holes are not to be located adjacent to unsound or loose knots.
3. The total area of groups of holes may not be greater than the maximum hole allowed, and must be 24" apart.



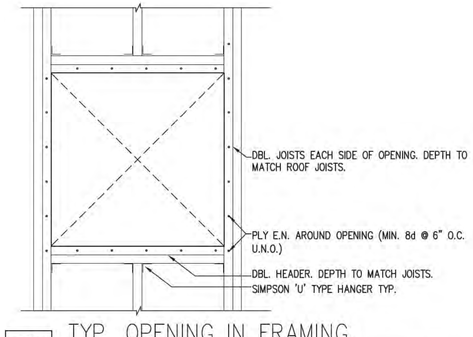
10 NON-BEARING PARTITION

1-½"=1'-0"



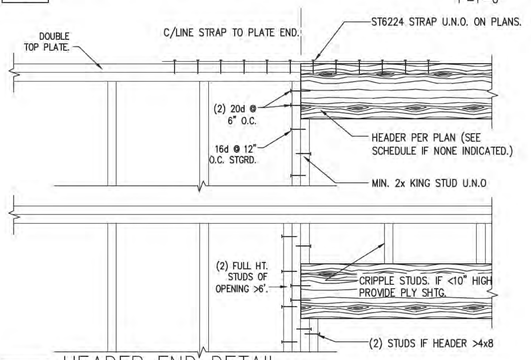
11 SHEAR TRANSFER

3"=1'-0"



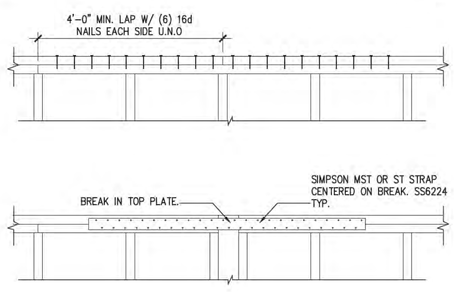
12 TYP. OPENING IN FRAMING

1"=1'-0"



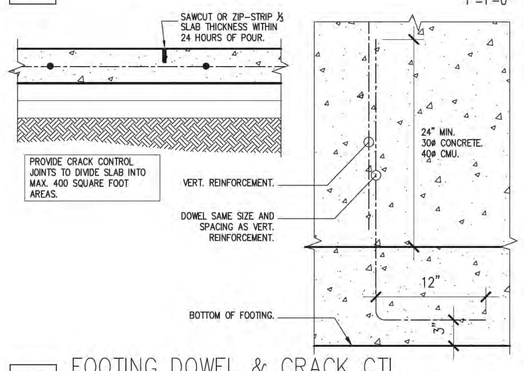
6 HEADER END DETAIL

1"=1'-0"



7 TOP PLATE SPLICE

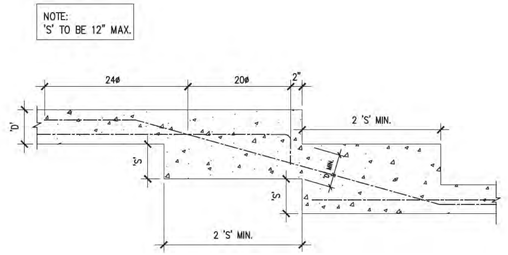
1"=1'-0"



8 FOOTING DOWEL & CRACK CTL

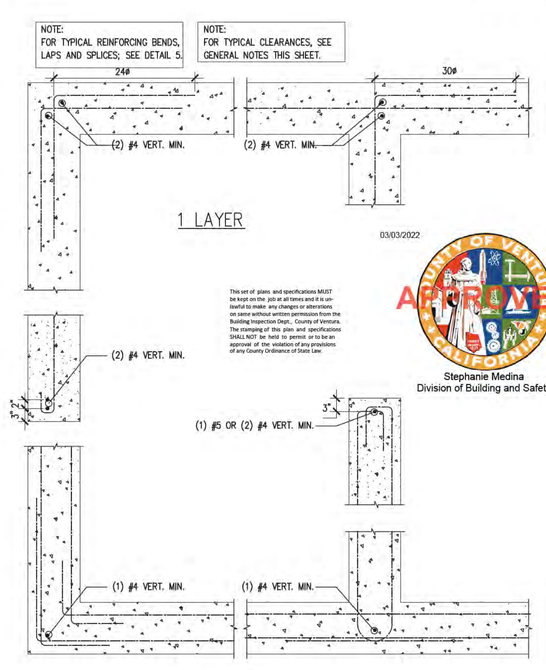
1-½"=1'-0"

NOTE:
'S' TO BE 12" MAX.



2 STEPPED FOOTING

1"=1'-0"



4 REINFORCEMENT @ CORNERS

¾"=1'-0"

03/03/2022

APPROVED
COUNTY OF VENTURA CALIFORNIA

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Stephanie Medina
Division of Building and Safety

Revisions

No.	Description	Date

Laima B. Reader, P.E.
Structural Design and Consulting
Civil Engineer C.E. #39400
805 985 1700 reader.lbr@gmail.com

REGISTERED PROFESSIONAL ENGINEER
LAIMA B. READER
No. 39400
Exp. 12/31/21
CIVIL
STATE OF CALIFORNIA

STANDARD STRUCTURAL DETAILS

PROPOSED CONSTRUCTION

C21-001401

DRAWN	CMS
CHECKED	
DATE	11-04-2021
SCALE	AS NOTED
JOB NO.	21-10-20
SHEET	S0.2

Shearwall Schedule

Sym	Sheathing and Nailing	Sill Anchorage	A35	Remarks
6	15/32" Struc 1 Ply (32/16) With 10d @ 6,6,12 v allow = 340 plf	5/8" dia. A.B. @ 32" o.c.	16" o.c.	
WSW1	Simpson strongwall WSW 12 x 8 V allow = 1030#	(2)7/8" dia. Std. all-thrd	16" o.c.	Install per ICC-ES ESR 2652

Plywood per PS 1-09 or OSB per PS 2-10. Nails to be 3/8 from edge of ply panel.
All plywood to be APA rated 5-ply. Use full panels wherever possible.
No ply panels less than 24" width allowed.
8d common nails- .131" x 2 1/2"
10d common nails- .148" x 2 3/8"

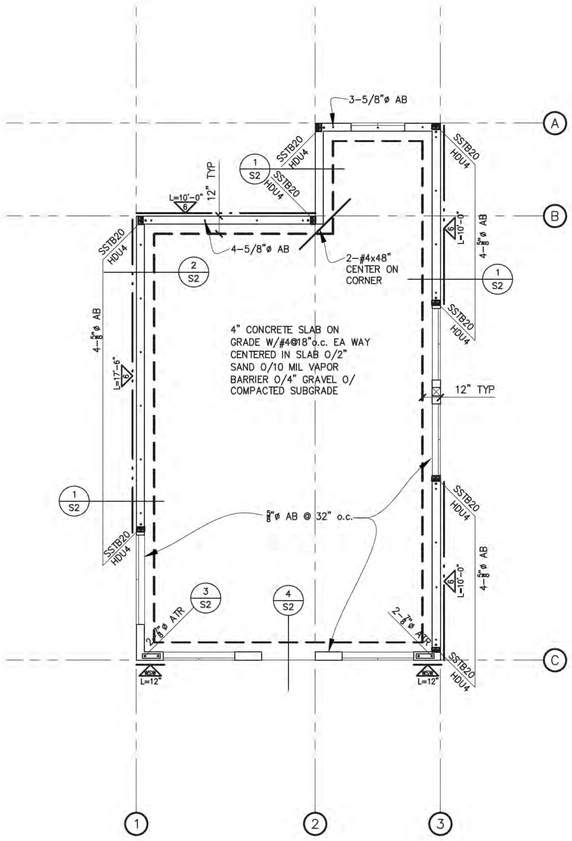
Structural Design Criteria-166 N. Encinal Ave.

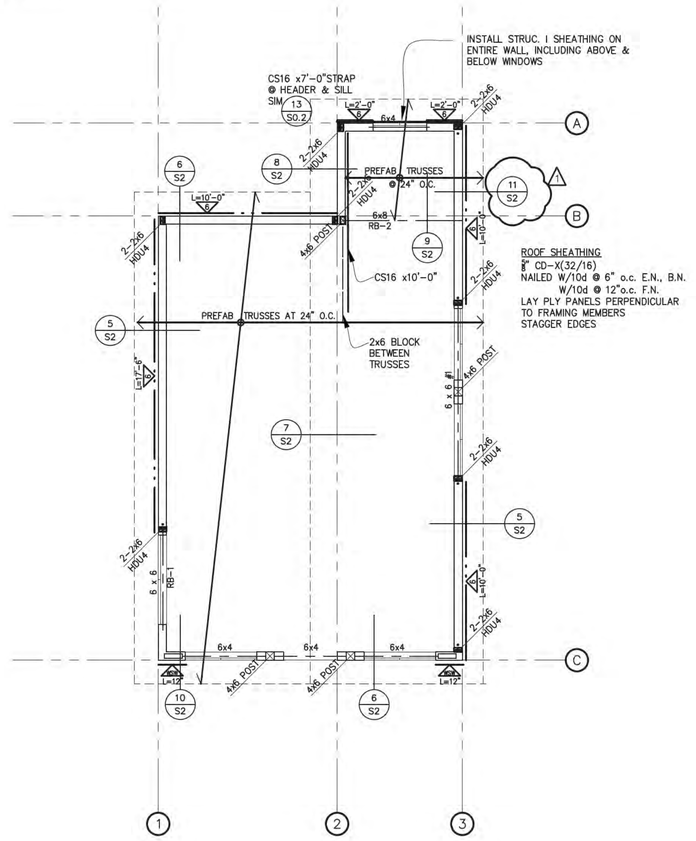
CBC 2019, ASCE 7-16
Allowable Soil Bearing Pressure=1500 psf per County of Ventura Soils Waiver

Roof Live Load = 20 psf Dead Load = 12 psf

Wind Design
Ultimate Wind Design Speed= 93 mph, Nominal Wind Design Speed= 85 mph
Risk Category II
Wind Exposure = C
Design Wind Pressure Coefficient Windward Walls = 13.8 psf
Leeward Walls = 9.7 psf
Windward Roof = 9.7 psf
Leeward Roof = 11.04 psf
Internal Pressure Coefficient= GCpi=+0.18,-0.18

Seismic Design
Equivalent Lateral Force Procedure
Seismic Importance Factor I = 1.0
Risk Category = II
Seismic parameters per USGS website
Site Class = D default
Seismic Design Category = D
Sms= 2.24 g Sm1= g Ss=1.867 g S1=.707 g Sds=1.494 g Sd1=.822 g
Fa = 1.2 Fv= null
Basic shear force resisting system- light frame shear panels R=6.5
Cs=Sds/(R/I)= .230 W





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

FOUNDATION NOTES:
1. PREPARE SITE PER APPROVED "FOUNDATION AND SOILS INVESTIGATION WAIVER REQUEST" FROM VENTURA COUNTY.
   a. PROPOSED FLOOR AREA DOES NOT EXCEED 1000 sf
   b. PROPOSED CONSTRUCTION IS ON AN EXISTING NATURAL, LEVEL LOT WITH NO FILL
2. ALL HOLDOWN ANCHORS TO BE SET IN PLACE BY TEMPLATE PRIOR TO FOUNDATION INSPECTION..

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

03/03/2022
APPROVED
Stephanie Medina
Division of Building and Safety

Revisions

No.	Description	Date
1	PLAN CHECK	2.8.22

Laima B. Reeder, P.E.
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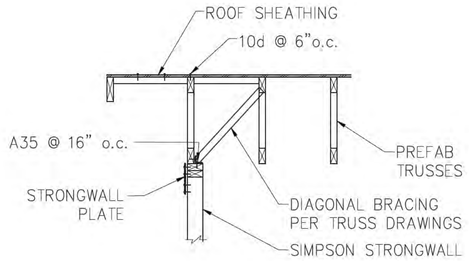
REGISTERED PROFESSIONAL ENGINEER LAIMA B. REEDER No. 39400 Exp. 12/31/21 CIVIL STATE OF CALIFORNIA

FOUNDATION PLAN
C21-001401

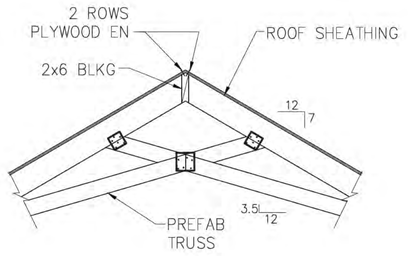
PROPOSED CONSTRUCTION

DRAWN: LMM
CHECKED:
DATE: 11-04-2021
SCALE: AS NOTED
JOB NO.: 21-10-20
SHEET: S1



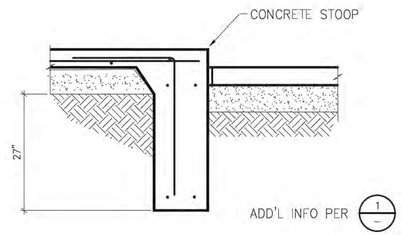
10 STRONGWALL

3/4"=1'-0"



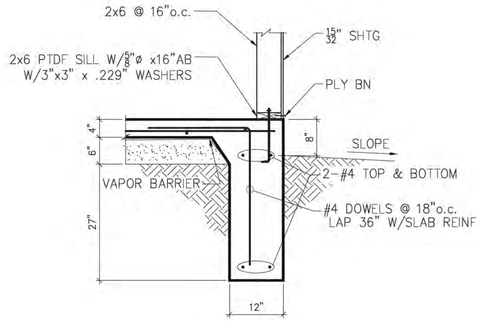
7 RIDGE BOARD

3/4"=1'-0"



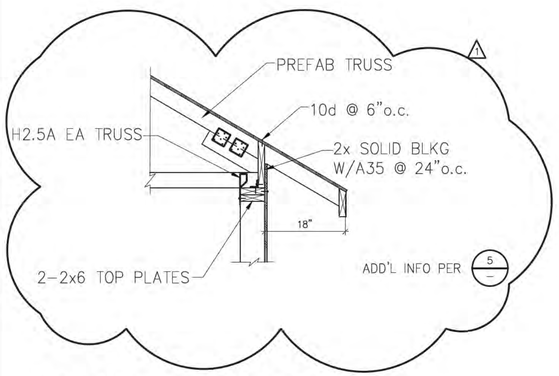
4 EXTERIOR FOOTING

3/4"=1'-0"



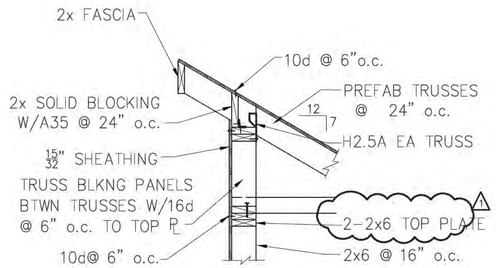
1 EXTERIOR FOOTING

3/4"=1'-0"



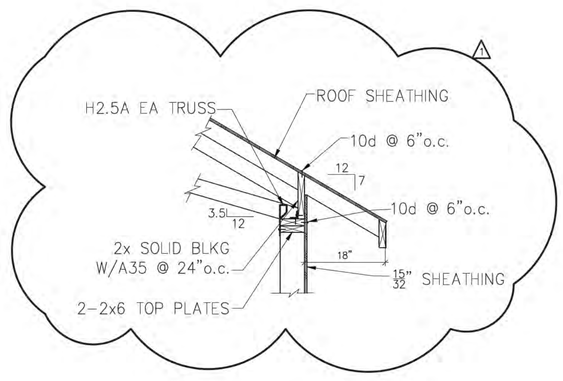
5 EAVE AT SCISSORS TRUSS

3/4"=1'-0"



8 EAVE AT HIGH SIDE

3/4"=1'-0"



5 EAVE AT SCISSORS TRUSS

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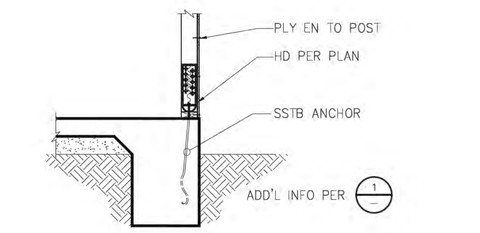
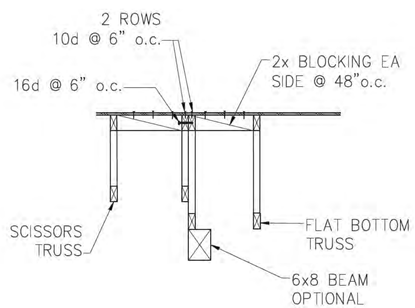


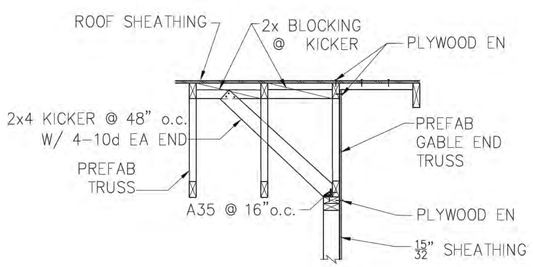
2 HOLDOWN

3/4"=1'-0"



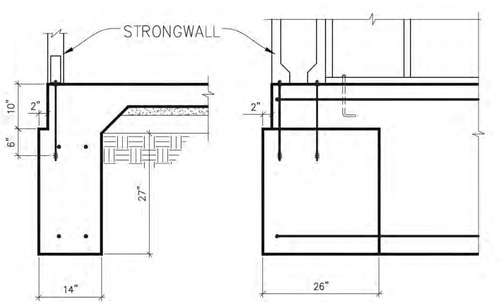
9 ROOF TRANSITION

3/4"=1'-0"



6 TYPICAL RAKE

3/4"=1'-0"



3 STRONGWALL FOUNDATION

3/4"=1'-0"

03/03/2022

APPROVED

COUNTY OF VENTURA CALIFORNIA

Stephanie Medina
Division of Building and Safety

Revisions		
No.	Description	Date
1	PLAN CHECK	2.8.22

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STATE OF CALIFORNIA

STRUCTURAL DETAILS

C21-001401

PROPOSED CONSTRUCTION

DRAWN: LMM
CHECKED:
DATE: 11-04-2021
SCALE: AS NOTED
JOB NO.: 21-10-20
SHEET: S2

03/03/2022

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APPROVED

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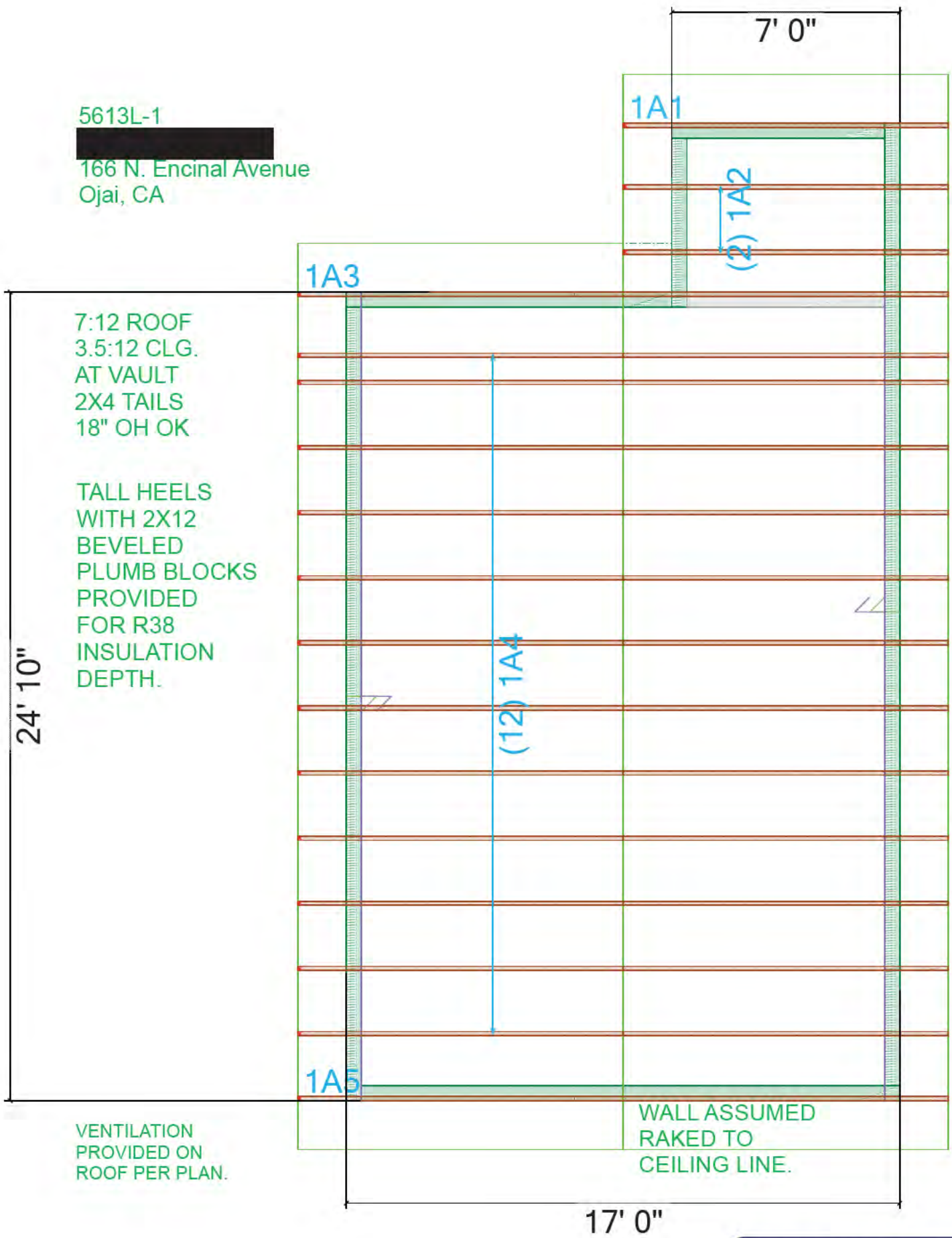
Division of Building and Safety

C21-001401

5613L-1
[redacted]
166 N. Encinal Avenue
Ojai, CA



REVIEWED
By Laima Reeder at 3:12 pm, Feb 18, 2022

GENERAL INFORMATION

01	Project Name	New Accessory Structure Unit			
02	Run Title	Title 24 Analysis			
03	Project Location	166 North Encinal Avenue			
04	City	Ojai	05	Standards Version	2019
06	Zip code	93023	07	Software Version	EnergyPro 8.2
08	Climate Zone	16	09	Front Orientation (deg/ Cardinal)	282
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	AdditionOnly	13	Number of Bedrooms	4
14	Addition Cond. Floor Area (ft²)	458	15	Number of Stories	1
16	Existing Cond. Floor Area (ft²)	1815	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft²)	2273	19	Glazing Percentage (%)	15.72%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Is Natural Gas Available?	Yes			

Addition Alone Project Analysis Parameters

01	02	03	04	05	06
Existing Area (excl. new addition) (ft2)	Addition Area (excl. existing) (ft2)	Total Area (ft2)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms
1815	458	2273	4	0	4

COMPLIANCE RESULTS

01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	This building incorporates one or more Special Features shown below

ENERGY USE SUMMARY

Energy Use (kTDV/ft²-yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement
Space Heating	82.65	82.61	0.04	0
Space Cooling	4.49	7.11	-2.62	-58.4
IAQ Ventilation	0	0	0	
Water Heating	45 07	40.65	4.42	9.8
Self Utilization/Flexibility Credit	n/a	0	0	n/a
Compliance Energy Total	**132.21**	**130.37**	**1.84**	**1.4**

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

- Variable capacity heat pump compliance option (verification details from VCHP Staff report, Appendix B, and RA3)

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

Building-level Verifications:
- Quality insulation installation (QII)

Cooling System Verifications:
- Verified Refrigerant Charge
- Airflow in habitable rooms (SC3.1.4.1.7)

Heating System Verifications:
- Verified heat pump rated heating capacity
- Wall-mounted thermostat in zones greater than 150 ft2 (SC3.4 5)
- Ductless indoor units located entirely in conditioned space (SC3.1.4.1.8)

HVAC Distribution System Verifications:
- -- None --

Domestic Hot Water System Verifications:
- -- None --

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
New	Conditioned	Heating/Cooling1	458	10 5	DHW Sys 1	N/A

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status
North Frame Wall	New	R-21 Wall	12	Left	260.8	6	90	none	New
East Frame Wall	New	R-21 Wall	102	Back	177.6	6	90	none	New
South Frame Wall	New	R-21 Wall	192	Right	240.2	12	90	none	New
West Frame Wall	New	R-21 Wall	282	Front	177.6	48	90	none	New

OPAQUE SURFACES - CATHEDRAL CEILINGS

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Area (ft²)	Skylight Area (ft²)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof
R-30 Roof Cathe.	New	R-30 Roof Cathedral	0	n/a	481	0	7	0.1	0.85	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
Window 6 slid	Window	North Frame Wall	Left	12			1	6	0.3	NFRC	0.45	NFRC	Bug Screen
Window 1 sglhg	Window	East Frame Wall	Back	102			1	6	0.3	NFRC	0.45	NFRC	Bug Screen
Window 2 slid	Window	South Frame Wall	Right	192			1	6	0.3	NFRC	0.45	NFRC	Bug Screen
Window 3 slid	Window	South Frame Wall	Right	192			1	6	0.3	NFRC	0.45	NFRC	Bug Screen

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
Window 4 sglhg	Window	West Frame Wall	Front	282			1	14	0.3	NFRC	0.45	NFRC	Bug Screen
Window 5 sglhg	Window	West Frame Wall	Front	282			1	14	0.3	NFRC	0.45	NFRC	Bug Screen
Door A swg	Window	West Frame Wall	Front	282			1	20	0.3	NFRC	0.45	NFRC	Bug Screen

SLAB FLOORS

01	02	03	04	05	06	07	08
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab-on-Grade	New	458	94	none	0	80%	No

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.069	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: 3 Coat Stucco
R-30 Roof Cathedral	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 16 in. O. C.	R-30	None / None	0.037	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-30 / 2x10 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50
Required	Not Required	Not Required	n/a

WATER HEATING SYSTEMS

01	02	03	04	05	06	07
Name	System Type	Distribution Type	Water Heater Name (#)	Solar Heating System	Compact Distribution	HERS Verification
DHW Sys 1	Domestic Hot Water (DHW)	Standard Distribution System	DHW Heater 1 (1)	n/a	None	n/a

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Energy Factor or Efficiency	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	NEEA Heat Pump Brand or Model	Tank Location or Ambient Condition	Status	Verified Existing Condition
DHW Heater 1	Gas	Consumer Instantaneous	1	0	0.93-UEF	<= 200 kBtu/hr	0	n/a	n/a	n/a	n/a	New	n/a

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07	08
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Central DHW Distribution	Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required	Not Required

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Heating Equipment Count	Cooling Equipment Count
Heating/Cooling1	Heat pump heating cooling	Heat Pump System 1	Heat Pump System 1	n/a	n/a	Setback	New	NA	1	1

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Number of Units	Heating		Cooling		Zonally Controlled	Compressor Type	HERS Verification
			HSPF/COP	Cap 47	Cap 17	SEER	EER/CEER			
Heat Pump System 1	VCHP-ductless	1	8 2	17000	12750	14	11.7	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER	Verified SEER	Verified Refrigerant Charge	Verified HSPF	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-htpump	Not Required	0	Not Required	Not Required	Yes	No	Yes	Yes

VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09	10
Name	Certified Low-Static VCHP System	Airflow to Habitable Rooms	Ductless Units in Conditioned Space	Wall Mount Thermostat	Air Filter Sizing & Pressure Drop Rating	Low Leakage Ducts in Conditioned Space	Minimum Airflow per RA3.3 and SC3.3.3.4.1	Certified non-continuous Fan	Indoor Fan not Running Continuously
Heat Pump System 1	Not required	Required	Required	Required	Not required	Not required	Not required	Not required	Not required

PROJECT NOTES

TITLE 24 ENERGY ANALYSIS
C21-001401

DRAWN BY
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DATE
SCALE
JOB NO.
SHEET
T24-1
OF 2 SHEETS

Attached Heating & Cooling load summary is submitted as part of the calculations required by the current regulations. DO NOT USE FOR ACTUAL HEATING & AC DESIGN.

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Marcos Rendon	Marcos Rendon
Company: Solargy, Inc.	**Signature Date:** 12/08/2021
Address: 22028 Ventura Blvd Suite 207	**CEA/ HERS Certification Identification (If applicable):**
City/State/Zip: Woodland Hills, CA 91364	**Phone:** 818-347-6096

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.
2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Responsible Designer Name:	Responsible Designer Signature:
[redacted]	[redacted]
Company: [redacted]	**Date Signed:** 12/08/2021
Address: 166 North Encinal Avenue	**License:**
City/State/Zip: Ojai, CA 93023	**Phone:** [redacted]

Digitally signed by ConSol Home Energy Efficiency Rating System Services, Inc. (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

RESIDENTIAL MEASURES SUMMARY — RMS-1

Project Name	Building Type			Date
New Accessory Structure Unit	☑ Single Family ☐ Multi Family	☑ Addition Alone ☐ Existing+ Addition/Alteration		*12/8/2021*
Project Address	**California Energy Climate Zone**	**Total Cond. Floor Area**	**Addition**	**# of Units**
166 North Encinal Avenue Ojai	*CA Climate Zone 16*	*458*	*458*	*1*

INSULATION

Construction	Type	Cavity	Area (ft^2)	Special Features	Status
Roof	*Wood Framed Rafter*	*R 30*	*481*		*New*
Wall	*Wood Framed*	*R 21*	*784*		*New*
Slab	*Unheated Slab-on-Grade*	*- no insulation*	*458*	*Perim = 94*	*New*

FENESTRATION — Total Area: *72* | Glazing Percentage: *15.7%* | New/Altered Average U-Factor: *0.30*

Orientation	Area(ft^2)	U-Fac	SHGC	Overhang	Sidefins	Exterior Shades	Status
Left (N)	*6.0*	*0.300*	*0.45*	*none*	*none*	*N/A*	*New*
Rear (E)	*6.0*	*0.300*	*0.45*	*none*	*none*	*N/A*	*New*
Right (S)	*12.0*	*0.300*	*0.45*	*none*	*none*	*N/A*	*New*
Front (W)	*28.0*	*0.300*	*0.45*	*none*	*none*	*N/A*	*New*
Front (W)	*20.0*	*0.300*	*0.45*	*none*	*none*	*N/A*	*New*

HVAC SYSTEMS

Qty.	Heating	Min. Eff	Cooling	Min. Eff	Thermostat	Status
1	*Split Heat Pump*	*8.20 HSPF*	*Split Heat Pump*	*14.0 SEER*	*Setback*	*New*

HVAC DISTRIBUTION

Location	Heating	Cooling	Duct Location	Duct R-Value	Status
Heating/Cooling	*Ductless / with Fan*	*Ductless*	*n/a*	*n/a*	*New*

WATER HEATING

Qty.	Type	Gallons	Min. Eff	Distribution	Status
1	*Small Instantaneous Gas*	*0*	*0.93*	*Standard*	*New*

TITLE 24 ENERGY ANALYSIS

C21-001401

DRAWN BY
CHECKED BY
DATE
SCALE
JOB NO.
SHEET

T24-2

OF 2 SHEETS

General Notes

1. Compliance information The builder shall leave in the building, copies of the completed, signed and submitted compliance documents for the building owner at occupancy. For low-rise residential buildings, such information shall, at a minimum, include copies of all Certificate of Compliance, Certificate of Installation, and Certificate of Verification documentation submitted. . [10-103(b)1]

2. Operating information. The builder shall provide the building owner at occupancy, operating information for all applicable features, materials, components, and mechanical devices installed in the building. Operating information shall include instructions on how to operate the features, materials, components, and mechanical devices correctly and efficiently. The instructions shall be consistent with specifications set forth by the Executive Director. For residential buildings, such information shall be contained in a folder or manual which provides all Certificate of Compliance, Certificate of Installation, and Certificate of Verification documentations. This operating information shall be in paper or electronic format. [10-103(b)2]

3. Maintenance information. The builder shall provide to the building owner at occupancy, maintenance information for all features, materials, components, and manufactured devices that require routine maintenance for efficient operation. Required routine maintenance actions shall be clearly stated and incorporated on a readily accessible label. The label may be limited to identifying, by title and/or publication number, the operation and maintenance manual for that particular model and type of feature, material, component or manufactured device. [10-103(b)3]

4. Ventilation information. The builder shall provide to the building owner at occupancy, a description of the quantities of outdoor air that the ventilation system(s) are designed to provide to the building's conditioned space, and instructions for proper operation and maintenance of the ventilation system. [10-103(b)4]

5. All systems, equipment, appliances and building components shall comply with the applicable manufacturing, construction, and installation provisions of Sections 110.0 through 110.11 for newly constructed buildings.

6. Any appliance regulated by the Appliance Efficiency Regulations, Title 20 California Code of Regulations, Section 1601 et seq., may be installed only if the appliance fully complies with Section 1608(a) of those regulations. [110.1(a)]

7. Service water-heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use as listed in Table 3, Chapter 50 of the ASHRAE Handbook, HVAC Applications Volume. [110.3(a)1]

8. On systems that have a total capacity greater than 167,000 Btu/hr, outlets that require higher than service water temperatures as listed in the ASHRAE Handbook, Applications Volume, shall have separate remote heaters, heat exchangers, or boosters to supply the outlet with the higher temperature. [110.3(c)1]

9. Service hot water systems with circulating pumps or with electrical heat trace systems shall be capable of automatically turning off the system. [110.3(c)2]

10. Controls for service water-heating systems shall limit the outlet temperature at public lavatories to 110°F. [110.3(c)3]

11. Unfired service water-heater storage tanks and backup tanks for solar water-heating systems shall have:

a. External insulation with an installed R-value of at least R-12, or

b. Internal and external insulation with a combined R-value of at least R-16, or

c. The heat loss of the tank surface based on an 80°F water-air temperature difference shall be less than 6.5 Btu/hr per square foot. [110.3 (c/c)4]

12. For Nonresidential, high-rise residential, and hotel/motel buildings, space conditioning systems shall meet the efficiency standards specified Section 120.2.

13. Continuously burning pilot light shall be prohibited for the following natural gas system or equipment listed below: [110.5]

a. Fan-type central furnaces

b. Household cooking appliances, except for household cooking appliances without an electrical supply voltage connection and in which each pilot consumes less than 150 Btu/hr

c. Pool heaters d. Spa heaters

14. Any pool or spa heating system or equipment shall: [110.4]

a. A thermal efficiency that complies with the Appliance Efficiency Regulations

b. Have a readily accessible on-off switch, mounted on the outside of the heater that allows shutting off the heater without adjusting the thermostat setting.

c. Not utilize electric resistance heating.

d. Have a cover for outdoor pools or spas that have a heat pump or gas heater.

e. Have a permanent, easily readable, and weatherproof instruction card that gives instructions for the energy efficient operation of the pool or spa heater and for the proper care of pool or spa water when a cover is used.

f. Have at least 36 inches of pipe installed between the filter and heater or dedicated suction and return lines, or built-in or built-up connections shall be installed to allow for the future addition of solar heating equipment.

g. Have directional inlets for the pool or spa that adequately mix the pool water.

h. A time switch or similar control mechanism shall be installed as part of a pool water circulation control system that will allow all pumps to be set or programmed to run only during the off-peak electric demand period and for the minimum time necessary to maintain the water in the condition required by applicable public health standards.

15. Manufactured fenestration products & exterior doors shall have air infiltration rates not exceeding 0.3 cfm/ft2 of window area, 0.3 cfm/ft2 of residential door area, 0.3 cfm/ft2 of nonresidential single door area, & 1.0 cfm/ft2 of nonres double door area. [110.6(a)1]

16. Fenestration products shall be rated in accordance with NFRC 100 for U-factor, NFRC 200 for SHGC, and VT or use the applicable default value. Fenestration products shall have a temporary label for manufactured fenestration products or a label certificate when the Component Modeling Approach is used and for site-built fenestration meeting the requirements of Section 10-111(a)1. [110.6(a)2, 110.6(a)3, 110.6(a)4, 110.6(a)5]

17. Field-fabricated fenestration products and exterior doors, other than unframed glass doors and fire doors, shall be caulked between the fenestration products or exterior door and the building, & shall be weatherstripped. [110.6(b)]

18. Joints, penetrations & openings in building envelope may be potential sources of air leakage shall be caulked, gasketed, weather stripped or otherwise sealed to limit infiltration & exfiltration. [110.7]

19. Insulation shall be certified by Department of Consumer Affairs, Bureau of Home Furnishing and Thermal Insulation that the insulation conductive thermal performance is approved pursuant to the California Code of Regulations, Title 24, Part 12, Chapter 12-13, Article 3, "Standards for Insulating Material." [110.8(a)]

20. Urea formaldehyde foam insulation may only be used in exterior side walls, & requires a four-mil-thick plastic polyethylene vapor barrier between the urea formaldehyde foam insulation & the interior space in all applications. [110.8(b)]

21. Insulating material shall be installed in compliance with the flame spread rating and smoke density requirements of the CBC. [110.8(c)]

22. Insulation installed on an existing space conditioning duct, it shall comply with Section 604.0 of the CMC. [110.8(d)3]

23. External insulation installed on an existing unfired water storage tank or on an existing back-up tank for a solar water-heating system, it shall have an R-value of at least R-12, or the heat loss of the tank surface based on an 80 EF water-air temperature difference shall be less than 6.5 Btu per hour per square foot. . [110.8(d)2] E.

Residential Notes:

1. A masonry or factory-built fireplace shall have the following: [150.0(e)1]

a. Closeable metal or glass doors covering the entire opening of the firebox;

b. A combustion air intake to draw air from the outside of the building directly into the firebox, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device (Exception: An outside combustion-air intake is not required if the fireplace will be installed over concrete slab flooring and the fireplace will not be located on an exterior wall.); and

c. A flue damper with a readily accessible control. [150.0 (e)C]

2. Heating or cooling systems shall be equipped with a setback thermostat that meet the requirements of Section 110.2(c). [150.0(i)]

3. Gas or propane water heaters shall have: [150.0(n)]

a. A 120V electrical receptacle that is within 3 feet from the water heater.

b. A Category III or IV vent, or a Type B vent with straight pipe.

c. Condensate drain that is no more than 2 inches higher than the base.

d. A gas supply line with a capacity of at least 200,000 Btu/hr

4. All pumps and pump motors installed shall be listed in the Commission's directory of certified equipment and shall comply with the Appliance Efficiency Regulations. [150.0(p)1.A]

5. The minimum installed weight per square foot of any loose-fill insulation shall conform with the insulation manufacturer's labeled R-value. [150.0 (b)]

6. The minimum depth of concrete-slab floor perimeter insulation shall be 16 inches or the depth of the footing of the building, whichever is less. [150.1(c)(1)(D)]

7. The crawl space shall be covered with a vapor retarder over the entire floor. [150.1(c)1.D]

8. Insulations are required for: [150.0(j)2.A]

a. All hot water pipes from the heating source to the kitchen fixtures.

b. All piping with a nominal diameter of 3/4 inch or larger.

c. The first 5 feet (1.5 meters) of hot and cold water pipes from the storage tank.

d. All piping associated with a domestic hot water recirculation system.

e. Piping from the heating source to storage tank or between tanks.

f. Piping buried below grade.

9. Insulation shall be provided for water heaters as follows:

a. Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, shall be externally wrapped with insulation having an installed thermal resistance of R-12 or greater or have internal insulation of at least R-16 and a label on the exterior of the tank showing the insulation R-value. [150.0 (j)1]

10. Lighting [150.0(k)]

a. Installed luminaires shall be classified as high-efficacy in accordance with TABLE 150.0-A.

b. Exhaust fans shall be switched separately from lighting systems.

c. Luminaries shall be switched with readily accessible controls that permit the luminaries to be manually switched ON and OFF.

d. Lighting installed in attached and detached garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces shall be controlled by vacancy sensors.

e. Dimmers or vacancy sensors shall control all luminaires required to have light sources compliant with Reference Joint Appendix JA8.

EXCEPTION 1: Luminaires in closets less than 70 square feet.

EXCEPTION 2: Luminaires in hallways.

f. A. In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building shall be high efficacy luminaires or controlled by an occupant sensor.

g. In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting in that building shall:

i) Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and

ii) Lighting installed in corridors and stairwells shall be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors shall be capable of turning the light fully On and Off from all designed paths of ingress and egress.

2019 Low-Rise Residential Mandatory Measures Summary

*NOTE: Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. *Exceptions may apply* (01/2020)

Building Envelope Measures:	
§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	**Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4 5 for exterior doors. They must be caulked and/or weather-stripped.*
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers**. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs
§ 150.0(a):	**Ceiling and Rafter Roof Insulation.** Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.*
§ 150.0(b):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0 .102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B.*
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent, have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration, and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Fireplaces, Decorative Gas Appliances, and Gas Log Measures:	
§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox
§ 150.0(e)2:	**Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.*
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
Space Conditioning, Water Heating, and Plumbing System Measures:	
§ 110.0-§ 110.3:	**Certification.** Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.*
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.*
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone, and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.*
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.*
§ 110.3(c)4:	**Water Heating Recirculation Loops Serving Multiple Dwelling Units.** Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)4.
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.
§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters.*
§ 150.0(h)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.

2019 Low-Rise Residential Mandatory Measures Summary

Requirements for Ventilation and Indoor Air Quality:	
§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality**. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.
§ 150.0(o)1C:	**Single Family Detached Dwelling Units.** Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C:
§ 150.0(o)1E:	**Multifamily Attached Dwelling Units.** Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be ≤ 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
§ 150.0(o)1F:	**Multifamily Building Central Ventilation Systems.** Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflows must be within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required airflow rate needed for compliance.
§ 150.0(o)1G:	**Kitchen Range Hoods.** Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
Pool and Spa Systems and Equipment Measures:	
§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations, an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.*
§ 110.4(b)1:	**Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.*
Lighting Measures:	
§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
§ 150.0(k)1A.	**Luminaire Efficacy**. All installed luminaires must meet the requirements in Table 150.0-A.
§ 150.0(k)1B:	**Blank Electrical Boxes.** The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C.
§ 150.0(k)1D:	**Electronic Ballasts for Fluorescent Lamps**. Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 150.0(k)1E:	**Night Lights, Step Lights, and Path Lights.** Night lights, step lights and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).*
§ 150.0(k)1G:	**Screw based luminaires**. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems.*
§ 150.0(k)2C:	**Interior Switches and Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.*
§ 150.0(k)2D:	**Interior Switches and Controls.** Controls and equipment must be installed in accordance with manufacturer's instructions.
§ 150.0(k)2E:	**Interior Switches and Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the control is installed to comply with § 150.0(k).
§ 150.0(k)2F:	**Interior Switches and Controls.** Lighting controls must comply with the applicable requirements of § 110.9.

2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(h)3A:	**Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer
§ 150.0(h)3B:	**Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	**Storage Tank Insulation.** Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation**. All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of one inch or a minimum insulation R-value of 7.7: the first five feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than one inch; all hot water piping with a nominal diameter less than 3/4 inch that is: associated with a domestic hot water recirculation system, from the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures.*
§ 150.0(j)3:	**Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	**Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125 volt, 20 amp electrical receptacle connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within three feet of the water heater without obstruction. Both ends of the unused conductor must be labeled with the word "spare" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than two inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu per hour.
§ 150.0(n)2:	**Recirculating Loops.** Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fans Measures:	
§ 110.8(d)3:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance**. All air-distribution system ducts and plenums must meet the requirements of the CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-5.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area.*
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures, joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage, sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11 and Reference Residential Appendix RA3.
§ 150.0(m)12:	**Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Pressure drops and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service.*
§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3 3.*

2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(k)2G:	**Interior Switches and Controls.** An energy management control system (EMCS) may be used to comply with control requirements if it: provides functionality of the specified control according to § 110 9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.0(e); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	**Interior Switches and Controls.** A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2.
§ 150.0(k)2I:	**Interior Switches and Controls.** In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must be controlled by an occupant sensor or a vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it must be initially configured to manual-on operation using the manual control required under Section 150.0(k)2C.
§ 150.0(k)2J:	**Interior Switches and Controls.** Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for dimming, and that are not controlled by occupancy or vacancy sensors, must have dimming controls.*
§ 150.0(k)2K:	**Interior Switches and Controls.** Under cabinet lighting must be controlled separately from ceiling-installed lighting systems.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either § 150.0(k)3Aii (photocell and either a motion sensor or automatic time switch control) or § 150.0(k)3Aiii (astronomical time clock), or an EMCS.
§ 150.0(k)3B:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, entrances, balconies, and porches; and residential parking lots and carports with less than eight vehicles per site must comply with either § 150.0(k)3A or with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3C:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, any outdoor lighting for residential parking lots or carports with a total of eight or more vehicles per site and any outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must comply with § 140.8; or must consume no more than 5 watts of power as determined according to § 130.0(c).
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in Sections 110 9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	**Interior Common Areas of Low-rise Multifamily Residential Buildings.** In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building must be comply with Table 150.0-A and be controlled by an occupant sensor.
§ 150.0(k)6B:	**Interior Common Areas of Low-rise Multifamily Residential Buildings.** In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting for the interior common areas in that building must: i. Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and ii. Lighting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress.
Solar Ready Buildings:	
§ 110.10(a)1:	**Single Family Residences.** Single family residences located in subdivisions with 10 or more single family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e).
§ 110.10(a)2:	**Low-rise Multifamily Buildings.** Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total area no less than 15 percent of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy.*
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.*
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.*
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through § 110.10(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric".

TITLE 24 ENERGY ANALYSIS

C21-001401

DRAWN BY

CHECKED BY

DATE

SCALE

JOB NO.

SHEET

T24-3

OF 2 SHEETS

Will-Serve/Proof of Service/Meter Request Form

A "Will-Serve" letter may be issued upon the District's completion of an analysis determining that all conditions of approval are met.

Required Attachments:

1. Drawing/sketch of project (with dimensions)
2. Tax Assessors parcel map that includes the subject property.
3. Subdivision map covering the location of the project.*
4. Documentation of existing permitted dwellings on the property.

* Clearly indicate all APNs and legal lots involved in the project. Ensure any markups to county documents do not obscure the underlying information.

Applicant Information:

Account Number:	02-[redacted]08
Name:	S[redacted]
Company:	S[redacted]
Mailing Address:	[redacted] Ventura, CA 93004
Phone Number:	805[redacted]
Email Address:	[redacted]@gmail.com

Project Information:

New Meter Requested:	☐ Yes ☑ No
Assessor's Parcel #(s):	017-0-0710-400
Service Address:	260 N. Alvarado Avenue
City, State, Zip code:	Ojai, CA 93023
Planning Dept Case #:	ZC23-
# of Existing Dwellings:	1
Date Dwellings Permitted:	

Type of Construction:

☐ New Construction ☐ Tenant Improvement ☑ ADU ☑ Other

Type of Use:

☐ Single Family Res ☐ Multi-Family Res (# of dwellings ____) ☑ Other

Project Dimensions (Sqft): 384

Continued on Next Page

Will-Serve/Proof of Service/Meter Request Form

Detailed Project Description:

convert existing 384 square foot permitted workshop into a ADU.

Please allow a minimum of 60 days to evaluate and process Will-Serve letter and new meter requests. The time frame will depend on receipt of satisfactory information from the applicant and schedule of pertinent District Committees and Board of Directors meetings.

☑ ***I acknowledge that MOWD will bill a $100 Administrative Fee for processing this request.***

Applicant Signature

DocuSigned by:
[redacted]

Date

February 17, 2023

Ojai El Roblar, by [redacted] its Manager

Review of Application for Will Serve Letter

Conversion of a 384-sf permitted workshop into a “Tiny Home” ADU for Property with Existing Meter at 260 N. Alvarado.

Proposal

The proposed project consists of converting a 384-sf permitted workshop to a "Tiny Home" ADU.

Applicant provided a detailed site plan, showing the location of the proposed structure.

Screening Step 1: Is the proposed building site on a legal lot? YES

Applicant provided a copy of a tax assessor parcel map and a subdivision map that indicate a single 0.21-acre parcel. APN: 017-0-071-40

Screening Step 2. Will the current allocation support an ADU? YES

Allocation Details:

- Allocation Case Identifier: AA-0323
- Allocation Category: 5/8" RES meter, 1 Parcel
- Parcel Size: 0.21 acre
- Current Base Fixed Allocation: 120 HCF/yr
- Current Base Variable Allocation: 106 HCF/yr
- Fixed Base Allocation Needed to Support "Tiny Home" ADU: 60 HCF/yr
- Deduction from Variable Allocation needed to Support "Tiny Home" ADU through drought stages: 70 HCF/yr

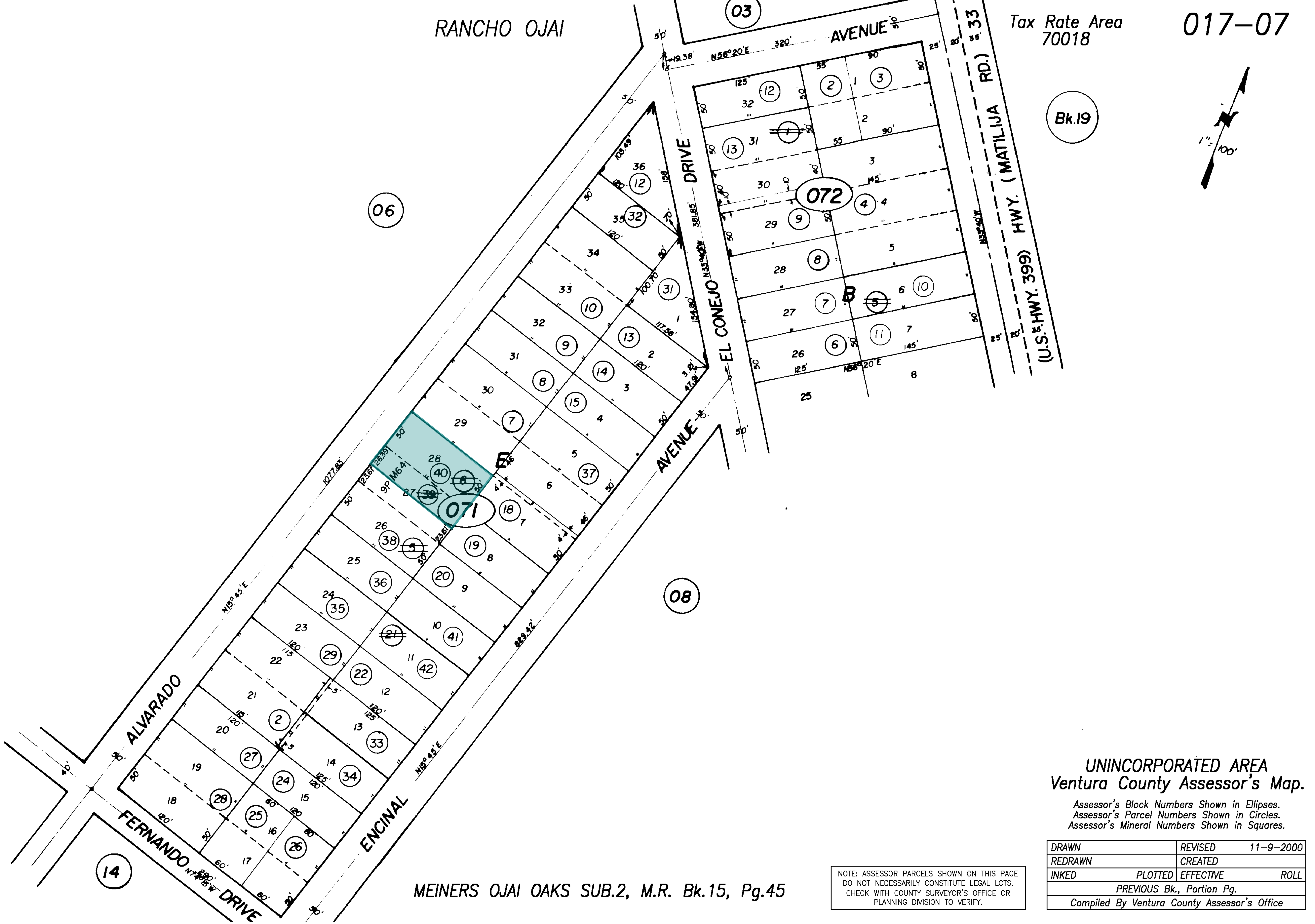
If the ADU are provided the customary fixed dwelling allocations, the new allocation for this property would be as follows:

- New Base Fixed Allocation: **180 HCF/yr**
- New Base Variable Allocation: **36 HCF/yr**

Recommendation

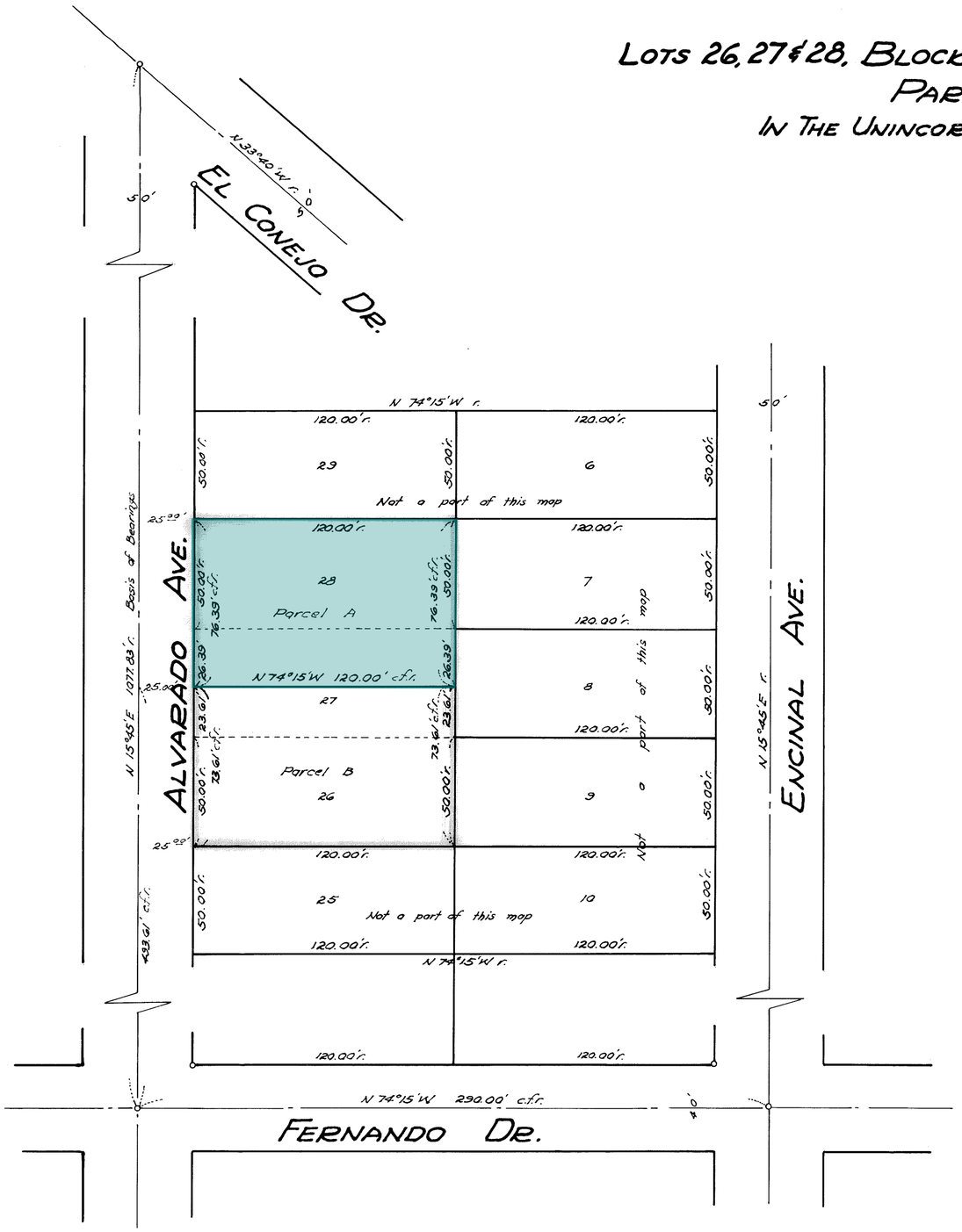
If a will serve letter is to be supplied, but must clearly state:

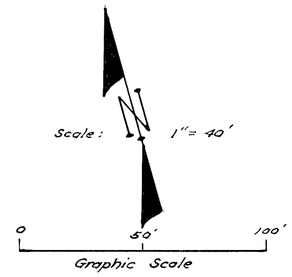
- Letter applies only to the proposed "Tiny Home" ADU as described in the applicant-provided preliminary site plan with the file date 2-17-2023.
- There will be no increase in the total (fixed plus variable) water allocation assigned to the meter Will Serve Letter will expire after 1 year.


RANCHO OJAI
Tax Rate Area 70018
017-07
Bk.19
06
08
14
03
071
072
ALVARADO
FERNANDO DRIVE
ENCINAL AVENUE
EL CONEJO DRIVE
AVENUE
HWY. (MATILIJA RD.) 33
(U.S. HWY. 399)
1" = 100'
MEINERS OJAI OAKS SUB.2, M.R. Bk.15, Pg.45
NOTE: ASSESSOR PARCELS SHOWN ON THIS PAGE DO NOT NECESSARILY CONSTITUTE LEGAL LOTS. CHECK WITH COUNTY SURVEYOR'S OFFICE OR PLANNING DIVISION TO VERIFY.
UNINCORPORATED AREA
Ventura County Assessor's Map.
Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.
Assessor's Mineral Numbers Shown in Squares.
DRAWN
REVISED 11-9-2000
REDRAWN
CREATED
INKED
PLOTTED
EFFECTIVE
ROLL
PREVIOUS Bk., Portion Pg.
Compiled By Ventura County Assessor's Office

PARCEL MAP

LOTS 26, 27 & 28, BLOCK "E" MEINERS OJAI OAKS SUB. Nº 2, (15 M.R. 45)
PART OF TRACT 7, RANCHO OJAI
IN THE UNINCORPORATED TERRITORY OF VENTURA CO., CALIF.
MARCH 1971





This map was prepared by me or under my direction and was compiled from record data in conformance with the requirements of the Subdivision Map Act at the request of Elmer E. Peterson on March 17, 1971. I hereby certify that it conforms to the approved tentative map and the conditions of approval thereof, that all provisions of applicable state law and local ordinances have been complied with.

Arthur N. Bjornstedt
L.S. Nº 2338

This map has been examined this 27th day of April 1971 for conformance with the requirements of Section 11575 of the Subdivision Map Act.

A. P. Stokes
County Surveyor

Deputy County Surveyor

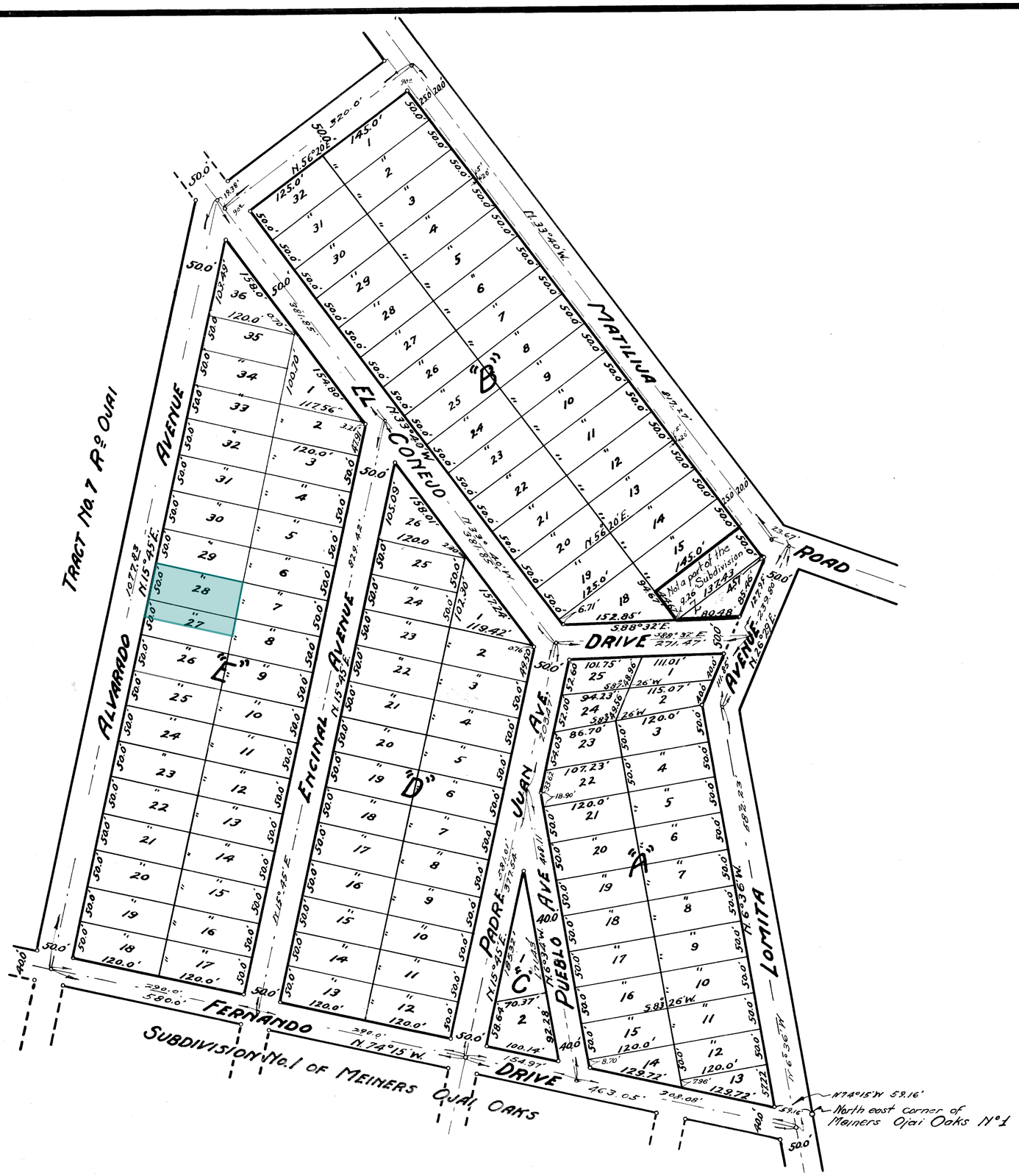
#23176

Filed this 3rd day of MAY 1971 at 11:15 A.M. in Book 9 of Parcel Maps at Page 64 at the request of Arthur N. Bjornstedt.

Robert L. Hamm
County Recorder

By: William Doverspeak
Deputy County Recorder

Note: 1½" I.P. at points marked ○ per 15 M.R. 45.



MAP OF
SUBDIVISION NO. 2
MEINERS OJAI OAKS
Part of Tract 7 of
RANCHO OJAI
as subdivided by T. R. Bard
1867–1870
VENTURA CO. CALIFORNIA
Scale 1" = 100'

Waud & Lewis Engrs. March 1928
o denotes location of 1½" iron pipe

Sheet Nº 1

46

- OWNERS' CERTIFICATE -

The undersigned persons and corporations hereby certify and declare that at the date hereof, they are the owners of or interested in the land included within the yellow shaded lines of the map entitled "Subdivision No. 2, Meiners Ojai Oaks", consisting of three sheets, this being Sheet No. 2 thereof; that we are the only persons or corporations whose consent is necessary to pass a clear title to said land; that we consent to the making and recording of such map, and hereby dedicate for public use "El Conejo Drive", "Alvarado Avenue", "Encinal Avenue", "Padre Juan Avenue", "Pueblo Avenue", and "Matilija Road".

Dated this 8th day of June, 1929.

OJAI RANCHE AND DEVELOPMENT COMPANY, a corporation, (Owner)
By C. A. A. McGee President.
Bernard S. Goldsmith Secretary.

SOUTHERN CALIFORNIA TITLE COMPANY, a corporation, (Trustee)
By J. H. Hinsdale President.
By Lester A. Jones Secretary.

UNIVERSAL BUILDING-LOAN ASSOCIATION, a corporation, (Beneficiary)
Lloyd J. Hickey President.
John S. Lay Secretary.

VENTURA ABSTRACT COMPANY, a corporation, (Trustee)
By A. C. Gates President.
By Louis C. Drapeau Secretary.

SANTA PAULA BUILDING AND LOAN ASSOCIATION, a corporation, (Beneficiary)
By D. W. Mott President.
By H. S. Spranger Secretary.

Clarence R. Sawyer (Owner)
Carrie W. Sawyer (Owner)
John L. Stuart (Owner)
Emily M. Stuart (Owner)
Roy H. Dale (Owner)
Marian H. Dale (Owner)
J. H. Meyer (Owner)
Igerna M. Meyer (Owner)
John W. Crumley (Owner)
Mamie Crumley (Owner)
George W. Harkey (Owner)
Verne H. Patrons (Owner)
Ruben W. Kiehl (Owner)
Anna A. Kiehl (Owner)

SECURITY TITLE INSURANCE AND GUARANTEE COMPANY, a corporation, (Trustee)
By J. H. Hinsdale Vice-President.
By J. Bradbury Asst. Secretary.

PACIFIC COAST BUILDING-LOAN ASSOCIATION, a corporation, (Beneficiary),
By F. C. Moore Vice-President
By [illegible] Assistant Secretary

STATE OF CALIFORNIA,)
COUNTY OF ALAMEDA.) ss.

On this 10th day of June, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and qualified, personally appeared C. A. A. McGEE, known to me to be the President, and BERNARD S. GOLDSMITH, known to me to be the Secretary of the corporation that executed the within and foregoing instrument, and known to me to be the persons who executed said instrument on behalf of the corporation therein named, and they acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal, the day and year first above written.

Frances McDermott
Notary Public in and for the County of Alameda, State of California.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 26th day of July, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared J. H. HINSDALE, known to me to be the President, and LESTER A. JONES, known to me to be the Secretary of SOUTHERN CALIFORNIA TITLE COMPANY, the corporation described in the within and foregoing instrument, and known to me to be the persons who executed said instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal the day and year first above written.

Harold M. Bailey
Notary Public in and for the County of Ventura, State of California.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 27th day of July, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared Lloyd J. Hickey and John S. Lay known to me to be the President known to me to be the Secretary, of UNIVERSAL BUILDING-LOAN ASSOCIATION, the corporation described in the within and foregoing instrument, and known to me to be the persons who executed said instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal, the day and year first above written.

[signature]
Notary Public in and for the County of Ventura, State of California.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 5th day of August, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared A. C. Gates, and Louis C. Drapeau, known to me to be the President, known to me to be the Secretary, of VENTURA ABSTRACT COMPANY, the corporation described in the within and foregoing instrument, and known to me to be the persons who executed said instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal, the day and year first above written.

[signature]
Notary Public in and for said County and State.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 5th day of Aug, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and qualified, personally appeared D. W. Mott and H. S. Spranger known to me to be the President, known to me to be the Secretary, of SANTA PAULA BUILDING AND LOAN ASSOCIATION, the corporation that executed the within and foregoing instrument, and known to me to be the persons who executed said instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal, the day and year first hereinabove written.

Anna B. Wright
Notary Public in and for the County of Ventura, State of California.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 27th day of July, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared CLARENCE R. SAWYER and CARRIE W. SAWYER, husband and wife, known to me to be the persons described in and whose names are subscribed to the within instrument, and they acknowledged to me severally that they executed the same.

WITNESS my hand and official seal, the day and year first hereinabove written.

[signature]
Notary Public in and for the County of Ventura, State of California.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 8th day of June, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared JOHN L. STUART and EMILY M. STUART, husband and wife, known to me to be the persons described in and whose names are subscribed to the within instrument, and they acknowledged to me severally that they executed the same.

WITNESS my hand and official seal, the day and year first hereinabove written.

[signature]
Notary Public in and for the County of Ventura, State of California.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 8th day of June, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared ROY H. DALE and MARIAN H. DALE, husband and wife, known to me to be the persons described in and whose names are subscribed to the within instrument, and they acknowledged to me severally that they executed the same.

WITNESS my hand and official seal, the day and year first hereinabove written.

[signature]
Notary Public in and for the County of Ventura, State of California.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 8th day of June, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared J. H. MEYER and IGERNA M. MEYER husband and wife, known to me to be the persons described in and whose names are subscribed to the within instrument, and they acknowledged to me severally that they executed the same.

WITNESS my hand and official seal, the day and year first hereinabove written.

[signature]
Notary Public in and for the County of Ventura, State of California.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 27th day of July, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared JOHN W. CRUMLEY and MAMIE CRUMLEY, husband and wife, and GEORGE W. HARKEY, a single man, known to me to be the persons described in and whose names are subscribed to the within instrument, and they acknowledged to me severally that they executed the same.

WITNESS my hand and official seal, the day and year first hereinabove written.

[signature]
Notary Public in and for the County of Ventura, State of California.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 8th day of June, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared VERNE H. PATRONS, a single man known to me to be the person described in and whose name is subscribed to the within instrument, and he acknowledged to me that he executed the same.

WITNESS my hand and official seal, the day and year first hereinabove written.

[signature]
Notary Public in and for the County of Ventura, State of California.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 8th day of June, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared RUBEN W. KIEHL and ANNA A. KIEHL, his wife, known to me to be the persons described in and whose names are subscribed to the within instrument, and they acknowledged to me severally that they executed the same.

WITNESS my hand and official seal, the day and year first hereinabove written.

[signature]
Notary Public in and for the County of Ventura, State of California.

- ENGINEER'S CERTIFICATE -

I, H. B. WAUD, do hereby certify that I am a Civil Engineer; that I have, under instructions from Ojai Ranch and Development Company, subdivided the lands delineated upon this map, consisting of three (3) sheets, this being Sheet No. 3 thereof, into lots, blocks, avenues and drives, and in making said survey I have established permanent monuments at the locations plainly indicated upon this map, by which any surveyor or engineer may retrace my work.

WITNESS my Hand this 15 day of June, 1929.

H B Waud
Civil Engineer.

- COUNTY TAX COLLECTOR'S CERTIFICATE -

I, GEORGE J. LITTLE, County Tax Collector of the County of Ventura, State of California, do hereby certify that the County taxes for the fiscal year 1928-29, on that certain tract of land shown on the map entitled, "Subdivision No. 2, Meiners Ojai Oaks", have been paid in full.

WITNESS my hand this 27th day of July, 1929.

Geo. J. Little
County Tax Collector.

- COUNTY AUDITOR'S CERTIFICATE -

I, R. N. HAYDON, County Auditor of the County of Ventura, State of California, do hereby certify that there are no liens for unpaid State or County taxes against the tract of land shown on the map entitled, "Subdivision No. 2, Meiners Ojai Oaks", except the taxes for the fiscal year 1929-30, which are not yet due or payable.

WITNESS my hand and official seal, this 27th day of July, 1929.

R N Haydon
County Auditor.
Chas P Daly Deputy

- COUNTY SURVEYOR'S AND COUNTY ASSESSOR'S CERTIFICATE -

WE, CHARLES W. PETIT, County Surveyor, and W. M. REESE, County Assessor, of the County of Ventura, State of California, each for himself certify that the tract of land shown on the map to which this certificate is attached, entitled "Subdivision No. 2, Meiners Ojai Oaks", is situated within the County of Ventura, State of California, and that no part thereof lies within the corporate limits of any incorporated City or Town; that he has carefully examined each and every lot and block shown upon said map, as to its value for residence or commercial use, and hereby suggests and recommends to the Board of Supervisors of the County of Ventura, State of California, that such Board of Supervisors approve said map.

WITNESS our hands, this 26th day of July, 1929.

Charles W. Petit
County Surveyor.
W. M. Reese
County Assessor.

- CITY ENGINEER'S CERTIFICATE -

I, H. B. WAUD, City Engineer of the City of Ojai, do hereby certify that the tract of land shown on the map designated as "Subdivision No. 2, Meiners Ojai Oaks", is in unincorporated territory, but is within three miles of the exterior boundary lines of the City of Ojai, County of Ventura, State of California, which City is the incorporated City lying nearest to said tract; that there is no City Planning Commission in the City of Ojai; that I have examined said map, and do hereby approve the same, and recommend to the Board of Trustees of said City of Ojai, that it approve the same.

WITNESS my hand this 15 day of June, 1929.

H B Waud
City Engineer.

- CITY BOARD OF TRUSTEE'S CERTIFICATE -

This is to certify that the Board of Trustees of the City of Ojai is the governing body of said City; that said Board has examined the map to which this certificate is attached, entitled "Subdivision No. 2, Meiners Ojai Oaks", said property lying outside of the City Limits, but within three miles of the exterior boundary lines of said City; that said Board has approved and does hereby approve the same, and recommends to the Board of Supervisors of the County of Ventura, that said Board of Supervisors approve the same.

IN WITNESS WHEREOF, said Board of Trustees has caused this certificate to be signed by the Chairman of said Board, and has caused the seal of the City of Ojai to be hereto affixed, this 10 day of June, 1929.

A. L. Brown
Chairman of the Board of Trustees of the City of Ojai.

ATTEST:

L. D. Conklin
City Clerk and Ex-Officio Clerk of the Board of Trustees of said City of Ojai.

- COUNTY CLERK'S CERTIFICATE -

I, L. E. HALLOWELL, County Clerk of the County of Ventura, State of California, and Ex-Officio Clerk of the Board of Supervisors of said County, do hereby certify that Ojai Ranch and Development Company has executed and filed with said Board of Supervisors, a good and sufficient Bond that has been approved by said Board, in the sum of $500.00 being the amount fixed by said Board, which bond by its terms, is made to inure to the benefit of said County of Ventura, and is conditioned upon the payment of all taxes which are, at the date of filing of this map, a lien against the tract of land, or any part thereof, shown upon said map, to which this certificate is attached, entitled "Subdivision No. 2, Meiners Ojai Oaks", but not yet payable.

IN WITNESS WHEREOF, I have hereunto set my hand, and affixed the official seal of the County Clerk of Ventura County, this 6th day of August, 1929.

L E Hallowell
Clerk of the County of Ventura, and Ex-Officio Clerk of the Board of Supervisors of said County.

- BOARD OF SUPERVISOR'S CERTIFICATE -

This map, entitled "Subdivision No. 2, Meiners Ojai Oaks", consisting of three (3) sheets, this being Sheet No. 3, being presented to the Board of Supervisors of Ventura County, California, at a regular meeting of said Board, held on the 6th day of August, 1929, is hereby approved by said Board, and said Board does hereby accept, on behalf of the public, and for public use, "El Conejo Drive", "Alvarado Avenue", "Encinal Avenue", "Padre Juan Avenue", "Pueblo Avenue", and "Matilija Road".

IN WITNESS WHEREOF, said Board of Supervisors has caused this certificate to be signed by its Chairman, and attested by its Clerk, and the official seal of the County Clerk of said County of Ventura to be hereto affixed, this 6th day of August, 1929.

BOARD OF SUPERVISORS OF THE COUNTY OF VENTURA, STATE OF CALIFORNIA.

By J. G. Gabbert
Chairman of said Board.

ATTEST:

L E Hallowell
Clerk of said Board.

STATE OF CALIFORNIA,)
COUNTY OF VENTURA.) ss.

On this 26th day of July, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared J. H. HUESTIS, known to me to be the Vice-President, and D. J. BRADBURY, known to me to be the Asst. Secretary of Security Title Insurance and Guarantee Company, Trustee, the corporation described in the within Owners' Certificate, and also known to me to be the persons who executed said certificate on behalf of the corporation therein named, and they acknowledged to me that such corporation executed the same, as such trustee.

WITNESS my hand and official seal, the day and year first above written.

Harold M. Bailey.
Notary Public in and for the County of Ventura, State of California.

STATE OF CALIFORNIA,)
COUNTY OF LOS ANGELES.) ss.

On this 31st day of July, 1929, before me, the undersigned, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared F. E. Noar, known to me to be the Vice President, and L. Bourget known to me to be the Asst. Secretary, of Pacific Coast Building-Loan Association, Beneficiary, the corporation described in the within Owners' Certificate, and also known to me to be the persons who executed said certificate on behalf of the corporation therein named, and they acknowledged to me that such corporation executed the same as such beneficiary.

WITNESS my hand and official seal the day and year first above written.

Margaret Kemper
Notary Public in and for the County of Los Angeles, State of California.

RECORDED AT REQUEST OF SOUTHERN CALIFORNIA TITLE CO. AUGUST 9TH, 1929 AT 3 MIN. PAST 11 O'CLOCK A. M. IN BOOK 15 OF MISCELLANEOUS RECORDS (MAPS) AT PAGE 45 ET SEQ, VENTURA COUNTY RECORDS.

R. N. HAYDON, COUNTY RECORDER
BY Olivia Montano DEPUTY

BOOK 15 PAGE 47

47

BEST MANAGEMENT PRACTICES

ALL OF THE FOLLOWING MUST BE FOLLOWED

ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, ARE DRAINS, NATURAL DRAINAGE COURSES OR WIND.

STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.

FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.

EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS MUST BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS A SOLID WASTE.

TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.

SEDIMENTS AND OTHER MATERIAL MAY NOT BE TRACED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.

ANY SLOPE WITH DISTURBED SOILS OR DEMANDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES.

2022 VENTURA COUNTY BUILDING CODE / ORDINANCES
2022 CALIFORNIA GREEN BLDG STAND CODE
2022 CALIFORNIA BUILDING CODE
2022 CALIFORNIA RESIDENTIAL CODE
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA PLUMBING CODE
2022 CALIFORNIA ENERGY CODE
2022 CALIFORNIA FIRE CODE
2022 CALIFORNIA TITLE 24

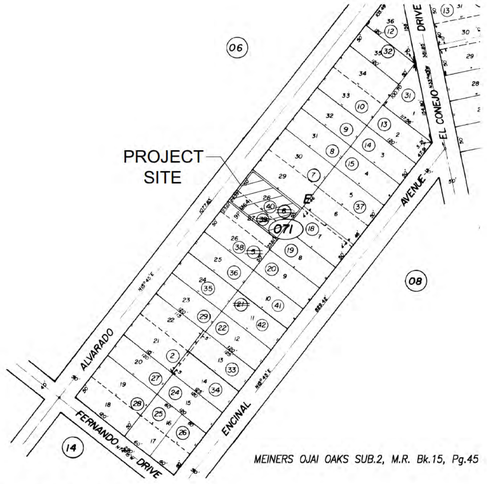
KEYED NOTES

1	(E) RESIDENCE
2	(E) DRIVEWAY
3	(E) GARAGE
4	(E) WORKSHOP TO BE CONVERTED TO ADU
5	REAR YARD
6	FRONT YARD
7	N. ALVARADO RIGHT OF WAY
8	MIN 6" FALL FOR F RST 10 FEET AWAY FROM THE STRUCTURE
9	4" GUTTERS / DOWNSPOUTS - DRAIN TO (E) YARD DRAIN / SWALE TO STREET
10	36" DIA OAK TREE
11	

KEYED NOTES

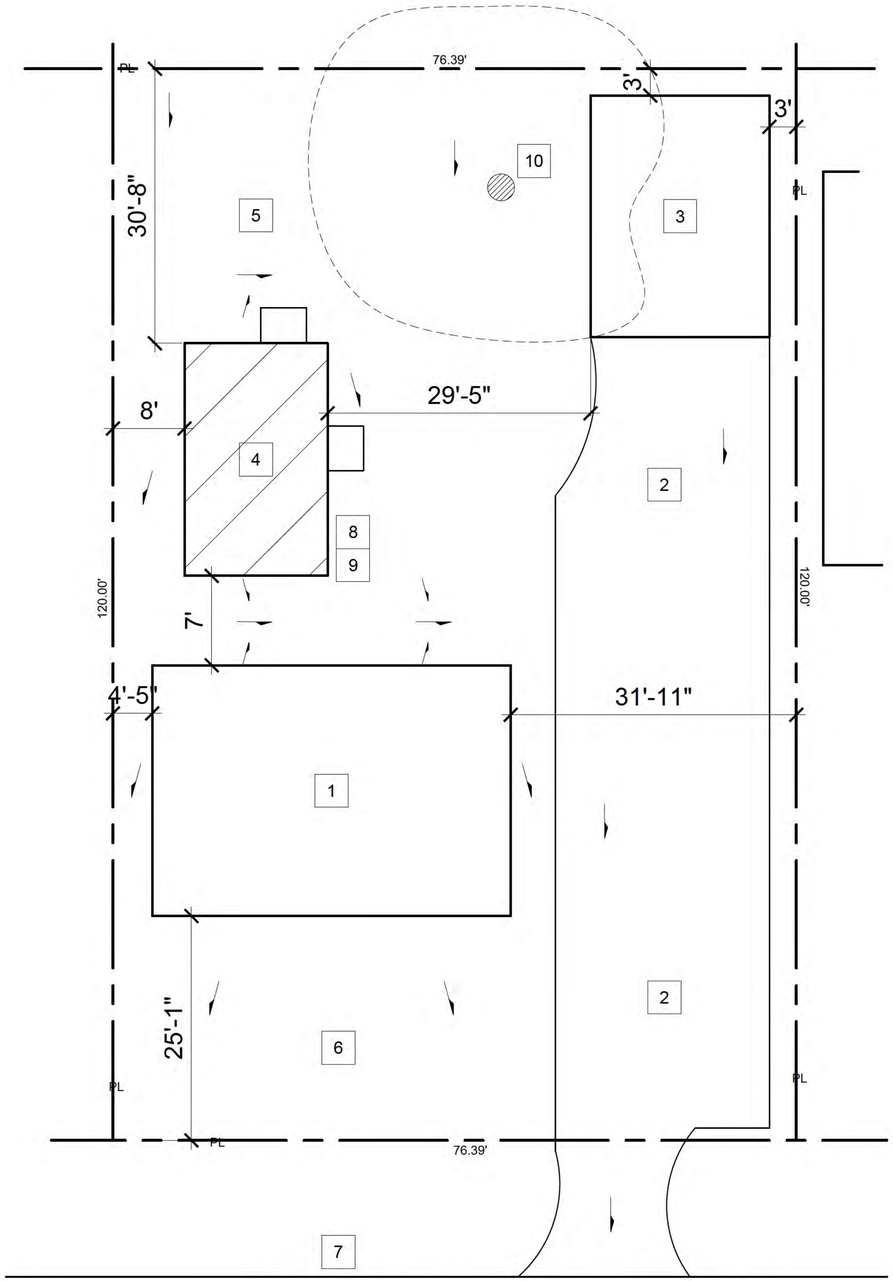
1. NO GRADING IS REQU RED

SIGNED:
RAY AMES, DESIGNER



MEINERS OJAI OAKS SUB.2, M.R. Bk.15, Pg.45

VICINITY MAP



SITE PLAN

1/8" = 1'-0"

PROJECT SCOPE

CONVERSION OF (E) WORKSHOP INTO A (N) ACCESSORY DWELLING UNIT PER PLANS.

PROJECT INFORMATION

SITE / ADDRESS:	260 N. ALVARADO AVE., OJAI, CA
OWNER/ADDRESS:	OJAI EL ROBLAR, LLC JOSH RABINOWITZ, MGR 1021 ANACAPA STREET, 2ND FLR SANTA BARBARA, CA 93101 (805) 882 1421
APN:	017007140
LOT SIZE:	9767 SF / .21 ACRE
ZONE:	R1-6
OCCUPANCY:	R-3
CONST TYPE:	TYPE V-B
NO. STORIES:	1
FIRE SEVERITY AREA:	YES
FIRE SPRINKLERS:	NO
(E) AREAS	SF
(E) RESIDENCE:	1,123
(E) GARAGE:	540
(E) WORKSHOP CONV: (ADU CONVERSION)	384
(N) ADU AREA TOTAL:	384

SHEET INDEX

fthill.
FOOTHILL DESIGN GROUP

COVER SHEET
PROJ INFO
SITE PLAN
VIC MAP

260
N. ALVARADO AVENUE

OJAI EL ROBLAR LLC
[redacted]

OJAI, CALIFORNIA

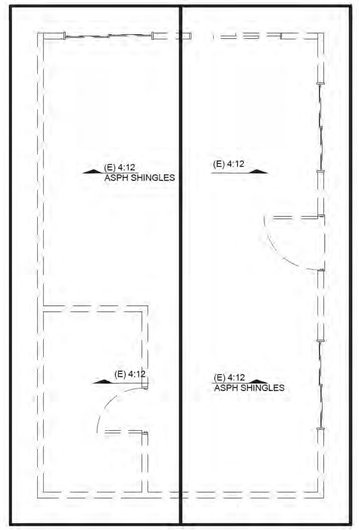
Ray Ames - Designer

Ray Ames

2309 Aztec Ave
Ventura, CA 93001
(805) 407-9327
fthillray@yahoo.com
foothilldesigngroup.com
houzz.com/pro/fthillray

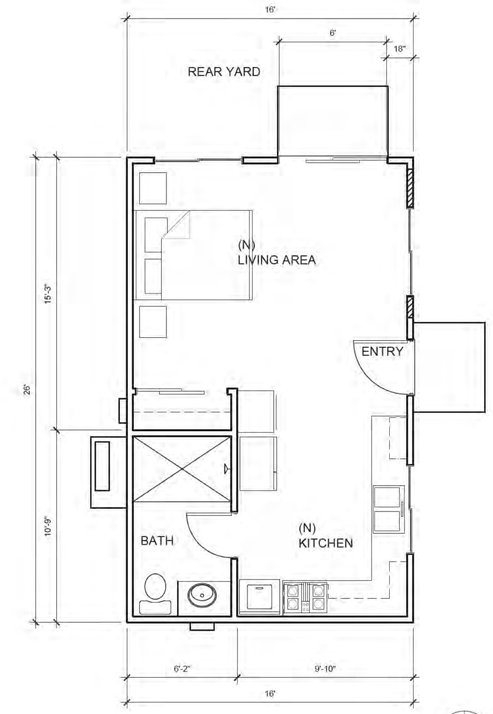
1.25.23

T-0



(E) ROOF PLAN

1/4" = 1'-0"

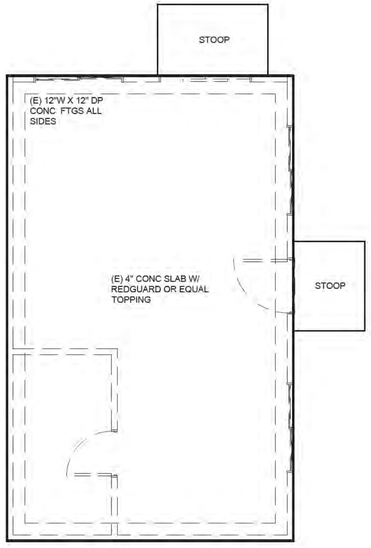


(E) / (N) ADU FLOOR PLAN

1/4" = 1'-0"

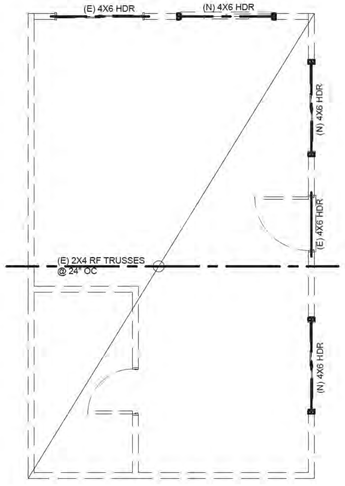
WALL LEGEND

(E) 2X4 WALLS



(E) WORKSHOP FOUND PLAN

1/4" = 1'-0"



(E) WORKSHOP FRAMING PLAN

1/4" = 1'-0"

fthill.
FOOTHILL DESIGN GROUP

(N) ADU FLR PLAN
ROOF PLAN
REF FOUND PLN
REF FRAM'G PLN

260
N. ALVARADO AVENUE

OJAI EL ROBLAR LLC
[redacted]

OJAI, CALIFORNIA

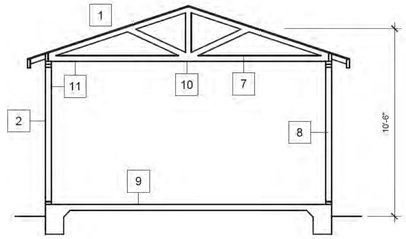
Ray Ames - Designer

Ray Ames

2309 Aztec Ave
Ventura, CA 93001
(805) 407-9327
fthillray@yahoo.com
foothilldesigngroup.com
houzz.com/pro/fthillray

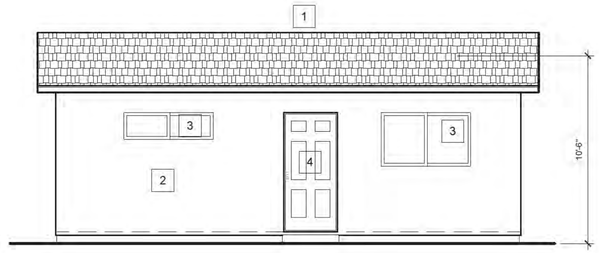
1.25.23

A-1



CROSS SECTION

1/4" = 1'-0"

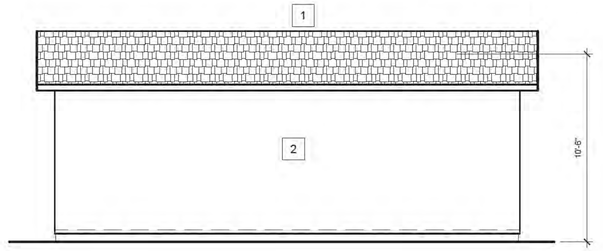


FRONT / SOUTH ELEVATION

1/4" = 1'-0"

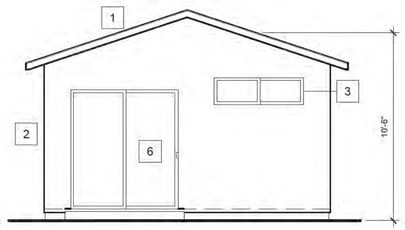
KEYED NOTES

1	(E) ASPHALT SHINGLE ROOFING
2	(E) STUCCO
3	(E) D.G. VINYL W NDOWS - (1) PANE TEMP
4	(E) F BERGLASS FRONT DOOR
5	NA
6	(E) VINYL SLIDING DOOR - (1) PANE TEMP
7	(N) R30 INSULATION
8	R15 INSULATION
9	(E) CONC SLAB W/ "REDGUARD" OR EQUAL APPLIED FOR WATERPROOFING
10	(E) WOOD TRUSSES
11	$\frac{5}{8}$" GYP BD, WALLS & CE L NG



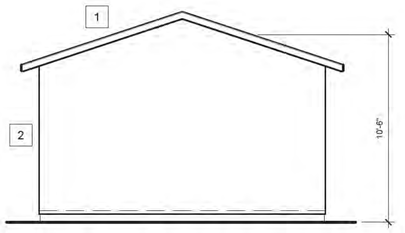
REAR / NORTH ELEVATION

1/4" = 1'-0"



RIGHT / EAST ELEVATION

1/4" = 1'-0"



LEFT / WEST ELEVATION

1/4" = 1'-0"

fthill.
FOOTHILL DESIGN GROUP

ELEVATION
CROSS SECTION
KEYED NOTES

260
N. ALVARADO AVENUE

OJAI EL ROBLAR LLC
[redacted]

OJAI, CALIFORNIA

Ray Ames - Designer

Ray Ames

2309 Aztec Ave
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1.25.23

A-2

BEST MANAGEMENT PRACTICES

ALL OF THE FOLLOWING MUST BE FOLLOWED

ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, ARE DRAINS, NATURAL DRAINAGE COURSES OR WIND.

STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.

FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.

EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS MUST BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS A SOLID WASTE.

TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.

SEDIMENTS AND OTHER MATERIAL MAY NOT BE TRACED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.

ANY SLOPE WITH DISTURBED SOILS OR DEMANDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES.

2022 VENTURA COUNTY BUILDING CODE / ORDINANCES
2022 CALIFORNIA GREEN BLDG STAND CODE
2022 CALIFORNIA BUILDING CODE
2022 CALIFORNIA RESIDENTIAL CODE
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA PLUMBING CODE
2022 CALIFORNIA ENERGY CODE
2022 CALIFORNIA FIRE CODE
2022 CALIFORNIA TITLE 24

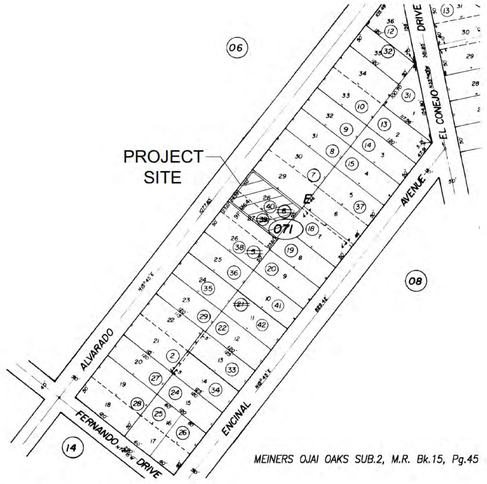
KEYED NOTES

1	(E) RESIDENCE
2	(E) DRIVEWAY
3	(E) GARAGE
4	(E) WORKSHOP TO BE CONVERTED TO ADU
5	REAR YARD
6	FRONT YARD
7	N. ALVARADO RIGHT OF WAY
8	MIN 6" FALL FOR F RST 10 FEET AWAY FROM THE STRUCTURE
9	4" GUTTERS / DOWNSPOUTS - DRAIN TO (E) YARD DRAIN / SWALE TO STREET
10	36" DIA OAK TREE
11	

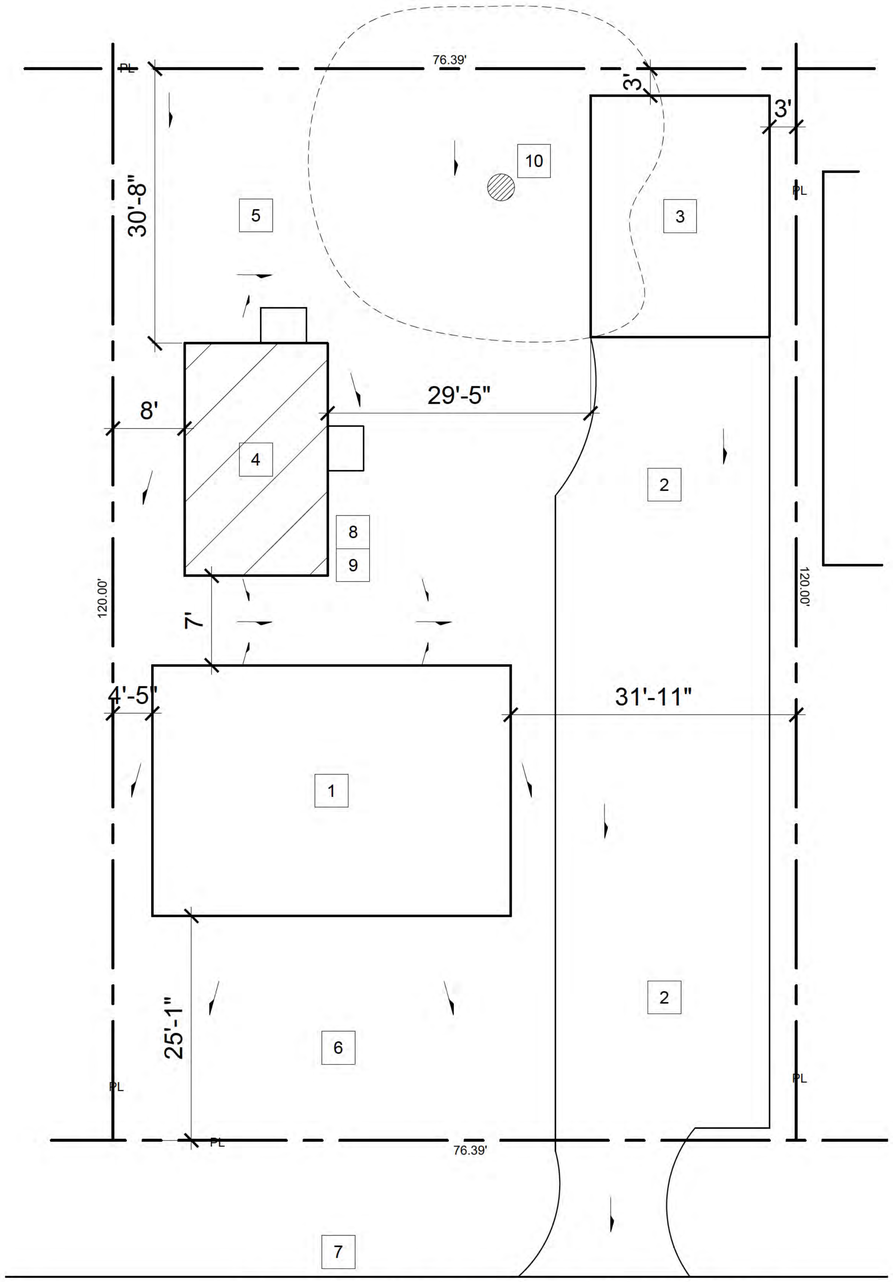
KEYED NOTES

1. NO GRADING IS REQU RED

SIGNED:
RAY AMES, DESIGNER



VICINITY MAP



SITE PLAN

1/8" = 1'-0"

PROJECT SCOPE

CONVERSION OF (E) WORKSHOP INTO A (N) ACCESSORY DWELLING UNIT PER PLANS.

PROJECT INFORMATION

SITE / ADDRESS:	260 N. ALVARADO AVE., OJAI, CA
OWNER/ADDRESS:	OJAI EL ROBLAR, LLC JOSH RABINOWITZ, MGR 1021 ANACAPA STREET, 2ND FLR SANTA BARBARA, CA 93101 (805) 882 1421
APN:	017007140
LOT SIZE:	9767 SF / .21 ACRE
ZONE:	R1-6
OCCUPANCY:	R-3
CONST TYPE:	TYPE V-B
NO. STORIES:	1
FIRE SEVERITY AREA:	YES
FIRE SPRINKLERS:	NO
(E) AREAS	SF
(E) RESIDENCE:	1,123
(E) GARAGE:	540
(E) WORKSHOP CONV: (ADU CONVERSION)	384
(N) ADU AREA TOTAL:	384

SHEET INDEX

fthill.
FOOTHILL DESIGN GROUP

COVER SHEET
PROJ INFO
SITE PLAN
VIC MAP

260
N. ALVARADO AVENUE

OJAI EL ROBLAR LLC
[redacted]

OJAI, CALIFORNIA

Ray Ames - Designer

Ray Ames

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foothilldesigngroup.com
houzz.com/pro/fthillray

1.25.23

T-0

GENERAL NOTES

SUBCONTRACTORS SHALL BY RESPONSIBLE FOR ALL TRADE RELATED ITEMS, WHETHER SPECIFICALLY SHOWN OR IMPLIED WITHIN THE CONSTRUCTION DOCUMENTS

SUBCONTRACTOR SHALL BE RESPONSIBLE FOR INCLUSION OF FULL CONSTRUCTION DOCUMENTS WITHIN ACCEPTED BID.

DIV 0 GENERAL

0.01 DIMENSIONS:

A. INTERIOR PLAN DIMENSIONS ARE TO FACE OF STUD OR CONCRETE (CMU) UNLESS A CENTERLINE/GRIDLINE IS INDICATED, WHICH WILL THEN INDICATE THE DIMENSION IS TO CENTER OF ELEMENT. (COLUMN, WALL, STUD, ETC...) .

B. EXTERIOR PLAN DIMENSIONS ARE TO FACE OF FOUNDATION UNLESS A CENTERLINE OR GRIDLINE IS INDICATED, WHICH WILL THEN INDICATE THE DIMENSION IS CENTER OF ELEMENT. SEE EXTERIOR DETAILS FOR ADDITIONAL INFO.

C. DOOR AND CASED OPENINGS WITHOUT LOCATION DIMENSIONS ARE FOUR & ONE-HALF (4 1/2) INCHES FROM FACE OF ADJACENT PARTITION OR CENTERED BETWEEN PARTITIONS (UON).

D. ALIGNMENT TAKES PRECEDENCE OVER DIMENSIONS. VERIFY ALL DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

E. EXTERIOR WINDOWS ARE DIMENSIONED TO CENTERLINE OF WINDOW, SIZE AS INDICATED ON WINDOW SCHEDULE & PER MFR SPECS. SUBCONTRACTOR SHALL DETERMINE WINDOW ROUGH OPENING REQUIREMENTS.

F. DO NOT SCALE DRAWINGS - NOTIFY THE ARCHITECT IF ANY DISCREPANCIES ARE FOUND PRIOR TO FABRICATION AND CONSTRUCTION. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SECURE ALL REQUIRED DIMENSIONS.

G. CONTRACTOR & SUBCONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE, AND REPORT ANY DISCREPANCIES TO THE ARCHITECT FOR INTERPRETATION AND OR CORRECTIONS PRIOR TO INSTALLATION. COST OF CORRECTING WORK BASED ON MISINTERPRETATION BY CONTRACTOR OR UNREPORTED DIMENSIONAL DISCREPANCIES SHALL BE BORNE BY THE CONTRACTOR.

H. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE ON THE DRAWINGS. LARGE SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS. DIMENSIONS GOVERN MEASUREMENTS.

0.02 CODES

A. ALL WORK SHALL CONFORM TO CURRENT APPLICABLE BUILDING CODES AND LOCAL ORDINANCES AND REGULATIONS. IN CASE OF ANY CONFLICT WHERE SPECIFIED DOES NOT EQUAL OR EXCEED THE REQUIREMENTS OF THE LAWS OR ORDINANCES, THE LAWS OR ORDINANCES SHALL GOVERN. NOTIFY THE ARCHITECT OF ALL CONFLICTS. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTION PRIOR TO CONSTRUCTION AT NO COST TO OWNER OR ARCHITECT.

B. ONE (1) COPY OF THESE CODES AND REGULATIONS SHALL BE IN THE CONTRACTOR'S FIELD OFFICE DURING CONSTRUCTION.

0.03 ABBREVIATIONS & SYMBOLS

A. THROUGHOUT THE PLAN ARE ABBREVIATIONS & SYMBOLS WHICH ARE IN COMMON USE. THE LIST OF ABBREVIATIONS & SYMBOLS PROVIDED IS NOT INTENDED TO BE COMPLETE OR REPRESENTATIVE OF CONDITIONS OR MATERIALS ACTUALLY USED ON THE PROJECT. THE ARCHITECT WILL DEFINE THE INTENT OF ANY IN QUESTION. CONTRACTOR HALL BE FULLY RESPONSIBLE FOR UNDERSTANDING ALL ABBREVIATIONS & SYMBOLS.

0.04 ELEVATION DATUMS

A. CEILING HEIGHTS INDICATED ON THE REFLECTED CEILING HEIGHTS ARE FROM TOP OF SLAB/OR FINISH FLOOR TO FINISH CEILING U.O.N.

0.05 DEFINITIONS

A. SUBCONTRACTOR & TRADE CONTRACTOR SHALL BE SYNONYMOUS

B. GENERALLY ACCEPTED TRADE RELATED ITEMS THAT ARE IDENTIFIED AS CONTRACTOR SHALL BE SYNONYMOUS WITH SUBCONTRACTOR.

C. CONSTRUCTION DOCUMENTS SHALL INCLUDE BUT NOT BE LIMITED TO: CONSTRUCTION DRAWINGS, SPECIFICATIONS, ADDENDUM AND BIDDING DOCUMENTS, SUPPLEMENTAL PROFESSIONAL REPORTS (E.G. SOILS REPORT, ACOUSTICAL REPORT), APPLICABLE BUILDING CODES (E.G. CALIFORNIA BUILDING CODE C.B.C. 2001)

DIV 1 GENERAL CONDITIONS

1.01 THE ENTIRE WORK PROVIDED FOR HEREIN IS TO BE CONSTRUCTED AND FINISHED IN EVERY PART IN A GOOD AND SUBSTANTIAL MANNER IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, TO THE FULL INTENT OF THE SAME. ANY WORK REQUIRED BY LAW, BUT WHICH MAY NOT BE SPECIFICALLY MENTIONED BY LAW, SHALL BE DONE BY CONTRACTORS IN ACCORDANCE WITH THE LAWS OF THE COUNTY, DISTRICT, OR STATE UNDER WHICH JURISDICTION MAY COME AND COST SHALL BE BORNE BY CONTRACTORS. ANY SUCH WORK SHALL BE DONE IN CONFORMANCE WITH THE PLAN; BOTH AS TO MANNER AND APPEARANCE. ALL WORK SHALL BE DONE IN ACCORDANCE WITH C.B.C., TITLE 24 AND AS REQUIRED BY THE LOCAL GOVERNING AGENCIES. IT SHALL BE FULLY THE CONTRACTORS RESPONSIBILITY TO COMPLY WITH CODES AT NO ADDITIONAL EXPENSE TO OWNER OR ARCHITECT.

1.02 THE DRAWINGS AND SPECIFICATIONS: THESE DRAWINGS COVER THE FURNISHING AND INSTALLATION OF ALL MATERIALS AND WORK AS CALLED FOR ON THE DRAWINGS OR IN THE SPECIFICATIONS (OR IN BOTH) WHICH ARE BOUND SEPARATELY AND ARE A PART OF THE CONTRACT. PRODUCT MANUFACTURER SPECS NOT DETAILED OR NOTED IN PLANS SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS. CIVIL, LANDSCAPING, INTERIOR DESIGN, KITCHEN & LAUNDRY, PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF EACH SUBCONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS PRIOR TO SUBMITTING THEIR BID AND BEFORE INSTALLATION OF THEIR WORK. ANY DISCREPANCY BETWEEN THE ARCHITECTURAL AND THE CONSULTING ENGINEER(S) DRAWINGS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION BY WRITTEN REQUEST FOR CLARIFICATION. ANY WORK OMITTED OR INSTALLED IN CONFLICT WITH ARCHITECTURAL DRAWINGS SHALL BE PERFORMED OR CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.

1.03 SOLELY AS A CONVENIENCE TO THE OWNER, THE ARCHITECT MAY INCLUDE DOCUMENTS PREPARED BY CERTAIN CONSULTANTS (OR INCORPORATED THE RECOMMENDATIONS OF SAID CONSULTANTS IN DOCUMENTS PREPARED BY THE ARCHITECT) WITHIN THE SET OF DOCUMENTS ISSUED BY THE ARCHITECT BEING EXPRESSLY UNDERSTOOD THAT, BY SAID ISSUANCE, THE ARCHITECT ASSUMES NO LIABILITY FOR THE SERVICES OF SAID CONSULTANTS NOT UNDER CONTRACT TO THE ARCHITECT.

1.04 ALL SITE INFORMATION IS BELIEVED TO BE CORRECT, HOWEVER, IT IS FULLY SUBCONTRACTORS RESPONSIBILITY TO VERIFY ALL ACTUAL SITE CONDITIONS PRIOR TO SUBMITTING A BID. ALL RESPONSIBILITY IS BELIEVED TO BE CORRECT, HOWEVER IT IS ALL SUBCONTRACTORS RESPONSIBILITY TO INCLUDE CODE REQUIRED ITEMS NOT SIGNIFICALLY NOTED PRIOR TO BID.

1.05 THE CONTRACTOR & SUBCONTRACTORS SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT, SERVICES AND TRANSPORTATION REQUIRED TO FULLY CARRY OUT THE INTENTIONS OF THE PLANS AND SPECIFICATIONS AS PART OF THE CONTRACT, WHETHER OR NOT SPECIFICALLY DOCUMENTED. THE CONTRACTOR SHALL PROVIDE EACH ITEM MENTIONED, INDICTED, OR IMPLIED TO ACHIEVE THE INTENDED BUILDING ACCORDING TO THE METHODS OF BEST CONSTRUCTION PRACTICE. THE ARCHITECT SHALL BE THE FINAL JUDGE AS TO THE QUALITY OF THE WORKMANSHIP, AND RESERVES THE RIGHT TO REJECT ANY WORK CONSIDERED INFERIOR.

1.06 ALL MANUFACTURED EQUIPMENT AND MATERIALS ARE TO BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, AND ARE TO BE NEW. MANUFACTURER'S RECOMMENDATIONS SHALL BE CONSIDERED A PART OF THESE CONTRACT DOCUMENTS AS THOUGH INCLUDED HEREIN. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH MANUFACTURER SPECS. (WHETHER OR NOT INCLUDED WITHIN THE CONSTRUCTION DOCUMENTS).

1.07 SUBCONTRACTOR SHALL BE RESPONSIBLE FOR KNOWLEDGE WITH TRADE & INTERFACING TRADES WITHIN CONSTRUCTION DOCUMENTS. CONFLICTS, DISCREPANCIES, OMISSIONS, SHALL BE CONVEYED IN WRITING TO ARCHITECT AND GENERAL CONTRACTOR PRIOR TO SUBMISSION OF BID DOCUMENTS. ARCHITECT SHALL BE GIVEN ADEQUATE RESPONSE TIME TO RESOLVE CONFLICTS, DISCREPANCIES, OMISSIONS. BID TIME MAY BE ADJUSTED BY OWNER SO SUBCONTRACTOR MAY PROPERLY BID ANY SAID CONFLICTS, DISCREPANCIES OR OMISSIONS.

DIV 0 GENERAL (continued)

1.08 CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR UNDERSTANDING THE INTENT & SPECIFIC REQUIREMENTS WITHIN THE CONSTRUCTION DOCUMENTS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY ARCHITECT OF ANY ERRORS, OMISSIONS OR INCONSISTANCIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR RESOLUTION PRIOR TO BID SUBMITTAL.

1.09 SUB TRADES ARE WHOLLY RESPONSIBLE FOR UNDERSTANDING & INTEGRATING RELATED REQUIREMENTS WITHIN COMPLETE CONSTRUCTION DOCUMENT PACKAGE. CONTRACTOR, OWNER & ARCHITECT SHALL BE NOTIFIED PRIOR TO SUBMISSION OF BID DOCUMENTS WITH ANY CLARIFICATIONS & OR DISCREPANCIES.

1.10 BUILDING PERMITS:

A. THE OWNER SHALL OBTAIN THE ARHITECTURAL BUILDING PERMIT ONLY.

1.11 COORDINATION:

A. EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION AND COORDINATION WITH OTHER SUBCONTRACTORS TO ASSURE COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS, AND THE ACCURATE LOCATION OF STRUCTURAL MEMBERS AND OPENINGS FOR MECHANICAL, ELECTRICAL, STAIRS, ELEVATORS AND MISCELLANEOUS EQUIPMENT PRIOR TO SUBMISSION OF BID DOCUMENTS.

B. SUBCONTRACTORS SHALL VERIFY SIZES & LOCATIONS OF ALL MECHANICAL EQUIPMENT PADS AND BASES AS WELL AS POWER AND WATER OR DRAIN INSTALLATION WITH EQUIPMENT MANUFACTURERS AND VERIFY CONFORMANCE WITHIN ARCHITECTURAL DOCUMENTATION BEFORE SUBMISSION OF BID DOCUMENTS & PROCEEDING WITH THE WORK. PROCEEDING WITHOUT VERIFICATION SHLL BE DONE SOLELY AT RISK OF SUB-CONTRACTOR.

C. THE CONTRACTOR & SUBCONTRACTOR ARE REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES SHOWN AND ANY OTHER UTILITIES OR STRUCTURES AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK.

D. NO STRUCTURAL MEMBER SHALL BE CUT FOR PIPES, DUCTS, ETC., UNLESS SPECIFICALLY DETAILED.

E. ALL COMBUSTIBLES CONSISTING OF BOXES, SCRAP LUMBER, ETC., ON THE CONSTRUCTION SITE SHALL BE CLEANED UP AND DISPOSED OF IN AN APPROVED MANNER ON A DAILY BASIS.

1.12 INSPECTIONS AND CERTIFICATES OF COMPLIANCE

A. CONTRACTOR SHALL INFORM THE FIRE DEPARTMENT OF THE REQUIRED FINAL INSPECTION AND SCHEDULE SUCH INSPECTION 24 HRS. IN ADVANCE.

B. THE CONTRACTOR SHALL SIGN AND SUBMIT TO THE DEPARTMENT OF BUILDING AND SAFETY A "CERTIFICATE OF COMPLIANCE" STATING THAT THE WORK HAS BEEN PERFORMED AND MATERIALS INSTALLED ACCORDING TO THE PLANS AND SPECIFICATIONS AFFECTING NON-RESIDENTIAL ENERGY.

1.13 MISCELLANEOUS

A. CONTRACTOR SHALL PROVIDE PEDESTRIAN PROTECTION AS REQUIRED IN C.B.C. & LOCAL AGENCIES

B. THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS FOR THE STORAGE AND HANDLING OF HAZARDOUS MATERIALS AS REQUIRED BY LOCAL ORDINANCE

C. CONTRACTOR SHALL INCLUDE COST FOR ALL REQUIRED STAKING.

DIV 2 SITEWORK

2.01 SEE CIVIL DRAWINGS FOR LOCATION OF BUILDING WORKING POINTS, ROUGH GRADING, ON-SITE UTILITIES, SITE IMPROVEMENTS, SITE RETAINING WALLS & SPECIFIC GENERAL NOTES. THE SOILS REPORT & CIVIL DRAWINGS SHALL OVERRIDE CONFLICTS WITH SITEWORK NOTE HEREIN. PRIOR TO SUBMISSION OF BID& CONSTRUCTION, CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES. ARCHITECT SHALL BE GIVEN REASONABLE TIME TO CORRECT (& PROCESS IF REQUIRED) ANY DISCREPANCIES.

2.02 EXCAVATION / GRADING REQUIREMENTS:

A. THE GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE PROJECT SHALL BE NOTIFIED BY THE CONTRACTOR AND OWNER THAT GRADING IS TO COMMENCE AND MAKE ALL NECESSARY ARRANGEMENT FOR FIELD INSPECTOR.

B. THE SOILS ENGINEER SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO COMMENCEMENT OF ANY EXCAVATION.

C. ALL BUILDING AREAS SHALL BE EXCAVATED AND RECOMPACTED IN ACCORDANCE WITH THE C.B.C.

D. SOIL EXCAVATION AND RECOMPACTION SHALL BE DONE UNDER THE SUPERVISION OF A REGISTERED SOILS ENGINEER, ALL DENSITIES, MOISTURE CONTENT AND TESTING SHALL BE APPROVED BY THE PROJECT SOILS ENGINEER PRIOR TO APPLYING THE FINISH SURFACES INDICATED ON THE DRAWINGS. ONE COPY OF ALL CERTIFICATION AND TESTS SHALL BE SENT TO THE ARCHITECT.

E. PRIOR TO EXCAVATION, A THOROUGH SEARCH SHALL BE MADE FOR UNDERGROUND UTILITIES AND STRUCTURES, ETC., WITHIN THE BUILDING SITE.

F. DAMAGE TO ANY ADJACENT PROPERTY, STREETS AND THE LIKE CAUSED BY OPERATIONS OF THIS SECTION SHALL BE RESTORED TO ORIGINAL CONDITION WITHOUT ADDITIONAL COST OR LIABILITY TO THE OWNER.

2.04 SITE UTILITIES

A. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES SHOWN..

B. THE CONTRACTOR SHALL LOCATE ALL UTILITY CONNECTIONS WITHIN 5 FT. OF THE OF THE BUILDING LINE, AND PROTECT UNTIL ALL CONNECTIONS AND TESTING ARE COMPLETED.

C. ALL ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.

2.05 SIDEWALKS

A. ALL CONCRETE SIDEWALKS SHALL SLOPE TO DRAIN AWAY FROM DOORS AND FACE OF BUILDING PER C.B.C.

B. ALL CONCRETE WALKS SHALL HAVE A MEDIUM BROOM FINISH U.O.N. ON THE DWGS.

DIV 3 CONCRETE

3.01 SEE STRUCTURAL DRAWINGS FOR STRUCTURAL CONCRETE REQUIREMENTS

3.02 SEE FOUNDATION PLAN FOR SLAB DIMENSIONS, DEPRESSIONS.

3.03 CONCRETE FINISHING

A. TROWEL AND RETROWEL SLAB FOR SMOOTH FINISH WITH NO TROWEL MARKS SHOWING WHEREVER CONCRETE FLOOR IS EXPOSED.

B. INTERIOR CONCRETE SLABS SHALL BE POURED LEVEL (UNLESS OTHERWISE INDICATED) - 1/8" TOLERANCE ON A 10'-0" EDGE IN ANY GIVEN DIRECTION.

3.04 CRACK ISOLATION JOINT (COLD JOINT & OR SAW-CUT) SHALL BE DIRECTED BY THE STRUCTURAL ENGINEER. REFER TO STRUCTURAL DRAWINGS.

DIV 6 WOOD + PLASTICS NOTES

6.01 ALL WOOD ON DRAWINGS NOTED TO BE FIRE-TREATED SHALL BE FIRE RETARDANT WOOD, PER C.B.C. REQUIREMENTS FOR FIRE-TREATED WOOD.

6.02 THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOLTS, NAILS, FRAMING CLIPS, WASHERS, PLATES, HANGERS, ETC., FOR A COMPLETE INSTALLATION WHETHER OR NOT SPECIFIED OR INDICATED ON THE DRAWINGS

6.03 WOOD BLOCKING

A. ALL WOOD FIRE BLOCKING TO COMPLY WITH C.B.C. STANDARDS FOR FIRE BLOCKING.

B. PROVIDE WOOD BLOCKING FOR MILLWORK, WOOD WINDOW AND DOOR JAMBS

6.04 SCARF JOINT ALL EXPOSED CONTINUOUS WOOD TRIM MEMBERS 45 DEGREES. DO NOT BUTT JOINT. NAIL OR SCREW PER INDUSTRY STANDARDS.

DIV 6 WOOD + PLASTICS NOTES (continued)

6.05 WOOD STUDS SHALL BE 2x4 @ 16" O.C. UNLESS NOTED OTHERWISE.

6 06 AS DEFINED WITHIN THE C.B.C., FIRESTOPPING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL MAX 10'-0" O.C) AND SHALL FORM AN EFFECTIVE BARRIER AND SHALL BE USED AS IDENTIFIED WITH IN THE C.B.C.

6.07 DRAFTSTOPPING PER C.B.C.

6 08 ALL INTERIOR STAIR STRINGERS SHALL HAVE $\frac{3}{4}$" OFFSET SPACERS TO ALLOW FOR GYP BD. INCREASE SPACING IF SHEAR WALLS ARE SCHEDULED.

6.09 ALL FRAMING CONDITIONS TO RECEIVE FINISH MATERIALS SHALL HAVE BACKER BOARDS INSTALLED AT ALL TRANSITION EDGES (E.G., STAIR STRINGER TO WALL, SOFFIT TO WALL, ETC.,...)

6.10 PROVIDE 2 X 8 BLOCKING FOR WALL ACCESSORY BARS AND HANGERS.

6.11 PRIOR TO ROUGH FRAMING, CONTRACTOR SHALL VERIFY THAT FINISH WILL ACCOMODATE SELECTED BUILT-IN CABINETS.

6.12 PRIOR TO INSTALLATION OF GWB., ALL STUDWALLS SHALL BE PLUMBED, FURRED, TRIMMED, AND STRAIGHTENED TO WITHIN 1/8" PER 10'-0".

6.13 U.O.N. ALL SUBFLOORS SHALL BE 1 1/8" x 4' x 8' EXP 1 T&G PLY (48" O.C. SPAN RATING). GLUED & SCREWED (SIZE & SPACING PER STRUCTURAL) THIS NOTE SUPERCEDES CONFLICT WITHIN STRUCTURAL DOCUMENTS.

DIV 7 THERMAL + MOISTURE NOTES

7.01 WATERPROOFING

A. SUBCONTRACTOR TO WATERPROOF MASONRY/CONCRETE AND CONCRETE PLANTER WALLS, RETAINING WALLS

7.02 BUILDING INSULATION

A. SEE WALL SECTIONS AND DETAILS & T-24 FOR BUILDING THERMAL INSULATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES.

B. ALL INSULATION USED IN THE BUILDING SHALL COMPLY WITH C.B.C. STANDARDS. INSULATION SHALL BE NON-COMBUSTABLE.

C. PROVIDE ACOUSTICAL INSULATION AT WALLS/FLOORS/CEILING OF LAUNDRY ROOM, POWDER ROOM, BEDROOMS AND ALL OTHER PRIVATE TO PUBLIC SPACES. ARCHITECT SHALL MAKE FINAL DETERMINATION. IF QUESTIONS PRIOR TO BIDDING, CONTRACTOR SHALL SUBMIT WRITTEN REQUEST TO ARCHITECT FOR CLARIFICATION OF SPECIFIC ROOM REQUIREMENTS.

E. INSULATE THE FOLLOWING: EXTERIOR WALLS, BETWEEN JAMBS AND FRAMING, CEILINGS WITH COLD AREAS ABOVE ATTIC ACCESS PANEL, KNEE WALLS ADJACENT TO HEATED SPACE, BETWEEN COMBINATION RAFTER AND CEILING JOIST.

F. WALLS TO BE A MINIMUM OF R-13 UNLESS OTHERWISE NOTED. (REFER TO TITLE 24 ENERGY CALCS)

G. CEILINGS AT SLOPED OR FLAT ROOFS TO BE A MINIMUM OF R-19 UNLESS OTHERWISE NOTED. (REFER TO TITLE 24 ENERGY CALCS)

7.04 ROOFING

A. CONTRACTOR TO VERIFY THAT ROOF DRAINAGE SHOWN ON PLANS PROVIDE POSITIVE ROOF DRAINAGE AND THAT THEY CONFORM TO MINIMUM DRAINAGE STANDARDS PRIOR TO ROOFING.

B. ALL ROOFING SHALL COMPLY WITH CH 15, CURRENT EDITION OF C.B.C., MFRS. SPECS. AND REQUIREMENTS.

C. PROVIDE UNDERLAYMENT PER CH 15, CURRENT EDITION OF C.B.C., MFRS. SPECS. AND REQUIREMENTS.

D. ROOFING CONTRACTOR(S) SHALL PROVIDE A FULL NON-PRORATED 10 YEAR WARRANTY COVERING ALL DAMAGE &/OR DEFECTIVE PARTS & LABOR.

E. ROOFING CONTRACTOR/MFR SHALL PROVIDE MINIMUM 40 YEAR WARRANTY ON DIMENSIONAL COMP. SHINGLE ROOF.

F. ROOFING CONTRACTOR/MFR SHALL PROVIDE MIN 20 YEAR WARRANTY ON ALL LOW SLOPE ROOFING.

I. LOW SLOPE ROOFS SHALL BE MODIFIED BITUMEN

7.05 WEATHERPROOFING

A. ALL EXTERIOR WALL OPENINGS, FLASHING, COUNTERFLASHING AND EXPANSION JOINTS SHALL BE CONSTRUCTED IN SUCH A MANNER TO MAKE THEM WEATHERPROOF. THE JUNCTION OF THE ROOF AND VERTICAL SURFACES SHALL BE FLASHED AND COUNTERFLASHED IN A MANNER TO MAKE THEM WATERPROOF.

B. ALL OPEN JOINTS IN THE BUILDING EXTERIOR AROUND CONDITIONED SPACES SHALL BE SEALED, CAULKED, GASKETED, OR WEATHER STRIPPED TO ELIMINATE AIR LEAKAGE.

C. PROVIDE A MINIMUM OF 15 LB. FELT AS MOISTURE PROTECTION BEHIND EXTERIOR FINISHES AND TRIM. FELTS TO BE NON-ORGANIC. (TWO LAYERS REQUIRED AT ALL SHEAR/SHEATHING LOCATIONS) REFER TO DETAILS FOR ADDITIONAL REQUIREMENTS.

D. ALL FLASHING, COUNTERFLASHING, AND COPING WHEN VISUALLY EXPOSED SHALL BE G.I., MIN THICKNESS PER C.B.C. ALL CONCEALED FLASHING, COUNTERFLASHING AND COPING WHEN OF METAL SHALL BE NO LESS THAN 24 GA GALV IRON (U.O.N.)

E. DISSIMILAR METALS SUBJECT TO GALVANIC ACTION SHALL BE SEPARATED AND PROTECTED.

F. FLASH AND COUNTERFLASH ALL ROOF TO WALL CONDITIONS. KERF CUT, FLASH AND CAULK WOOD BEAMS AND OUTLOOKERS PROJECTING THROUGH EXTERIOR WALLS OR ROOF SURFACES.

G. FLASH ALL EXTERIOR OPENINGS WITH APPROVED WATERPROOFING, WHICH CONFORMS TO STANDARD LOCAL AND STATE CODES.

H. PROVIDE FLASHING AND COUNTERFLASHING (WHEN REQUIRED) AND TERMINATE ROOFING TO INSURE NO LEAKAGE OCCURS AT ALL ROOF PENETRATIONS. VALLEY FLASHING SHALL BE PROVIDED OF NO LESS THAN NO. 24 GAUGE GALVANIZED IRON (U.N.O.) AND SHALL EXTEND AT LEAST 12 INCHES FROM THE CENTERLINE EACH WAY AND SHALL HAVE A SPLASH DIVERTED RIB NOT LESS THAN 1 INCH HIGH AT THE FLOW LINE FORMED AS PART OF THE FLASHING. SECTIONS OF FLASHING SHALL HAVE AN END LAP OF NOT LESS THAN FOUR INCHES.

I. AT HORIZONTAL & NON-VERTICAL CONDITIONS TO RECEIVE P.C. PLASTER, PREP WITH EXPANDED DIAMOND LATH AND 2 LAYER BITUTHENE "OR EQUAL" SELF ADHESIVE WATERPROOF MEMBRANE. (NOTE: HORIZONTAL SURFACE(S) SHALL MAINTAIN A MINIMUM 5% POSITIVE SLOPE AT THE FRAMING TO ENSURE PROPER DRAINAGE)

J. SHOWER PAN MEMBRANES SHALL BE "NOBLE-CHLORALOY 240" {(CPE) CHLORINATED POLYETHYLENE SHEET MEMBRANE)} OR EQUAL. INSTALL PER C.B.C. & MFR SPECIFICATIONS.

K. ALL FLASHING/COUNTERFLASHING SHALL COMPLY WITH S M.A.C.H.A. STANDARDS.

L. SHOWER WALLS SHALL BE WATERPROOFED WITH "NOBLE-WALL SEAL" OR EQUAL. INSTALL PER C.B.C. & MFR SPECIFICATIONS.

7.06 ATTIC VENTILATION: ENCLOSED ATTIC SPACES AND ENCLOSED ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATED SPACE BY VENTILATING OPENINGS PROTECTED AGAINST ENTRANCE OF RAIN.

7.07 NON-VERTICAL WALL WATER PROOFING

A. ALL NON-VERTICAL P.C. WALL SURFACES SHALL HAVE 3 LAYER P.C. PLASTER OVER EXPANDED DIAMOND LATH OVER MIN 2 LAYER BITUTHENE (OR APPROVED EQUAL).

B. NON-VERTICAL SIDING SURFACE SHALL HAVE BASE SELF-ADHESIVE WATERPROOFING * MFR (OR ARCHITECT) SPECIFIED VAOPR BARRIER.

7.08 SEALANTS

A. ALL SEALANTS SHALL BE RATED MINIMUM 40 YEAR (FOR THE SPECIFIC APPLICATION THE SEALANT IS BEING APPLIED)

DIV 8 DOORS + WINDOWS NOTES

8.01 SEE DOOR SCHEDULE FOR HARDWARE GROUPS FOR EACH DOOR. SEE SPECIFICATIONS FOR HARDWARE SPECIFICATIONS OF HARDWARE GROUPS. IF NON SPECIFIED, CONTRACTOR SHALL SUBMIT SPECS TO ARCHITECT FOR REVIEW & APPROVAL PRIOR TO SUBMITTAL OF BID DOCUMENTS

8.02 DOORS AND FRAMES

A. ALL WOOD DOORS RATED AND NON RATED SHALL HAVE STRAIGHT GRAIN, FREE OF ALL DEFECTS OR KNOTS AND SHALL BE BACK PRIMED AND PAINTED, STAINED, & FINISHED AS SCHEDULED.

B. EXTERIOR DOORS STOPS OF IN-SWINGING DOORS SHALL BE ONE-PIECE CONSTRUCTION WITH THE JAMB STOP BY RABBETED TO THE JAMB.

8.03 HARDWARE

A. ALL DOOR HARDWARE, SPECIALTY HARDWARE, FINISH AND SMOKE RATED ASSEMBLIES SHALL BE FIRE MARSHALL APPROVED AS REQUIRED BY GOVERNING AGENCY CODES.

B. ALL NON ACCESSIBLE DOOR THRESHOLDS (WHERE OCCURS WITHOUT A STEP) SHALL NOT EXCEED HEIGHT PER C.B.C. FROM TOP OF THRESHOLD TO FLOOR FINISH - BOTH SIDES (U.O.N.).

C. ALL JAMBS SHALL BE SOLID SHIMED FOR SUPPORT AT HINGES & STRIKES.

D. FOR DOOR HARDWARE GROUPS, REFER TO SCHEDULE.

8.04 SWINGING EXTERIOR GLASS DOORS, METAL OR WOOD DOORS WITH GLASS PANELS, SOLID WOOD OR METAL DOORS SHALL BE CONSTRUCTED OR PROTECTED AS FOLLOWS:

A. ANY GLAZING UTILIZED WITHIN 24" OF ANY DOOR JAMB SHALL BE CONSTRUCTED OR PROTECTED AS FOLLOWS: FULLY TEMPERED GLASS

8.05 AIR INFILTRATION AT WINDOWS AND DOORS

A. FOR OPENABLE EXTERIOR DOORS (REQUIRED STEEL FIRE-RATED DOORS ARE EXEMPT FROM THESE REQUIREMENTS), AIR INFILTRATION SHALL BE MITIGATED BY FOLLOWING THESE CONSTRUCTION REQUIREMENTS:

1. DOOR HEADS, SILLS, AND JAMBS SHALL HAVE CONTINUOUS SEALS AS REQUIRED TO ELIMINATE AIR INFILTRATION.
2. A CONTINUOUS ANGLE, SEALED GASKET OR WEATHERSTRIPPING SHALL BE USED WITH DOORS REQUIRING VERTICAL TRACTS OR GUIDES (E.G. ROLLING INDUSTRIAL DOORS).
3. A CONTINUOUS SEAL OR BAFFLE SHALL BE INSTALLED AT EACH DOOR.
4. ALL SWING DOORS AND WINDOWS OPENING TO THE EXTERIOR OR TO UNCONDITIONED AREAS SHALL BE FULLY WEATHERSTRIPPED, GASKETED, OR OTHERWISE TREATED TO LIMIT AIR INFILTRATION.

8.06 WINDOWS

A. ALL MOVABLE WINDOWS SHALL BE EQUIPPED WITH A LOCKING DEVICE AND SHALL BE CONSTRUCTED IN A FASHION TO RESTRICT THEM FROM BEING LIFTED OUT OF ITS TRACK WHEN IN CLOSED POSITION.

B. ALL MOVABLE WINDOWS SHALL BE FITTED W/ REMOVABLE SCREEN ASSEMBLIES.

8.07 GLAZING

A. ALL GLASS AND GLAZING SHALL CONFORM TO CHAPTER 24 & HIGH FIRE REQUIREMENTS OF THE C.B.C. & LOCAL CODES.

B. IN LOCATIONS WHICH MAY BE SUBJECT TO HUMAN IMPACT, SUCH AS FRAMELESS GLASS DOORS, GLASS ENTRANCE/EXIT DOORS, SHOWER DOORS, TUB ENCLOSURES, AND STORM DOORS, GLAZING SHALL MEET THE REQUIREMENTS SET FORTH IN THE CALIFORNIA BUILDING CODE.

C. ALL GLASS DOORS AND FIXED GLASS LESS THAN 18" ABOVE THE FLOOR LINE SHALL BE APPROVED SAFETY OR TEMPERED GLASS.

D. ALL EXTERIOR GLAZING WITHIN "HIGH FIRE DESIGNATED AREAS SHALL BE DUAL-GLAZED, TEMPERED ON EXTERIOR SIDE.

DIV 9 FINISHES NOTES

SEE INTERIOR ELEVATIONS, REFLECTED CEILING PLANS, ROOM FINISH GROUPS AND ROOM FINISH SCHEDULE FOR WALL, CEILING AND FLOOR FINISHES.

9.01 EXPOSED EQUIPMENT

A. THERE SHALL BE NO EXPOSED PIPE, CONDUITS, DUCTS, VENTS, AND THE LIKE ALL SUCH LINES SHALL BE CONCEALED OR FURRED AND FINISHED, UNLESS NOTED AS EXPOSED CONSTRUCTION ON DRAWINGS.

B. ALL EXPOSED EXTERIOR METAL FITTINGS, FLASHING, CONDUIT, ETC. SHALL BE PAINTED TO MATCH ADJACENT SURFACES, UNLESS IT IS SPECIFIED AS COPPER.

9.02 INTERIOR WALLS

A. OFFSET STUDS WHERE REQUIRED, SO THAT FINISH WALL SURFACE WILL BE FLUSH.

B. ALL GYPSUM WALL BOARD SHALL BE 5/8" THICKNESS & CONFORM TO CHAPTER 25 OF THE CBC

C. ALL GYP BOARD ON WALLS WITH IN BATHROOMS & LAUNDRY AREAS SHALL BE "GREEN BOARD."

D. AT ANY CONDITIONS WHERE GYP BOARD IS IN CONTACT WITH CONCRETE SHALL BE "GREEN BOARD."

E. CONTRACTOR SHALL PROVIDE FULL-SCALE MOCK-UPS (MIN. 3'x3') IF FINISH FOR APPROVAL BY OWNER & REVIEWED BY ARCHITECT.

9.03 CERAMIC TILE / STONE TILE/ FINISHED CONCRETE

A. ALL TILE INSTALLATION SHALL BE IN ACCORDANCE WITH ACCEPTED CURRENT INDUSTRY STANDARD WITH THE BEST QUALITY IN CRAFTSMANSHIP.

B. SEE INTERIOR DESIGN DRAWINGS FOR TILE LAYOUT OF WALLS AND FLOOR PATTERNS

C. WHERE FLOOR DRAINS OR FLOOR SINKS OCCUR, ALL FINISH FLOORS SHALL SLOPE TO DRAIN. TILE OR FINISH MATERIAL SHALL NON-SLIP.

9.04 INTERIOR FINISH FLAME RETARDANT REQUIREMENTS

A. INTERIOR FINISHES AND FLAMEPROOFING MUST CONFORM TO THE REQUIREMENTS OF C.B.C..

B. ALL DECORATIVE MATERIALS ARE REQUIRED TO BE MAINTAINED IN A FLAME- RETARDANT CONDITION, (PER C.B.C.).

9.05 PROVIDE GALVANIC INSULATION BETWEEN DISSIMILAR METALS.

9.07 IF STORING, USING, OR HANDLING ANY AMOUNTS OF HAZARDOUS MATERIALS, FLAMMABLE/COMBUSTIBLE LIQUIDS, OR CHEMICALS, CONTRACTOR SHALL COMPLY WITH STATE AND LOCAL HAZARDOUS MATERIAL ORDINANCES.

9.08 PAINTING

A. ALL SURFACES ARE TO BE COLOR PRIMED AND TW0-COAT FINISH. OWNER SHALL APPROVE PRIOR TO APPLICATION. WHEN REQUESTED BY OWNER OR ARCHITECT, MOCK-UPS SHALL BE SUBMITTED AND APPROVED.

B. PAINTING SUBCONTRACTOR SHALL BE RESPONSIBLE TO APPROVE CONDITION OF ALL SURFACES TO INSURE THAT THEY HAVE BEEN PROPERLY PREPARED FOR PAINTING. (CAULK, PATCH & FILL AS REQUIRED)

C. ALL COLORS SHALL BE APPROVED BY THE ARCHITECT.

D. ALL ADJACENT WORK SHALL BE PROTECTED AGAINST PAINT SPLATTERING.

E. DRYWALL AT BATHROOMS SHALL RECEIVE A MINIMUM OF TWO COATS OF SEMI-GLOSS ENAMEL.

F. ALL CABINETS SHALL RECEIVE TWO COATS OF STAIN, UNLESS NOTED OTHERWISE.

G. UPON COMPLETION OF PAINTING REMOVE ALL PAINT SPOTS AND LEAVE JOB IN A CLEAN ACCEPTABLE MANNER - READY FOR OCCUPANCY.

H. ALL FINISH TRIM & EXPOSED WOOD MEMBERS SHALL BE PROPERLY BACK PRIMED ON ALL SURFACES.

9.09 GYPSUM WALLBOARD

A. ALL GYPSUM WALLBOARD SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE CURRENT EDITION OF THE U.B.C., STATE AND LOCAL CODES.

B. GYPSUM WALLBOARD SHALL NOT BE INSTALLED UNTIL WEATHER PROTECTION FOR THE INSTALLATION IS APPROVED.

C. ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL OCCUR ON THE FRAMING EDGES EXCEPT THOSE EDGES AND ENDS WHICH ARE PERPENDICULAR TO THE FRAMING MEMBERS. ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL BE IN MODERATE CONTACT EXCEPT IN CONCEALED SPACES WHERE FIRE-RESISTIVE CONSTRUCTION OR SPACES WHERE FIRE-RESISTIVE CONSTRUCTION OR DIAPHRAGM ACTION IS NOT REQUIRED.

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CONST NOTES

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GENERAL NOTES

DIV 9 FINISHES NOTES (continued)

D. THE SIZE AND SPACING OF FASTENERS SHALL COMPLY WITH THE CURRENT EDITIONS OF THE U.B.C., STATE AND LOCAL CODES. FASTENERS SHALL BE SPACED NOT LESS THAN 3/8" INCHES FROM EDGES AND ENDS OF GYPSUM WALLBOARD.

E. FASTENERS SHALL BE APPLIED IN SUCH A MANNER AS NOT TO FRACTURE THE FACE PAPER WITH THE FASTENER HEAD.

F. GYPSUM WALL BOARD SHALL BE 5/8" TYPE "X"

G. AT BATHROOM & LAUNDRY AREA WALLS & OTHER LOCATIONS IDENTIFIED ON PLANS USE 5/8" GYPSUM GREEN BOARD.

H. GYPSUM BOARD THAT IS POTENTIALLY IN CONTACT WITH CONCRETE SHALL BE SEPARATED BY AN APPROVED VAPOR BARRIER

WATER-RESISTANT GYP BACKING BOARD SHALL NOT BE USED IN THE FOLLOWING LOCATIONS:

1. OVER A VAPOR BARRIER IN SHOWER OR BATH TUB COMPARTMENTS
2. WHERE THERE SHALL BE DIRECT EXPOSURE TO WATER OR IN AREAS SUBJECT TO HIGH HUMIDITY
3. ON CEILINGS WHERE FRAME SPACING EXCEEDS 12" O.C. FOR 1/2" GWB OR 16" O.C. FOR 5/8" GWB (C.B.C. 2509.3)

9.10 EXTERIOR PLASTER

A. ALL EXTERIOR MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT EDITIONS OF THE U.B.C., STATE AND LOCAL CODES.

B. MATERIALS

1. PORTLAND CEMENT PLASTER
   a. BASE COAT CEMENTS: PORTLAND CEMENT, ASTM C150, TYPE I OR II, LOW ALKALI. "LOW ALKALI" SHALL BE PRINTED ON THE BAG.

   b. FACTORY FINISH COAT: MANUFACTURER'S STANDARD PRODUCT REQUIRING ADDITION OF WATER ONLY..

   c. SAND AGGREGATE FOR BASE COATS: ASTM C897.

2. VERTICAL LATH - LATH ON VERTICAL SURFACES SHALL BE FACTORY ASSEMBLED WIRE MESH WITH MINIMUM 2-LAYER GRADE "D." WORK SHALL INSURE PROPER WATERPROOFING. WIRE OVERLAPS SHALL BE PER C.B.C. & MFR SPECS. STAGGER VERTICAL LAPS. (REFER TO DETAILS FOR ANY ADDITIONAL REQUIREMENTS).

3. NON-VERTICAL LATH - LATH AT NON-VERTICAL CONDITIONS SHALL BE DIAMOND MESH EXPANDED STEEL LATH OVER MINIMUM 2-LAYER SELF-ADHESIVE FLASHING..

C. EXECUTION

1. COMPLY WITH INSTRUCTIONS AND RECOMMENDATIONS OF MANUFACTURER.

2. PLASTER ON LATH SHALL BE THREE COATS, NOT LESS THAN 7/8" THICK. LOCATE SCORE LINES, EXPANSION JOINTS AND SCREEDS AS RECOMMENDED BY THE MANUFACTURER & TRADE ORGANIZATION. LAPS OR OTHER UNSIGHTLY DIFFERENCES IN FINISH COAT ARE NOT ACCEPTABLE AND MUST BE REFINISHED. PLASTER STOPS SHALL BE PLACED WHERE PLASTER MEETS A SURFACE WHICH IS NOT PLASTERED. PLACE CORNER BEADS LEVEL, PLUMB, FULL HEIGHT, AND/OR LENGTH ACCURATELY TO FINISH PLASTER LINES. SECURE AGAINST SHIFTING. PLACE VENTS WHERE REQUIRED BY THE C.B.C. OVER PLYWOOD SHEAR PANELS PROVIDE (2) LAYERS OF GRADE "D" FELT. (ADDITIONAL REQUIREMENTS AS DETAILED).

3. WEEP SCREEDS SHALL BE A MINIMUM OF 26 GAUGE CORROSION PROOF METAL WITH MINIMUM VERTICAL ATTACHMENT OF 3 1/2" AT OR BELOW FOUNDATION PLATE WALL. SCREED SHALL BE PLACED ABOVE GRADE 4" MINIMUM AND SHALL ALLOW TRAPPED WATER TO DRAIN. EXTERIOR BUILDING PAPER AND LATH SHALL COVER AND TERMINATE ON THE ATTACHED FLANGE.

   PLASTER FINISH TO BE TROWEL FINISH AS APPROVED BY OWNER

4. SCREED SHALL BE MINIMUM 2" ABOVE APPROVED FINISH (

5.

DIV 10 SPECIALITIES NOTES

10.01 TOILET ACCESSORIES

A. SUBCONTRACTOR SHALL INSTALL MINIMUM 2x8 SOLID BLOCKING AS REQUIRED FOR ALL ACCESSORIES.

B. ACCESSORIES SUCH AS GRAB BARS, TOWEL BARS, PAPER DISPENSERS AND SOAP DISHES, ETC., PROVIDED ON OR WITHIN WALLS, SHALL BE INSTALLED AND SEALED TO PROTECT STRUCTURAL ELEMENTS FROM MOISTURE.

10.02 FLOOD PANS

A. WASHING MACHINE SURROUND SHALL BE "FLOODSAVER" MODEL WMPP27 WALL UNIT, WMPB27 BASE, WMPBD27 BASE OR EQUAL 2-PIECE SYSTEM TO CONSIST OF FORMED HIGH DENSITY POLYETHYLENE BASE & WALL PANEL, WITH A HUD/FHA FLAME SPREAD 100 & SMOKE DENSITY 450 PER ASTM STEINER TUNNEL TEST METHOD. BASE SHALL FORM A 3" DEEP CONTAINER PAN & SHALL ACCOMMODATE A STANDARD SHOWER-TYPE DRAIN. WALL PANEL SHALL PROVIDE MIN MUM 3" SPRAY BARRIER ON SIDES & TOP. WMPBD27 DRAINLESS BASE - USED IN APPLICATION WHERE A FLOOR JOIST OR OTHER OBSTRUCTION REQUIRES FLEXIBILITY IN DRAIN PLACEMENT. DRAIN TYPE SHALL BE CONSISTENT WITH LOCAL CODES.

B. DISHWASHER WATER CONTAINMENT SYSTEM SHALL BE "FLOODSAVER SLIDE-N-FOLD PAN" OR EQUIVALENT. 1-PIECE SYSTEM TO CONSIST OF FORMED HIGH DENSITY POLYPROPYLENE. UNIT SHALL FORM A MINIMUM 2.5" DEEP CONTAINMENT PAN.

10.03 CLOSETS

A. PROVIDE POLE & SHELF AT ALL CLOSETS

DIV 11 EQUIPMENT

11.01 DRYER VENTS TO OUTSIDE AIR PER MANUFACTURER'S APPROVED SPECIFICATION AND NOTES.

11.02 SUBCONTRACTOR SHALL SUPPLY AND INSTALL APPLIANCES: DISHWASHER, RANGE, OVEN, GARBAGE DISPOSAL, ETC.

11.03 SUBCONTRACTOR SHALL DESIGN, SUPPLY AND INSTALL F.A.U. (HEATING AND COOLING)

DIV 15 MECHANICAL/PLUMBING NOTES

15.01 MECHANICAL DRAWINGS FOR MECHANICAL, PLUMBING AND FIRE PROTECTION SHALL BE DESIGN/BUILD (OWNER TO APPROVE AND ARCHITECT TO REVIEW)

15.02 ACCESS PANELS

A. SUBCONTRACTOR SHALL PROVIDE ACCESS PANELS AS REQUIRED BY PLUMBING, AIR CONDITIONING AND OTHER INSTALLERS AS REQUIRED BY CODE.

B. CONTRACTOR SHALL SUBMIT LOCATIONS OF ALL ACCESS PANELS TO ARCHITECT FOR REVIEW - PRIOR TO INSTALLATION.

C. NO ACCESS PANELS SHALL BE LOCATED IN PUBLIC AREA WALLS OR CEILINGS.

15.03 NO STRUCTURAL MEMBER SHALL BE CUT FOR PIPES, DUCTS, ETC., UNLESS SPECIFICALLY DETAILED.

15.04 THE GENERAL CONTRACTOR SHALL COORDINATE AND VERIFY WITH THE PLUMBING, MECHANICAL AND ELECTRICAL CONTRACTORS THE SIZE AND LOCATION OF ALL PIPING, DUCTWORK, TRENCHES, SLEEVES, SPECIAL BOLTING FOR EQUIPMENT CONDUITS, ETC. THROUGH AND UNDER CONCRETE SLABS PRIOR TO POURING OF FOOTING AND SLABS. REFER TO MECHANICAL AND PLUMBING FOR ADDITIONAL NOTES AND REQUIREMENTS.

15.05 TOP OF ROOF MECHANICAL EQUIPMENT SHALL NOT BE PROJECTED ABOVE BUILDING PARAPET AND BE LOCATED AWAY FROM PARAPETS. IF HIGHER, EQUIPMENT SCREENS SHALL BE PROVIDED AS APPROVED BY PLANNING DEPARTMENT.

DIV 15 MECHANICAL/PLUMBING NOTES (continued)

15.06 FIRE PROTECTION SYSTEMS

A. FIRE PROTECTION SHALL BE PER C.B.C., C.F.C. & LOCAL CODES

B. ALL PLUMBING AND HEATING WORK SHALL CONFORM TO GOVERNING LOCAL CODES.

C. SUBCONTRACTOR SHALL PROVIDE AND INSTALL ADEQUATE VENTS FOR ALL GAS APPLIANCES.

D. SUBCONTRACTOR SHALL PROVIDE AND INSTALL GAS SHUT-OFF VALVE CONSPICUOUSLY MARKED OUTSIDE OF BUILDING (TITLE 19, CHAPT. 6 THRU 9, U.B.C).

15.07 PLUMBING

A. MAXIMUM FLOW OF ALL NEW LAVATORY FAUCETS SHALL BE CERTIFIED IN ACCORDANCE WITH TITLE-24

B. SUBCONTRACTOR SHALL INSULATE ALL PLUMBING PIPING IN ATTICS. CANOPIES, AND WALLS TO DETER FREEZING OF PIPES.

C. SUBCONTRACTOR SHALL SUPPLY AND INSTALL WATER HEATERS WITH NON-RIGID WATER CONNECTIONS SHALL BE STRAPPED FOR LATERAL SUPPORT (PER GOVERNING CODES)

D. WATER CONSERVATION FEATURES (I.E., MAXIMUM GALLON USAGE) SHALL BE PER C.P.C. SECTION #402.3, 402.7, 402.8

E. HOSE BIBBS & FUTURE UNIT IRRIGATION SHALL BE SPLIT FROM INLET MAIN PRIOR TO WATER SOFTENER. INSTALL BACK FLOW PREVENTER(S) AS REQUIRED BY C.P.C. & LOCAL CODES.

F. WATER HEATER SHALL BE SECURED AWAY FROM WALL PER REQUIRED CODES

G. AT FIBERGLASS TUB SHOWER ASSEMBLIES, PROVIDE FURRING STRIPS AT WALLS TO MATCH NAILING FLANGE PLANE. UNIT SHALL BE PLACED LEVEL & BOTTOM PAN SHALL BE SUPPORTED PER MANUFACTURER SPECS.

H. PROVIDE RECESSED BOX & PLUMBING FOR REFRIGERATED WATER SUPPLY.

15.08 VENTILATION & SANITATION SHALL CONFORM WITH CURRENT EDITION OF C.B.C., C.E.C. & TITLE 24.

15.09 PLUMBING AT RATED ASSEMBLIES

A. WALLS CONTAINING GAS VENTS OR NON COMBUSTIBLE PIPING THAT PASS THROUGH THREE FLOORS OR LESS NEED NOT PROVIDE THE FIRE-RESISTANCE RATING SPECIFIED IN C.B.C. FOR "SHAFT ENCLOSURES" PROVIDED ANNULAR SPACE AROUND THE VENTS OR PIPING IS FILLED AT EACH FLOOR OR CEILING WITH EQUIPMENT RATED NONCOMBUSTIBLE MATERIALS.

15.09 HEATING, VENTILATING, AND AIR CONDITIONING

A. ALL VERTICAL SHAFTS SHALL HAVE INSTALLED OVER EACH SIDE OF FRAMING 5/8" TYPE 'X' GYPSUM BOARD FOR ALL OPENINGS WITH ONE (1) HOUR ASSEMBLIES.

B. MECHANICAL CONTRACTOR SHALL BE REQUIRED TO MEET THE STATE OF CALIFORNIA ENERGY REGULATIONS FOR ALL MECHANICAL EQUIPMENT. OWNER HAS COMPLIED WITH BUILDING ENVELOPE REQUIREMENTS, PER U.B.C.

1. HEATING, VENTILATING, AIR CONDITIONING SYSTEM DESIGN AND INSTALLATION IS PART OF THIS PERMIT.
2. THE MECHANICAL CONTRACTOR SHALL PROVIDE TO THE BUILDING DEPT. COMPLETE DESIGN CALCULATIONS, INCLUDING TITLE 24 ENERGY CALCULATIONS TO THE SATISFACTION OF THE BUILDING DEPARTMENT.
   a. ALL WORK REQUIRED TO COMPLETE THE ABOVE SHALL BE A PART OF THIS CONTRACT.

C. PROVIDE AIR CHANGES FOR TOILET ROOMS, ETC. TO COMPLY WITH APPLICABLE BUILDING MECHANICAL CODES AND REGULATIONS.

D. THE MECHANICAL DESIGN/BUILD CONTRACTOR SHALL PROVIDE, IN ACCORDANCE WITH THE SPECIFICATIONS, THE REQUIRED NUMBER OF SETS OF MECHANICAL PLANS FOR REVIEWING SHOWING:

1. DUCT LAYOUT.
2. LOCATION, MANUFACTURER, MODEL NUMBER AND CAPACITY OF THE HVAC SYSTEM COMPONENTS AS WELL AS THERMOSTAT LOCATIONS.
3. FOR EACH HVAC UNIT INDICATED ON THE PLANS, ITS EER, COP, AND/OR COMBUSTION EFFICIENCY.

E. EVERY SPACE ACCOMMODATING HUMAN ACTIVITIES SHALL HAVE THE CLIMATE TEMPERATURE CONTROLLED IN ACCORDANCE WITH C.M.C. & C.B.C.

F. ALL MECHANICAL AND GRAVITY VENTILATION SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH C M.C. & C.B.C.

G. ALL DUCT CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH C.M.C.

H. THE MIN MUM INSULATION OF DUCT AND PLENUM (SUPPLY AND RETURN) SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH C.M.C.

I. REQUIRED MAINTENANCE OF ALL MECHANICAL EQUIPMENT SHALL BE PROVIDED TO THE OWNER THROUGH THE CONTRACTOR.

J. DRYER VENTING SHALL BE MIN. 26 GA. SHEET METAL DUCTING, 4" MIN DIAMETER. PRIOR TO INSTALLATION, CONTRACTOR SHALL VERIFY THAT SPECIFIC VENT LENGTH CONDITIONS AT EACH UNIT ARE APPROVED BY DRYER MFR(S). ALTERNATIVE DESIGNS SHALL BE APPROVED BY DRYER MFR(S) & BUILDING OFFICIAL PRIOR TO INSTALLATION. DRYER VENTS SHALL BE PROVIDED WITH BACKDRAFT STOP.

K. PROVIDE COMBUSTION AIR FOR ANY GAS FIRED EQUIPMENT PER MFR SPECS, C.B.C. AND C.M.C.

L. MOTORIZED MECHANICAL EQUIPMENT SHALL BE PROVIDED WITH NOISE ISOLATION CONNECTIONS.

M. PRIOR TO FRAMING, MECHANICAL & PLUMBING CONTRACTOR SHALL PROVIDE "SCHEMATIC" INTEGRATION DRAWINGS WITH PROPOSED LAYOUT. ARCHITECT SHALL HAVE THE OPPORTUNITY TO REVIEW DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ANY CHANGES (AT NO EXTRA CHARGE) TO ENSURE PROPER INTEGRATION WITH THE INTENT OF THE DRAWINGS.

DIV 16 ELECTRICAL NOTES

16.01 ELECTRICAL

A. ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF ELECTRICAL JUNCTION BOXES, ACCESS PANELS, AND SIGNAGE RACEWAYS WITH SIGN CONTRACTOR.

B. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS, SERVICE REQUIREMENTS, AND EXACT LOCATIONS OF SERVICE FACILITIES.

C. ELECTRICAL CONTRACTOR SHALL CHECK WITH OTHER TRADES FOR LOCATION OF EQUIPMENT WHICH REQUIRES ANY HOOK-UP, DISCONNECT SWITCHES, RELAYS, ETC. PRIOR TO ANY START OF WORK.

D. THE ELECTRICAL CONTRACTOR SHALL VERIFY WITH MECHANICAL DRAWINGS FOR CONTROL WIRING DIAGRAMS, EXACT LOCATIONS AND SIZE OF EQUIPMENT.

E. LOCATIONS SHOWN ON ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ELECTRICAL DRAWINGS.

F. ALL ELECTRICAL INSTALLATIONS SHALL COMPLY WITH GOVERNING APPROVED EDITIONS OF THE LOCAL ELECTRICAL CODES.

G. LIGHT SHALL CONFORM TO CURRENT EDITION, OF C.B.C., C.E.C. & TITLE 24.

H. FIXED WINDOWS SHALL BE SEALED TO LIMIT AIR INFILTRATION.

I. MINIMUM LIGHTING LEVEL WATTAGE AND REDUCTION CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH TITLE 20-1542.

J. FIXTURES SHALL BE RATED FOR THE SPECIFIC LOCATION INSTALLED.

K. ALL EQUIPMENT INSTALLED OUTDOORS AND EXPOSED TO THE WEATHER SHALL BE WEATHERPROOF AND G.F.C.I.

L. RECEPTACLES IN THE KITCHEN AND BATHROOM SHALL BE INSTALLED ABOVE THE WORK TOP UNLESS OTHERWISE NOTED ON THE ELECTRICAL PLANS.

M. RECEPTACLES SHALL BE INSTALLED VERTICALLY AT 12" PLUS ABOVE THE FLOOR, AT A MAX MUM DISTANCE NOTED IN THE C.B.C. & C.E.C. UNLESS INDICATED OTHERWISE.

N. WALL SWITCHES SHALL BE 42" ABOVE THE FINISH FLOOR.

O. RECEPTACLES IN KITCHENS AND BATHROOMS, WITHIN 6'-0" OF ANY SINKS, TUBS, AND/OR SHOWERS SHALL BE ON G.F.C.I. CIRCUITS.

P. RECEPTACLES INSTALLED IN ALL AREAS SHALL BE PROVIDED WITH ARC FAULT CIRCUIT INTERRUPTERS EXCEPT BATHROOMS AND GARAGES

Q. ELECTRICAL DRAWINGS SHALL BE DESIGN/BUILD (OWNER TO APPROVE & ARCHITECT TO REVIEW)

R. CABLE/ PHONE/ TV/ INTERNET SHALL BE WIRE TO "HOME RUN" TO A COMMON AREA CLOSET (OWNER SHALL APPROVE LOCATION PRIOR TO INSTALLATION)

ABBREVIATIONS:

ABV	ABOVE
AFF	ABOVE FINISH FLOOR
ACC	ACCESS
AP	ACCESS PANEL
AC	ACOUSTICAL
ADD	ADDENDUM
ADJ	ADJACENT
AGG	AGGREGATE
A/C	AIR CONDITIONING
ALT	ALTERNATE
AL	ALUMINUM
AB	ANCHOR BOLT
APX	APPROXIMATE
ARCH	ARCHITECT (URAL)
AC	ASPHALT / CONCRETE
BRG	BEARING
BM	BENCH MARK
BEL	BELOW
BLK	BLOCK
BLKG	BLOCKING
BD	BOARD
BOT	BOTTOM
BRZ	BRONZE
BLDG	BUILDING
BUR	BUILT UP ROOF
CAB	CABINET
CSMT	CASEMENT
CI	CAST IRON
CB	CATCH BASIN
CLG	CEILING
CFCI	CONTRACTOR FURNISH, CONTRACTOR INSTALL
CHAM	CHAMFER
CIR	CIRCLE
CLR	CLEAR (ANCE)
COL	COLUMN
CONC	CONCRETE
CMU	CONCRETE MASONRY UNIT
CONST	CONSTRUCTION
CJ	CEILING JOIST
CJT	CONTROL JOINT
CFL	COUNTER FLASHING
CS	COUNTERSINK
CY	CUBIC YARD
DP	DAMP PROOFING
DL	DEAD LOAD
DEM	DEMOLISH, DEMOLITION
DMT	DEMOUNTABLE
DEP	DEPRESSED
DTL	DETAIL
DIAG	DIAGONAL
DIA	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DR	DOOR
DH	DOUBLE HUNG
DS	DOWNSPOUT
DT	DRAIN TILE
DWG	DRAWING
DW	DUMBWAITER
EL	ELEVATION
EXT	EXTERIOR
EXS	EXTRA STRONG
FB	FACE BRICK
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUDS
FIN	FINISH (ED)
FF	FINISH FLOOR
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FP	FIRE PLACE
FL	FLASHING
FLR	FLOOR (ING)
FLCO	FLOOR CLEANEST
FJ	FLOOR JOIST
FD	FLOOR PLATE
FLUOR	FLUORESCENT
FTG	FOOTING
FND	FOUNDATION
FUR	FURRED (ING)

GA	GAGE, GAUGE
GI	GALVANIZED IRON
GC	GENERAL CONTRACT
GL	GLASS, GLAZING
GLB	GLASS BLOCK
GB	GRAB BAR
GR	GRADE GRADING
GWB / GYP	GYPSUM DRY WALL
GPPL	GYPSUM PLASTER
HWD	HARDWOOD
HDR	HEADER
HVAC	HEATING/VENTILATION/ AIR CONDITIONING
HT	HEIGHT
HM	HOLLOW METAL
HOR	HORIZONTAL
HB	HOSE BIBB
ID	INSIDE DIAMETER
INT	INTERIOR
INV	INVERT
LAM	LAMINATE (D)
LAV	LAVATORY
LH	LEFT HAND
LT	LIGHT
LL	LIVE LOAD
MB	MACHINE BOLT
MI	MALLEABLE IRON
MH	MANHOLE
MFR	MANUFACTURE (ER)
MAB	MARBLE
MAS	MASONRY
MAX	MAXIMUM
MC	MEDICINE CABINET
MED	MEDIUM
MEM	MEMBRANE
MIR	MIRROR
MISC	MISCELLANEOUS
MOD	MODULAR
MLD	MOLDING, MOULDING
MULL	MULLION
NAT	NATURAL
N	NORTH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER (S)
OFCI	OWNER FURNISH, CONTRACTOR INSTALL
OFDI	OWNER FURNISH, OWNER INSTALL
PED	PEDESTAL
PER	PERIMETER
PLAM	PLASTIC LAMINATE
PWD / PLY	PLYWOOD
PVC	POLYVINYL CHLORIDE
PL	PROPERTY LINE
QT	QUARRY TILE
RAD	RADIUS
RWC	RAINWATER CONDUCTOR
REG	REGISTER
R	R
RD	ROOF DRAIN
RM	ROOM
RO	ROUGH OPENING
RB	RUBBER BASE
SHTH	SHEATHING
SHT	SHEET
SIM	SIMILAR
S	SOUTH
SPEC	SPECIFICATION (S)
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
ST	STEEL
STO	STORAGE
SD	STORM DRAIN
STR	STRUCTURAL
SYS	SYSTEM
TEL	TELEPHONE
TV	TELEVISION
T&G	TONGUE AND GROOVE
TOS	TOP OF SLAB
TOW	TOP OF WALL
TB	TOWEL BAR
T	TREAD
TYP	TYPICAL
VG	VERTICAL GRAIN
VCT	VINYL COMPOSITION TILE
WSCT	WAINSCOT
WC	WATER CLOSET
WP	WATERPROOFING
W	WEST
WIN	WINDOW
WO	WITHOUT
WD	WOOD
WI	WROUGHT IRON

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CONST NOTES

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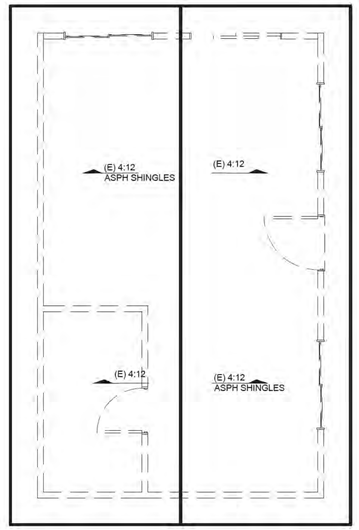
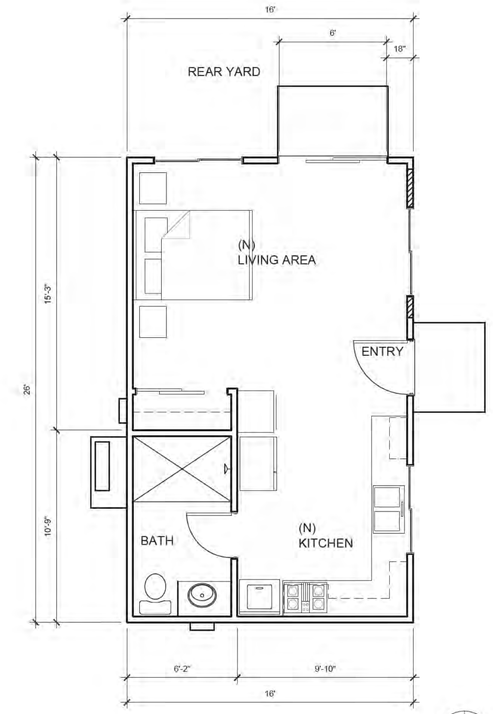
T-2



(E) ROOF PLAN

1/4" = 1'-0"

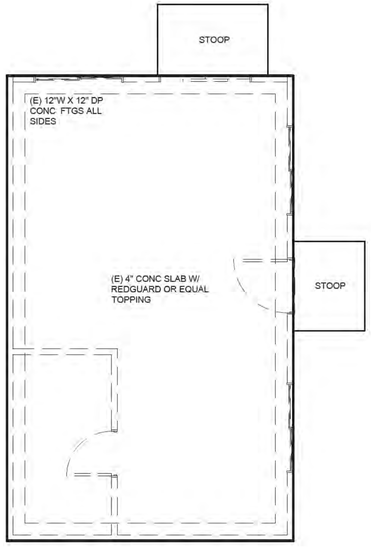


(E) / (N) ADU FLOOR PLAN

1/4" = 1'-0"

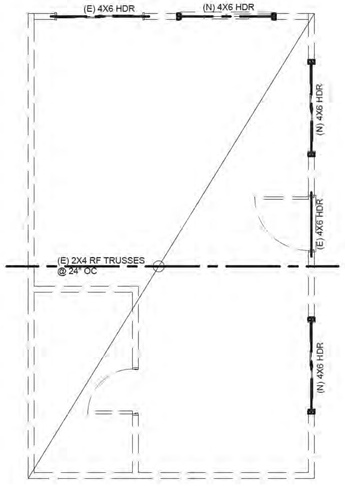
WALL LEGEND

(E) 2X4 WALLS



(E) WORKSHOP FOUND PLAN

1/4" = 1'-0"



(E) WORKSHOP FRAMING PLAN

1/4" = 1'-0"

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(N) ADU FLR PLAN
ROOF PLAN
REF FOUND PLN
REF FRAM'G PLN

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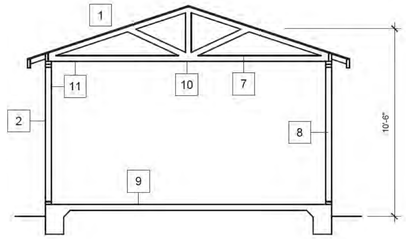
A-1

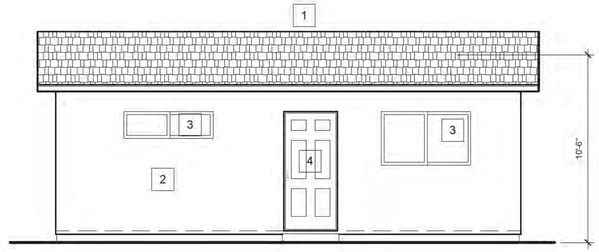


CROSS SECTION

1/4" = 1'-0"

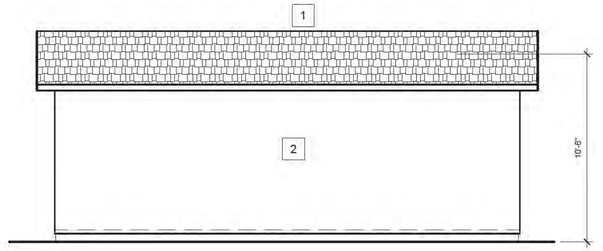
KEYED NOTES

1	(E) ASPHALT SHINGLE ROOFING
2	(E) STUCCO
3	(E) D.G. VINYL W NDOWS - (1) PANE TEMP
4	(E) F BERGLASS FRONT DOOR
5	NA
6	(E) VINYL SLIDING DOOR - (1) PANE TEMP
7	(N) R30 INSULATION
8	R15 INSULATION
9	(E) CONC SLAB W/ "REDGUARD" OR EQUAL APPLIED FOR WATERPROOFING
10	(E) WOOD TRUSSES
11	$\frac{5}{8}$" GYP BD, WALLS & CE L NG



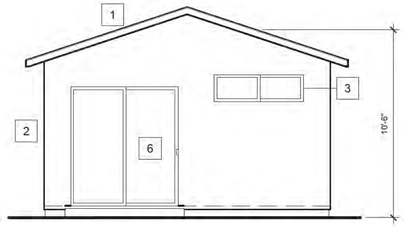
FRONT / SOUTH ELEVATION

1/4" = 1'-0"



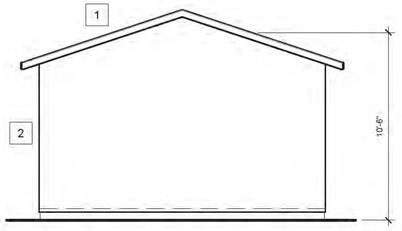
REAR / NORTH ELEVATION

1/4" = 1'-0"



RIGHT / EAST ELEVATION

1/4" = 1'-0"



LEFT / WEST ELEVATION

1/4" = 1'-0"

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ELEVATION
CROSS SECTION
KEYED NOTES

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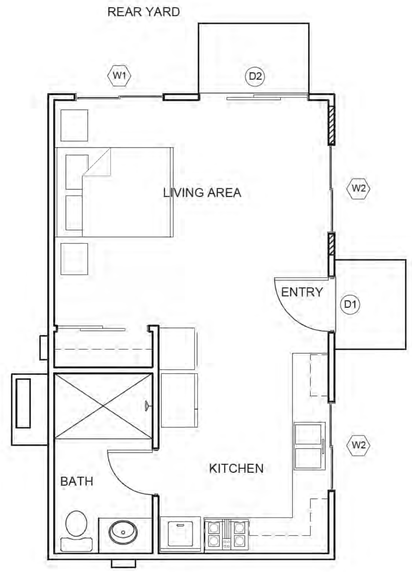
A-2



ADU FLR PLN - DR / WIND REFERENCE

1/4" = 1'-0"

WINDOW SCHEDULE

WINDOW SYMBOL	WINDOW SIZE	WINDOW TYPE	CONSTRUCTION / MATERIAL	MFGR'S INFO	DESCRIPTION	FINISH	REMARKS:	HDR. HGT.	LOCATION
W1	5016	-	VINYL	.31 U FACT/.27 SHGC	SLIDER	VINYL	DG, (1) PANE TEMPERED	(E) 7'-0"	LVG AREA
W2	5030	-	VINYL	.31 U FACT/.27 SHGC	SLIDER	VINYL	DG, (1) PANE TEMPERED	6'-8"	LVG AREA
W3	5016	-	VINYL	.31 U FACT/.27 SHGC	SLIDER	VINYL	DG, (1) PANE TEMPERED	5'-8"	KITCHEN

WINDOW NOTES:

1. ALL WINDOWS TO BE MINIMUM DUAL GLAZED, (1) PANE TEMPERED OR DUAL PANE TEMPERED AS NOTED IN THE SCHEDULE.
2. U-FACTOR - .31 / SHGC - .27 PER T24 PAGES OF THIS PROJECT
3. THE NFRC THERMAL PERMORMANCE LABELS SHALL REMAIN ON THE WINDOWS UNTIL FINAL INSPECTION.
4. BEDROOM EMERGENCY EGRESS
   EACH BEDROOM SHALL HAVE A DOOR DIRECTLY TO THE EXTERIOR OR A WINDOW PROVIDING AT LEAST 5.7 SF IN THE OPEN POSITION & HAVE A MINIMUM CLEAR WIDTH OPENING OF 20 INCHES AND CLEAR OPENING HEIGHT OF 24 INCHES. WINDOWS SHALL HAVE A MAXIMUM SILL HEIGHT OF 44 INCHES ABOVE THE FLOOR. SLEEPING ROOMS AT GRADE FLOOR LEVEL MAY HAVE A CLEAR SPACE OPENING OF 5 SF.
5. WINDOW LABELING IS TO REMAIN IN PLACE ON THE WINDOWS AT THE TIME OF THE INSPECTION AND SHALL MATCH FACTORS AND COEFFICIENTS ON THE TITLE-24 ENERGY CALCULATIONS.

DOOR SCHEDULE

	DOOR SYMBOL	DOOR SIZE	THICKNESS	DOOR TYPE	CONSTRUCTION / MATERIAL	MFGR'S INFO	DESCRIPTION	INT. FINISH	REMARKS:	HDR. HGT.	LOCATION
	EXTERIOR	A 4									
4 B	D1	3068 ENTRY DR	2"		S.C., WD, DG, GLASS PANELS	30 DR WISIDELIGHTS	SWING DR	WOOD		6'-8"	FRONT ENTRY
4 B	D2	6068 SLIDER	2"		VINYL		SLIDING DOOR	VINYL	DUAL PANE, (1) PANE TEMP	6'-8"	LVG AREA
4 B											

DOOR NOTES:

1. MATCH FINISH WINDOW / DOOR HEAD HEIGHT WHERE APPLICABLE.
2. VERIFY OWNER CHOICE ON TYPE, STYLES, ETC..
3. EXTERIOR DOORS / SIDELIGHTS TO BE DG, TEMPERED GLASS
4. EXTERIOR DOORS TO MEET HIGH FIRE REQUIREMENTS, MIN 20 MIN RATED COMPONENTS, MATERIALS AND MINIMUMS PER HIGH FIRE.
5. GARAGE DOOR SHALL BE MIN 1 3/8", SOLID CORE, TIGHT FITTING W/ SELF CLOSING HARDWARE OR A TIGHT FITTING, SELF CLOSING DOOR WITH A FIRE PROTECTION RATING OF NOT LESS THAN 20 MINUTES

KEYED CODE NOTES

A 708A.2.1 Exterior windows and exterior glazed door assembly requirements. Exterior windows and exterior glazed door assemblies shall comply with one of the following requirements: 1. Be constructed of multi-pane glazing with a minimum of one tempered pane meeting the requirements of Section 2406 Safety Glazing, or 2. Be constructed of glass block units, or 3. Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or 5. Be tested to meet the performance requirements of SFM 12-7A-2.

708A.2.2 Structural glass veneer. The wall assembly behind structural glass veneer shall comply with section 707A.3.

708A.3 Exterior doors. Exterior doors shall comply with one of the following:

B 1. The exterior surface or cladding shall be of noncombustible or Ignition-resistant material, or 2. Shall be constructed of solid core wood having stiles and rails not less than 1 3/8 inches thick with interior field panel thickness no less than 1 1/4 inches thick, or 3. Shall have a fire-resistance ra ing of not less than 20 minutes when tested according to NFPA 252. Exception: Solid doors having a fire-resistance rating of not less than 20 minutes may have untested glazing that complies with sec ion 708A.2. 4. Shall be tested to meet the performance requirements of standard SFM 12-7A-1.

708A.3.1 Exterior door glazing. Glazing in exterior doors shall comply with Section 708A.2.1.

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DR / WIND SCHED
REF FLR PLAN

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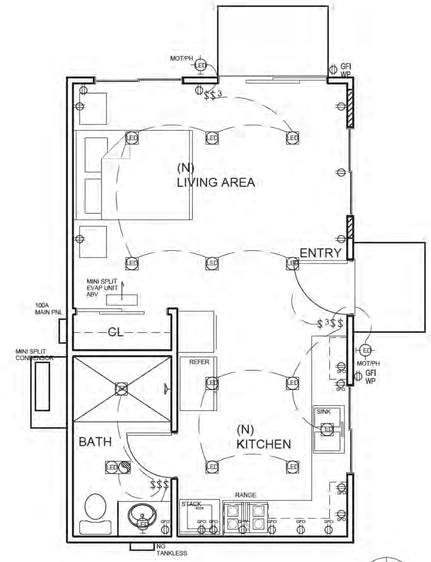
A-3

ELECTRICAL LEGEND:

AFCI TYP	AFCI / TAMPER RESISTENT OUTLET DUPLEX OUTLET
DFCI	GFCI / AFCI OR DUAL FUNCT. (DFCI) DUPLEX OUTLET, TAMP RESISTENT
GFI	GFCI, TAMP RESIST DUPLEX OUTLET
GFI WP	GFCI, WEATHER PROOF DUPLEX OUTLET
	FOURPLEX CONVENIENT OUTLET
	1/2 HOT OUTLET
	220V OUTLET
	FLOOR OUTLET
	JUNCTION BOX
GFI *1	GROUND FAULT INTERCEPTOR DUPLEX CONVENIENT OUTLET
WP	WATER PROOF OUTLET
$ VS	VACANCY SENS SWITCH, MANUAL ON
$	SINGLE POLE SWITCH
$ 3	THREE WAY SWITCH
$ 4	FOUR WAY SWITCH
PB	PUSH BUTTON SWITCH
A/L	DISPOSAL AIR SWITCH
E	ETHERNET JACK
USB	USB JACK
PH	PHONE JACK
TV	CABLE TV
	FLUOR LIGHTING - PIN BASED SOCKET
	LED RECESSED LIGHT
	WALL MOUNTED LIGHT
MOTPH	EXTERIOR LIGHT, MOTION & PHOT CNTRL
	CEILING OR HANGING LIGHT - SURFACE MTD
	EXHAUST FAN, 50 CFM MIN
	RECESSED EXHAUST FAN W/ LED. 50 CFM MIN W/ HUMIDISTAT
	RECESSED-HALO
SD	SMOKE DETECTOR, 110V, INTERCONNECTED WITH BATTERY BACKUP
H	HANGING/PENDANT (U.O.N.)
M	MASTER CONTROL SWITCH
	FLOOD LIGHT
	4'-0" TWO CIRCUIT 110V
	4'-0" ONE CIRCUIT 110V
	STAIR LIGHTS
	CEILING FAN
	WALL WASHER - AS INDICATED
	ADJUSTABLE SPOTLIGHT - AS INDICATED
CHIME	CHIMES
	FUEL GAS
GAS	LOOSE KEY VALVE W/ SECONDARY SHUT OFF VALVE.
HB	HOSE BIBB W/ FIXED ANTISYPHON DEVICE
	1/2" COPPER WATER PIPE
CM	CARBON MONOXIDE DETECTOR/ALARM, 110V, INTERCONNECTED WITH BATTERY BACKUP



ELECT - MECH PLAN

1/4" = 1'-0"

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ELECT PLAN
ELECT-MECH
NOTES

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E-1

GENERAL INFORMATION					
01	Project Name	Residential Building			
02	Run Title	Title 24 Analysis			
03	Project Location	260 N Alvarado Street			
04	City	Ojai	05	Standards Version	2022
06	Zip code	93023	07	Software Version	CBECC-Res 2022.2.0
08	Climate Zone	16	09	Front Orientation (deg/ Cardinal)	225
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Newly Constructed Addition	13	Number of Bedrooms	3
14	Addition Cond. Floor Area (ft²)	384	15	Number of Stories	1
16	Existing Cond. Floor Area (ft²)	1176	17	Fenestration Average U-factor	0.34
18	Total Cond. Floor Area (ft²)	1560	19	Glazing Percentage (%)	20.20%
20	ADU Bedroom Count	1			

ADDITION ALONE - Project Analysis Parameters					
01	02	03	04	05	06
Existing Area (excl. new addition) (ft2)	Addition Area (excl. existing) (ft2)	Total Area (ft2)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms
1176	384	1560	2	1	3

ADDITION ALONE - ACCESSORY DWELLING UNIT (ADU) PROJECT ANALYSIS PARAMETERS							
01	02	03	04	05	06	07	08
Zone Name	Existing Area (excl. new addition) (ft²)	ADU Area (excl. existing) (ft²)	Total Area (ft²)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms	Attached vs. Detached
First Floor	1176	384	1560	2	1	3	Detached

COMPLIANCE RESULTS	
01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	This building incorporates one or more Special Features shown below

ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft²-yr)	Standard Design TDV Energy (EDR2) (kTDV/ft²-yr)	Proposed Design Source Energy (EDR1) (kBtu/ft²-yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft²-yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0	89.78	0	86.17	0	3.61
Space Cooling	0	8.51	0	7.71	0	0.8
IAQ Ventilation	0	5.83	0	5.83	0	0
Water Heating	0	84.94	0	84.15	0	0.79
Self Utilization/Flexibility Credit						
Efficiency Compliance Total	0	189.05	0	183.86	0	5.2
Photovoltaics		0		0		
Battery				0		
Flexibility						
Indoor Lighting	0	8.11	0	8.11		
Appl. & Cooking	0	80.69	0	80.7		
Plug Loads	0	101.46	0	101.46		
Outdoor Lighting	0	7.56	0	7.56		
TOTAL COMPLIANCE	0	386.88	0	381.69		

ENERGY USE INTENSITY				
	Standard Design (kBtu/ft² - yr)	Proposed Design (kBtu/ft² - yr)	Compliance Margin (kBtu/ft² - yr)	Margin Percentage
Gross EUI[1]	62.18	61.41	0.77	1.24
Net EUI[2]	62.18	61.41	0.77	1.24

Notes
1. Gross EUI is Energy Use Total (not including PV) / Total Building Area.
2. Net EUI is Energy Use Total (including PV) / Total Building Area.

REQUIRED SPECIAL FEATURES
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.
• Variable capacity heat pump compliance option (verification details from VCHP Staff Report, Appendix B, and RA3)

HERS FEATURE SUMMARY
The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry
• Indoor air quality ventilation • Kitchen range hood • Verified Refrigerant Charge • Airflow in habitable rooms (SC3.1.4.1.7) • Verified heat pump rated heating capacity • Wall-mounted thermostat in zones greater than 150 ft2 (SC3.4.5) • Ductless indoor units located entirely in conditioned space (SC3.1.4.1.8)

ZONE INFORMATION						
01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
First Floor	Conditioned	HVAC System1	384	8	DHW Sys 1	New

OPAQUE SURFACES									
01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status
Northwest Wall	First Floor	R-15 Wall	315	Left	128	0	90	Ex. w/ Siding	New
North-east Wall	First Floor	R-15 Wall	45	Back	208	0	90	Ex. w/ Siding	New
South-east Wall	First Floor	R-15 Wall	135	Right	128	47.5	90	Ex. w/ Siding	New
Southwest Wall	First Floor	R-15 Wall	225	Front	208	50	90	Ex. w/ Siding	New
Roof	First Floor	R-30 Roof Attic	n/a	n/a	384	n/a	n/a		New

ATTIC							
01	02	03	04	05	06	07	08
Name	Construction	Type	Roof Riso (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof
Attic First Floor	Attic Roof/First Floor	Ventilated	4	0.1	0.85	No	No

FENESTRATION / GLAZING														
01	02	03	04	05	06	07	08	09	10	11	12	13	14	
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	
Window	Window	Southeast Wall	Right	135			1	47.5	0.34	NFRC	0.34	NFRC	Bug Screen	
Window 2	Window	Southwest Wall	Front	225			1	30	0.34	NFRC	0.34	NFRC	Bug Screen	

OPAQUE DOORS			
01	02	03	04
Name	Side of Building	Area (ft²)	U-factor
Door	Southwest Wall	20	0.5

SLAB FLOORS							
01	02	03	04	05	06	07	08
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab	First Floor	384	84	none	0	80%	No

OPAQUE SURFACE CONSTRUCTIONS							
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-15 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.089	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: Wood Siding/sheathing/decking
Attic Roof/First Floor	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION				
01	02	03	04	05
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50
Not Required	Not Required	N/A	n/a	n/a

WATER HEATING SYSTEMS								
01	02	03	04	05	06	07	08	09
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)

WATER HEATERS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input Type	Input Rating or Pilot	Tank Insulation R-value (int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Location
DHW Heater 1	Gas	Consumer Instantaneous	1	0	UEF	0.82	Btu/Hr	200000	0	n/a		

WATER HEATING - HERS VERIFICATION							
01	02	03	04	05	06	07	
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery	
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required	

SPACE CONDITIONING SYSTEMS								
01	02	03	04	05	06	07	08	09
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type
HVAC System1	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump System 1	1	n/a	n/a	Setback

HVAC - HEAT PUMPS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	System Type	Number of Units	Heating				Cooling			Zonally Controlled	Compressor Type	HERS Verification
			Efficiency Type	HSPF / HSPF2 / COP	Cap 47	Cap 17	Efficiency Type	SEER / SEER2	EER / EER / CEER			
Heat Pump System 1	VCHP-ductless	1	HSPF	8.5	24000	17500	EERS/EER	14	11	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION								
01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-htpump	Not Required	0	Not Required	Not Required	Yes	No	Yes	Yes

VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION										
01	02	03	04	05	06	07	08	09	10	
Name	Certified Low-Static VCHP System	Airflow to Habitable Rooms	Ductless Units in Conditioned Space	Wall Mount Thermostat	Air Filter String & Pressure Drop Rating	Low Leakage Ducts in Conditioned Space	Minimum Airflow per R43.3 and SC3.3.4.1	Certified non-continuous Fan	Indoor Fan not Running Continuously	
Heat Pump System 1	Not required	Required	Required	Required	Not required	Not required	Not required	Not required	Not required	

INDOOR AIR QUALITY (IAQ) FANS								
01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE	Includes Fault Indicator Display?	HERS Verification	Status
SFam ADU IAQVentRpt	27	0.35	Exhaust	No	n/a	No	Yes	

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
I, I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Mario Bertacco	Documentation Author Signature: Mario Bertacco
Company: NRG Compliance LP	Signature Date: 01/24/2023
Address: PO Box 3777	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Santa Rosa, CA 95402	Phone: 707-237-6957

RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California: 1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance. 2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.	
Responsible Designer Name: Ray Ames	Responsible Designer Signature: Ray Ames
Company: Foothill Design Group	Date Signed: 01/24/2023
Address: 2309 Aztec Avenue	License:
City/State/Zip: Ventura, CA 93001	Phone: (805) 407-9327

Digitally signed by ConSol Home Energy Efficiency Rating System Services, Inc. (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

fthill.
FOOTHILL DESIGN GROUP

GRN BLDG NOTES

260 N. ALVARADO AVENUE

OJAI EL ROBLAR LLC
[redacted]

OJAI, CALIFORNIA

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1.25.23

EN1

RESIDENTIAL MEASURES SUMMARY — RMS-1

Project Name	Building Type	Date
Ojai El Roblar LLC ADU	☑ Single Family ☑ Addition Alone ☐ Multi Family ☐ Existing+ Addition/Alteration	1/24/2023

Project Address	California Energy Climate Zone	Total Cond. Floor Area	Addition	# of Units
260 N Alvarado Street Ojai	CA Climate Zone 16	384	384	1

INSULATION

Construction	Type	Cavity	Area (ft^2)	Special Features	Status
Wall	Wood Framed	R 15	129		New
Wall	Wood Framed	R 15	208		New
Wall	Wood Framed	R 15	81		New
Wall	Wood Framed	R 15	158		New
Door	Opaque Door	- no insulation	20		New
Roof	Wood Framed Attic	R 30	384		New
Slab	Unheated Slab-on-Grade	- no insulation	384	Perim = 84'	New

FENESTRATION — Total Area: 78 | Glazing Percentage: 20.2% | New/Altered Average U-Factor: 0.34

Orientation	Area(ft^2)	U-Fac	SHGC	Overhang	Sidefins	Exterior Shades	Status
Right (SE)	47.5	0.340	0.34	none	none	N/A	New
Front (SW)	30.0	0.340	0.34	none	none	N/A	New

HVAC SYSTEMS

Qty.	Heating	Min. Eff	Cooling	Min. Eff	Thermostat	Status
1	Electric Heat Pump	8.50 HSPF	Split Heat Pump	14.0 SEER	Setback	New

HVAC DISTRIBUTION

Location	Heating	Cooling	Duct Location	Duct R-Value	Status
HVAC System	Ductless / with Fan	Ductless	n/a	n/a	New

WATER HEATING

Qty.	Type	Gallons	Min. Eff	Distribution	Status
1	Small Instantaneous Gas	0	0.82	Standard	New

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2022 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information.
(042022)

Building Envelope:

§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AAMA/WDMA/CSA 101/I.S.2/A440-2011. *
§ 110.6(a)5:	**Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped. *
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	**Roof Deck, Ceiling and Rafter Roof Insulation.** Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration, as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling. *
§ 150.0(b):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B. †
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45, or area-weighted average U-factor of all fenestration must not exceed 0.45. *

Fireplaces, Decorative Gas Appliances, and Gas Log:

§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device. *
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *

Space Conditioning, Water Heating, and Plumbing System:

§ 110.0-§ 110.3:	**Certification.** Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating. *
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
§ 110.3(c)3:	**Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

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2022 Single-Family Residential Mandatory Requirements Summary

§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters. *
§ 150.0(h)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.
§ 150.0(h)3A:	**Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	**Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. *
§ 150.0(j)2:	**Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	**Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2' higher than the base of the water heater.
§ 150.0(n)3:	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.

Ducts and Fans:

§ 110.8(d)3:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance.** All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than ¼". If mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed. *
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.
§ 150.0(m)12:	**Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter. *

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§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *

Ventilation and Indoor Air Quality:

§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality**. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1. *
§ 150.0(o)1B:	**Central Fan Integrated (CFI) Ventilation Systems.** Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and controlled per §150.0(o)1Bii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	**Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses .** Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1Ci-iii.
§ 150.0(o)1G:	**Local Mechanical Exhaust.** Kitchens and bathrooms must have local mechanical exhaust; noncenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1Gii; enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Gii-iv. Airflow must be measured by the installer per §150.0(o)1Gv, and rated for sound per §150.0(o)1Gvi. *
§ 150.0(o)1H&I:	**Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems.** The airflow required per § 150.0(o)1C must be measured using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G

Pool and Spa Systems and Equipment:

§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDbS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating. *
§ 110.4(b)1:	**Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.

Lighting:

§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. *
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.
§ 150.0(k)1B:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.
§ 150.0(k)1D:	**Light Sources in Enclosed or Recessed Luminaires**. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1E:	**Blank Electrical Boxes.** The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k). *

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	**Accessible Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	**Multiple Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	**Mandatory Requirements.** Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	**Energy Management Control Systems.** An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	**Automatic Shutoff Controls.** In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	**Dimmers.** Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(k)2K:	**Independent controls.** Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Solar Readiness:

§ 110.10(a)1:	**Single-family Residences.** Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§110.10(b)1A:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. *
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(s)	**Energy Storage System (ESS) Ready.** All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, or a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(t)	**Heat Pump Space Heater Ready.** Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(u)	**Electric Cooktop Ready.** Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v)	**Electric Clothes Dryer Ready.** Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

*Exceptions may apply.

5/6/22

fthill.
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GRN BLDG NOTES

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EN2

Division 4.1 – PLANNING AND DESIGN

SECTION 4.101 GENERAL

4.101.1 Scope. The provisions of this division outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties.

SECTION 4.102 DEFINITIONS

4.102.1 Definitions. The following terms are defined in Chapter 2.

FRENCH DRAIN.

WATTLES.

SECTION 4.103 SITE SELECTION (Reserved)

SECTION 4.104 SITE PRESERVATION (Reserved)

SECTION 4.105 DECONSTRUCTION AND REUSE OF EXISTING STRUCTURES (Reserved)

SECTION 4.106 SITE DEVELOPMENT

4.106.1 General. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

4.106.2 Storm water drainage and retention during construction. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil.

(Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)

4.106.3 Grading and paving. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales
2. Water collection and disposal systems
3. French drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception: Additions and alterations not altering the drainage path.

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Section 4.106.4.1, 4.106.4.2, or 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

Exceptions:

1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
   1.1. Where there is no commercial power supply.
   1.2. Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than $400.00 per dwelling unit.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

4.106.4.2 New multifamily dwellings. If residential parking is available, ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

Notes:

1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.2.1 Electric vehicle charging space (EV space) locations. Construction documents shall indicate the location of proposed EV spaces. Where common use parking is provided at least one EV space shall be located in the common use parking area and shall be available for use by all residents.

4.106.4.2.1.1 Electric vehicle charging stations (EVCS). When EV chargers are installed, EV spaces required by Section 4.106.4.2.2, Item 3, shall comply with at least one of the following options:

1. The EV space shall be located adjacent to an accessible parking space meeting the requirements of the *California Building Code*, Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The EV space shall be located on an accessible route, as defined in the *California Building Code*, Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the *California Building Code*, Chapter 11B, are not required to comply with Section 4.106.4.2.1.1 and Section 4.106.4.2.2, Item 3.

Note: Electric vehicle charging stations serving public housing are required to comply with the *California Building Code*, Chapter 11 B.

4.106.4.2.2 Electric vehicle charging space (EV space) dimensions. The EV spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).
2. The minimum width of each EV space shall be 9 feet (2743 mm).
3. One in every 25 EV spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).
   a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.3 Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV space. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.2.4 Multiple EV spaces required. Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

4.106.4.2.5 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the *California Electrical Code*.

4.106.4.3 New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces.

Notes:

1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.3.1 Number of required EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

TABLE 4.106.4.3.1

TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED EV SPACES
0–9	0
10–25	1
26–50	2
51–75	4
76–100	5
101–150	7
151–200	10
201 and over	6 percent of total

4.106.4.3.2 Electric vehicle charging space (EV space) dimensions. The EV spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).
2. The minimum width of each EV space shall be 9 feet (2743 mm).

4.106.4.3.3 Single EV space required. When a single EV space is required, the EV space shall be designed in accordance with Section 4.106.4.2.3.

4.106.4.3.4 Multiple EV spaces required. When multiple EV spaces are required, the EV spaces shall be designed in accordance with Section 4.106.4.2.4.

4.106.4.3.5 Identification. The service panels or subpanels shall be identified in accordance with Section 4.106.4.2.5.

4.106.4.3.6 Accessible EV spaces. In addition to the requirements in Section 4.106.4.3, EV spaces for hotels/motels and all EVSE, when installed, shall comply with the accessibility provisions for EV charging stations in the *California Building Code*, Chapter 11B.

Division 4.2 – ENERGY EFFICIENCY

SECTION 4.201 GENERAL

4.201.1 Scope. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

Division 4.3 – WATER EFFICIENCY AND CONSERVATION

SECTION 4.301 GENERAL

4.301.1 Scope. The provisions of this chapter shall establish the means of conserving water used indoors, outdoors and in wastewater conveyance.

SECTION 4.302 DEFINITIONS

4.302.1 Definitions. Reserved.

SECTION 4.303 INDOOR WATER USE

4.303.1 Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

4.303.1.1 Water closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

4.303.1.2 Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

4.303.1.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.

Note: A hand-held shower shall be considered a showerhead.

4.303.1.4 Faucets.

4.303.1.4.1 Residential lavatory faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory faucets in common and public use areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.

4.303.1.4.4 Kitchen faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

4.303.2 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code*.

SECTION 4.304 OUTDOOR WATER USE

4.304.1 Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

Notes:

1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the *California Code of Regulations*, Title 23, Chapter 2.7, Division 2.

   MWELO and supporting documents, including a water budget calculator, are available at: https://www.water.ca.gov/

SECTION 4.305 WATER REUSE SYSTEMS

4.305.1 Recycled water supply systems. Newly constructed residential developments, where disinfected tertiary recycled water is available from a municipal source to a construction site, may be required to have recycled water supply systems installed, allowing the use of recycled water for residential landscape irrigation systems. See Chapter 15 of the *California Plumbing Code*.

Division 4.4 – MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

SECTION 4.401 GENERAL

4.401.1 Scope. The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture; construction waste diversion; employment of techniques to reduce pollution through recycling of materials; and building commissioning or testing, adjusting and balancing.

SECTION 4.402 DEFINITIONS

4.402.1 Definitions. Reserved.

SECTION 4.403 FOUNDATION SYSTEMS (Reserved)

SECTION 4.404 EFFICIENT FRAMING TECHNIQUES (Reserved)

SECTION 4.405 MATERIAL SOURCES (Reserved)

SECTION 4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

4.406.1 Rodent proofing. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

SECTION 4.407 WATER RESISTANCE AND MOISTURE MANAGEMENT (Reserved)

SECTION 4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

4.408.1 Construction waste management. Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Exceptions:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

4.408.2 Construction waste management plan. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
2. Specify if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).
3. Identify diversion facilities where the construction and demolition waste material will be taken.
4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 Waste management company. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

4.408.4 Waste stream reduction alternative [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 pounds per square foot of the building area shall meet the minimum 65 percent construction waste reduction requirement in Section 4.408.1.

4.408.4.1 Waste stream reduction alternative. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65 percent construction waste reduction requirement in Section 4.408.1.

4.408.5 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, Items 1 through 5, Section 4.408.3 or Section 4.408.4.

Notes:

1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at http://www.hcd.ca.gov/building-standards/calgreen/cal-green-form.shtml may be used to assist in documenting compliance with this section.
2. Mixed construction and demolition debris (C&D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

SECTION 4.409 LIFE CYCLE ASSESSMENT (Reserved)

SECTION 4.410 BUILDING MAINTENANCE AND OPERATION

4.410.1 Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
2. Operation and maintenance instructions for the following:
   a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
   b. Roof and yard drainage, including gutters and downspouts.
   c. Space conditioning systems, including condensers and air filters.
   d. Landscape irrigation systems.
   e. Water reuse systems.
3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
4. Public transportation and/or carpool options available in the area.
5. Educational material on the positive impacts of an interior relative humidity between 30–60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
6. Information about water-conserving landscape and irrigation design and controllers which conserve water.
7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
9. Information about state solar energy and incentive programs available.
10. A copy of all special inspection verifications required by the enforcing agency or this code.

4.410.2 Recycling by occupants. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of nonhazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are not required to comply with the organic waste portion of this section.

Division 4.5 – ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL

4.501.1 Scope. The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS

4.502.1 Definitions. The following terms are defined in Chapter 2.

AGRIFIBER PRODUCTS.

COMPOSITE WOOD PRODUCTS.

DIRECT-VENT APPLIANCE.

MAXIMUM INCREMENTAL REACTIVITY (MIR).

MOISTURE CONTENT.

PRODUCT-WEIGHTED MIR (PWMIR).

REACTIVE ORGANIC COMPOUND (ROC).

VOC.

SECTION 4.503 FIREPLACES

4.503.1 General. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

SECTION 4.504 POLLUTANT CONTROL

4.504.1 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of water, dust and debris, which may enter the system.

4.504.2 Finish material pollutant control. Finish materials shall comply with this section.

4.504.2.1 Adhesives, sealants and caulks. Adhesives, sealants and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with Section 94507.

4.504.2.2 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-high Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3 Aerosol paints and coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(a)(1) and (f)(1) of *California Code of Regulations*, Title 17, commencing with Section 94522; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification.
2. Field verification of on-site product containers.

TABLE 4.504.1
ADHESIVE VOC LIMIT[1,2]
Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesive	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

1. If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.
2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168.

TABLE 4.504.2
SEALANT VOC LIMIT
Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	VOC LIMIT
Architectural	250
Marine deck	760
Nonmembrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural Nonporous Porous	250 775
Modified bituminous	500
Marine deck	760
Other	750

TABLE 4.504.3
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2,3]
Grams of VOC per Liter of Coating,
Less Water and Less Exempt Compounds

COATING CATEGORY	VOC LIMIT
Flat coatings	50
Nonflat coatings	100
Nonflat-high gloss coatings	150
SPECIALTY COATINGS	
Aluminum roof coatings	400
Basement specialty coatings	400
Bituminous roof coatings	50
Bituminous roof primers	350
Bond breakers	350
Concrete curing compounds	350
Concrete/masonry sealers	100
Driveway sealers	50
Dry fog coatings	150
Faux finishing coatings	350
Fire resistive coatings	350
Floor coatings	100
Form release compounds	250
Graphic arts coatings (sign paints)	500
High temperature coatings	420
Industrial maintenance coatings	250
Low solids coatings[1]	120
Magnesite cement coatings	450
Mastic texture coatings	100
Metallic pigmented coatings	500
Multicolor coatings	250
Pre-treatment wash primers	420
Primers, sealers, and undercoaters	100
Reactive penetrating sealers	350
Recycled coatings	250
Roof coatings	50
Rust preventative coatings	250
Shellacs Clear Opaque	730 550
Specialty primers, sealers and undercoaters	100
Stains	250
Stone consolidants	450
Swimming pool coatings	340
Traffic marking coatings	100
Tub and tile refinish coatings	420
Waterproofing membranes	250
Wood coatings	275
Wood preservatives	350
Zinc-rich primers	340

1. Grams of VOC per liter of coating, including water and including exempt compounds.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available from the Air Resources Board.

4.504.3 Carpet systems. All carpet installed in the building interior shall meet the testing and product requirements of one of the following:

1. Carpet and Rug Institute's Green Label Plus Program.
2. California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350.)
3. NSF/ANSI 140 at the Gold level.
4. Scientific Certifications Systems Indoor Advantage™ Gold.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's Green Label program.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall comply with one or more of the following:

1. Products compliant with the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database.
2. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools program).
3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.
4. Meet the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350).

4.504.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5.

4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain-of-custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, *et seq.*).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European 636 3S, and Canadian CSA O121, CSA O151, CSA O153 and CSA O325 standards.
5. Other methods acceptable to the enforcing agency.

TABLE 4.504.5
FORMALDEHYDE LIMITS[1]
Maximum Formaldehyde Emissions in Parts per Million

PRODUCT	CURRENT LIMIT
Hardwood plywood veneer core	0.05
Hardwood plywood composite core	0.05
Particleboard	0.09
Medium density fiberboard	0.11
Thin medium density fiberboard[2]	0.13

1. Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E1333. For additional information, see *California Code of Regulations*, Title 17, Sections 93120 through 93120.12.
2. Thin medium density fiberboard has a maximum thickness of $^5/_{16}$ inch (8 mm).

SECTION 4.505 INTERIOR MOISTURE CONTROL

4.505.1 General. Buildings shall meet or exceed the provisions of the *California Building Standards Code*.

4.505.2 Concrete slab foundations. Concrete slab foundations required to have a vapor retarder by the *California Building Code*, Chapter 19 or concrete slab-on-ground floors required to have a vapor retarder by the *California Residential Code*, Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:

1. A 4-inch-thick (101.6 mm) base of $^1/_2$ inch (12.7 mm) or larger clean aggregate shall be provided with a vapor retarder in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the enforcing agency.
3. A slab design specified by a licensed design professional.

4.505.3 Moisture content of building materials. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:

1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece to be verified.
3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

SECTION 4.506 INDOOR AIR QUALITY AND EXHAUST

4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
   a. Humidity controls shall be capable of adjustment between a relative humidity range of ≤ 50 percent to a maximum of 80 percent. A humidity control may utilize manual or automatic means of adjustment.
   b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in).

Notes:

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower, or tub/shower combination.
2. Lighting integral to bathroom exhaust fans shall comply with the *California Energy Code*.

SECTION 4.507 ENVIRONMENTAL COMFORT

4.507.1 Reserved.

4.507.2 Heating and air-conditioning system design. Heating and air-conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J—2016 (*Residential Load Calculation*), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D—2016 (*Residential Duct Systems*), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S—2014 (*Residential Equipment Selection*) or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the systems function are acceptable.

SECTION 4.508 OUTDOOR AIR QUALITY (Reserved)

fthill.
FOOTHILL DESIGN GROUP

GRN BLDG NOTES

260 N. ALVARADO AVENUE

OJAI EL ROBLAR LLC

CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL

OJAI, CALIFORNIA

Ray Ames - Designer

Ray Ames

2309 Aztec Ave
Ventura, CA 93001
(805) 407-9327
fthillray@yahoo.com
foothilldesigngroup.com
houzz.com/pro/fthillray

1.23.23

GB-1

Will-Serve/Proof of Service/Meter Request Form

A "Will-Serve" letter may be issued upon the District's completion of an analysis determining that all conditions of approval are met.

Required Attachments:

1. Drawing/sketch of project (with dimensions)
2. Tax Assessors parcel map that includes the subject property.
3. Subdivision map covering the location of the project.*
4. Documentation of existing permitted dwellings on the property.

   * Clearly indicate all APNs and legal lots involved in the project. Ensure any markups to county documents do not obscure the underlying information.

Applicant Information:

Account Number:	
Name:	B[redacted]
Company:	B[redacted] Inc
Mailing Address:	PO Box [redacted] Oak View CA 93022
Phone Number:	805-[redacted]
Email Address:	[redacted]@sbcglobal.net

Project Information:

New Meter Requested: ☐ Yes ☐ No

Assessor's Parcel #(s):	018-0-101-115
Service Address:	1186 Rice Rd
City, State, Zip code:	Ojai CA 93022
Planning Dept Case #:	2023-0047
# of Existing Dwellings:	1

Date Dwellings Permitted: ~~1111~~ 1949

Type of Construction:

☐ New Construction ☑ Tenant Improvement ☑ ADU ☐ Other

Type of Use:

☑ Single Family Res ☐ Multi-Family Res (# of dwellings _____) ☐ Other

Project Dimensions (Sqft): 720 total sq ft

Continued on Next Page

MEINERS OAKS WATER DISTRICT
(805) 646-2114

Will-Serve/Proof of Service/Meter Request Form

Detailed Project Description:

Change of use from permitted Garage w/ bathroom (~~1964~~ 1949) to ADU w/ kitchen and 240 sq ft ad

Please allow a minimum of 60 days to evaluate and process Will-Serve letter and new meter requests. The time frame will depend on receipt of satisfactory information from the applicant and schedule of pertinent District Committees and Board of Directors meetings.

☑ ***I acknowledge that MOWD will bill a $100 Administrative Fee for processing this request.***

Applicant Signature

[redacted]

Date

3/24/23

Review of Application for Will Serve Letter

Conversion of a permitted garage with bathroom to a 720-sf ADU with kitchen for Property with Existing Meter at 1186 S Rice Rd.

Proposal

The proposed project consists of tenant improvement to a permitted 439-sf garage with bathroom, adding 240-sf to an ADU with kitchen.

Applicant provided a detailed site plan, showing the location of the proposed structure.

Screening Step 1: Is the proposed building site on a legal lot? YES

Applicant provided a copy of a tax assessor parcel map and a subdivision map that indicate a single 0.95-acre parcel. APN: 081-0-101-115

Screening Step 2. Will the current allocation support an ADU? YES

Allocation Details:

- Allocation Case Identifier: AA-1052
- Allocation Category: 5/8" RES meter, 1 Parcel
- Parcel Size: 0.95 acre
- Current Base Fixed Allocation: 120 HCF/yr
- Current Base Variable Allocation: 324 HCF/yr
- Fixed Base Allocation Needed to Support ADU: 84 HCF/yr
- Deduction from Variable Allocation needed to Support ADU through drought stages: 100 HCF/yr

If the ADU are provided the customary fixed dwelling allocations, the new allocation for this property would be as follows:

- New Base Fixed Allocation: **180 HCF/yr**
- New Base Variable Allocation: **224 HCF/yr**

Recommendation

If a will serve letter is to be supplied, but must clearly state:

- Letter applies only to the proposed ADU as described in the applicant-provided preliminary site plan with the file date 2-23-2023.
- There will be no increase in the total (fixed plus variable) water allocation assigned to the meter Will Serve Letter will expire after 1 year.

NAME.....

LOT..... BLK..... CODE.....

RESIDENTIAL BUILDING RECORD

ADDRESS 1186 RICE RD.

PARCEL 018-101-115

SHEET 2 OF 2 SHEETS

SUB..... MAP.....

DESCRIPTION OF BUILDING

CLASS & SHAPE	CONSTRUCTION	STRUCTURAL	EXTERIOR	ROOF	LIGHTING	AIR CONDITION
D4.58	Light	X Frame	X Stucco on CW	Flat % Pitch	Wiring	X Heating X Cooling
	Sub-Standard	X 2" x 4" -16"		X Gable 4/4 L	K.T. Conduit	Forced Clean'g
ARCHITECTURE	X Standard	Sheathing	Siding "x"	Hip 1/4	B.X. X Cable	Gravity Humid.
	Above-Standard	Concrete Block		Shed 1/4	Fixtures	Wall Unit
1 Stories	Special	B & B. T. & G.		Cut Up	Few Cheap	
TYPE		Brick	Shingle	Dormers	X Avg. X Med.	X Floor Unit
Use / Design	FOUNDATION	Adobe	Shake	X Raft. 2"x6" 24"	Many Special	Zone Unit
X Single X	X Concrete	X Floor Joist:	B & B. T. & G.	X Gutters PART		Central"
Double	Reinforced	X 1ST. 2"x6" 16"		X METAL	PLUMBING	X 2 1/2 TON EVAP COOL
Duplex	Brick	2ND "x" "	Brick	Shingle	Poor X Std. Spec	
Apartment	Wood	X Sub-Floor OP	Stone	Shake		Oil Burner
Flat-Court	Piers	Concrete Floor	WINDOWS	Tile	X Sink	
Motel			X D.H. Casement	Tile Trim	Laundry	55 M-B.T.U.
		Insulated Ceilings	Metal Sash	X Compo.; RK	X Water Htr.-Auto.	X Fireplace
Units	Light Heavy	Insulated Walls	X Screens	Compo. Shingle	Water-Softner	

ROOM AND FINISH DETAIL

ROOMS	FLOORS B	1	2	FLOOR FINISH Material	Grade	TRIM	INTERIOR FINISH Walls	Ceilings
All		X		LINO	F	OP	PL	PL
Ent Hall								
Living		1						
Dining		1						
Bed		1		AT			3WA KP PANEL	KP-OBM
Bed		1						
Kitchen		1			A			
Drain Bd.	Material: FORMICA			Lgth: 12 Ft		Splash: 16" C-T1		

CONSTRUCTION RECORD

Permit No.	Permit For	Amount	Date	EFFEC. YEAR	APPR. YEAR	NORMAL % GOOD Age	Remain'g Life	Table	%	RATING (E,G,A,F,P) Cond.	Arch. Attr.	Func. Plan	Con-form	Storage Cupb'd	Space Closet	Work-m'nshp
			1949	1949	1965	16	40	R55	71	A	A	A	A	A	G	A
				1949	1973	24	36	R60	71	A	A	A	A	A	G	A

BATH DETAIL

Fl.	No.	FINISH Floors	Walls	FIXTURES Wc.	Lo.	Tub	Type	Grade	SHOWER St.	O.T.	G.D.	Finish
1	1	LINO	PL-EN	1	1	1	M	A		X		T1

SPECIAL FEATURES

Book Cases		Bit in Range		Intercom	
Shutters		Bit in Dishwasher	X	HD W/FAN	
Disposal		Bit in Refrig	X	S.S. SINKS	

COMPUTATION

Appraiser & Date		RJM 8.21.64		RWE 67 2-73												ESTIMATE	
Unit	Area	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost	Unit Cost	Cost		
MAIN	1116	7.90	8810	9.60	10710												
C-CP	27	1.10	30	3.00	80												
C-UP (3)	88	.60	50														
AC			490														
FP			300														
GAR	480	3.10	1480	3.95	1900												
SHOP	448	1.90	850	2.80	1250												
FLAT	600	.60	360														
BBQ			100		100												
FENCE	250	.50	120														
FENCE	90	1.60	140	x1.10	14040												
TOTAL			12,720		15140												
NORMAL % GOOD			79		71												
R.C.L.N.D			10040		10970												

SBE-DAS AH 530A 3-54

MISCELLANEOUS STRUCTURES

Structure	Found.	Cons.	Ext.	Roof	Floor	Int.	Size, etc
GAR	CONC.	FR	STUCCO	GABLE WD. SH.	CONC.	UNF	20×24
SHOP	CONC.	FR	STUCCO	SHED COMP	CONC.	UNF	16×28
FLAT	FLAG & CONC.						600 SF
B-BQ	ROCK - 3'×6'		NO CHIMNEY				
FENCE		PST + WIRE		4'×500'	PARTY		250'
FENCE		CROSS/FRAMED 2"×2"				4'×	90'

COMPUTATIONS

Main
20 × 3 = 60
44 × 24 = 1056
1116

Shop
28 × 16 = 448

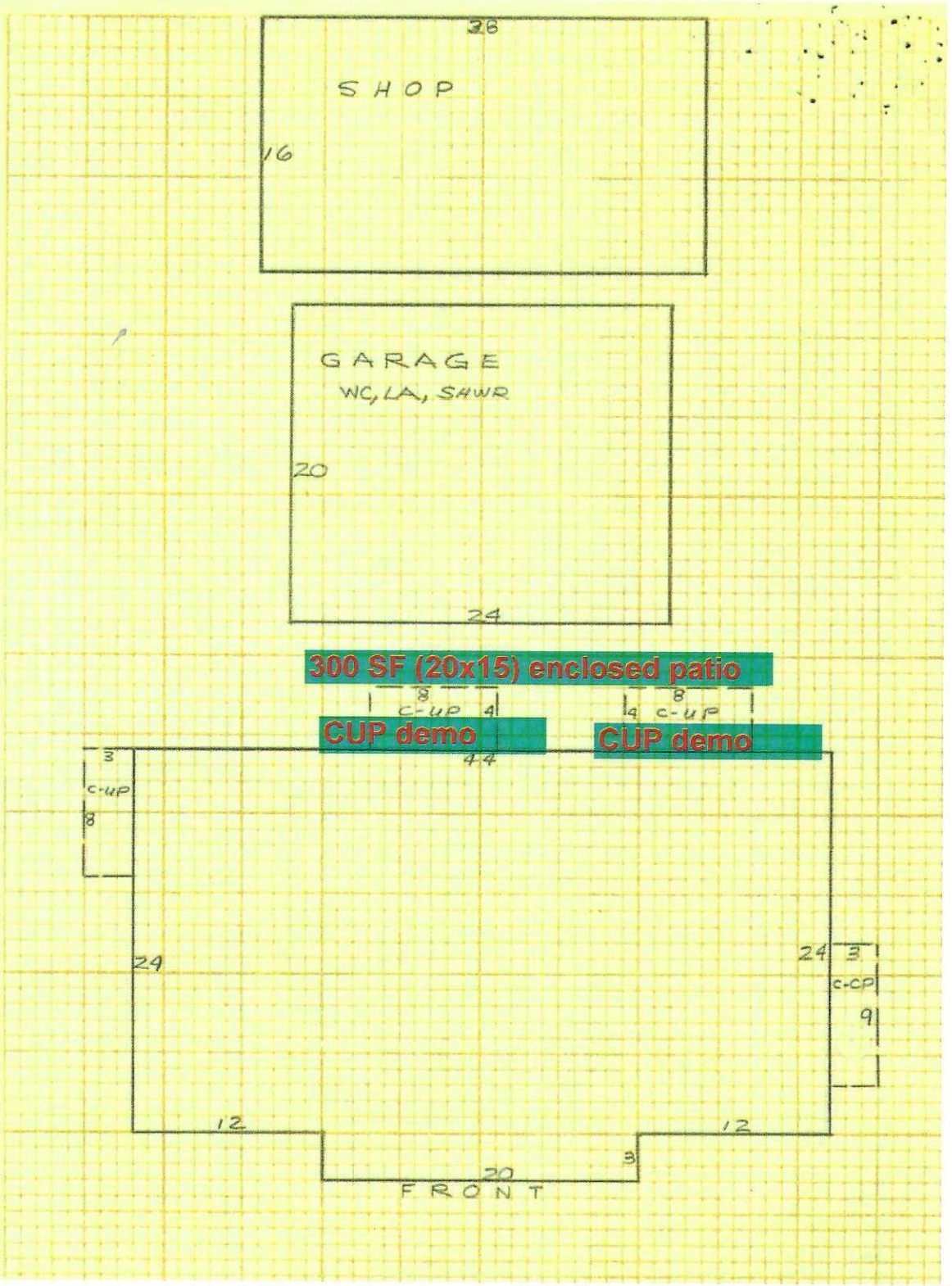
C.U.P.
9 × 3 = 27

C.U.P.
3 × 8 = 24
8 × 4 = 32
8 × 4 = 32
88

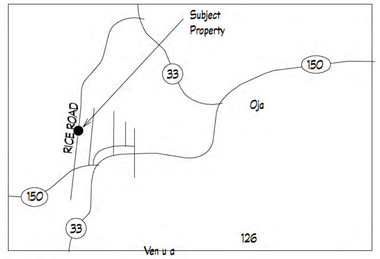
Garage
24 × 20 = 480

DATE	COMPUTED BY	CHECKED BY	ENTERED BY
9/64	HR		

Remarks: 2-22-73 NO CHANGES, BATH INCLUDED IN GAR FACTOR RWE67

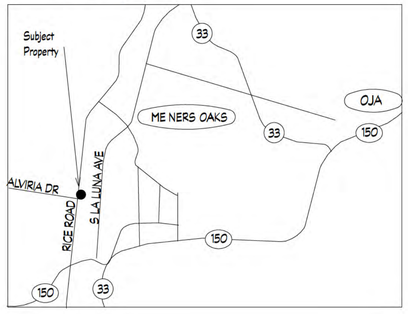


Vicinity Map



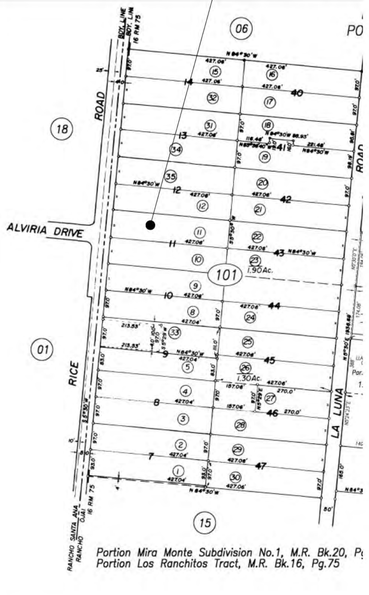
Cas tas
Spr ngs

Local Map



Plat Map

The Castro House
1186 R ce Road
Oja , Ca forn a 93023
APN# 018 - 101 - 115



Portion Mira Monte Subdivision No.1, M.R. Bk.20, P
Portion Los Ranchitos Tract, M.R. Bk.16, Pg.75

The [redacted] House

SCOPE

AFTER THE FACT PERMIT FOR CONVERSION OF GARAGE TO ADU AND AFTER THE FACT PERMIT FOR 240 SQ FT ADDITION TO ADU. DEMOLITION OF PATIO ENCLOSURE ATTACHED TO PRIMARY RESIDENCE AND INTERIOR REMODEL OF KITCHEN OF PRIMARY RESIDENCE.

PROJECT DESCRIPTION

LOT AREA:	1.07 ACRES 41,425 SF
APN:	018-0-101-115
ZON NG:	RE-1
OCCUPANCY:	R
TYPE OF CONSTRUCT ON:	V
STOR ES:	1
SPR NKLERS:	NO
MAX. BLDG. HE GHT = 25'	
H GH F RE AREA - YES	

AREAS

MA N HOUSE	1,116 SF
PROPOSED ADU	720 SF (INCLUDING 240 SF ADD)
SHED	439 SF

PROPOSED SQUARE FOOTAGE 240 SF
FOR ADDITION TO ADU

LOT COVERAGE NCL. PROPOSED 41,425 / 2275 = 5.5 %

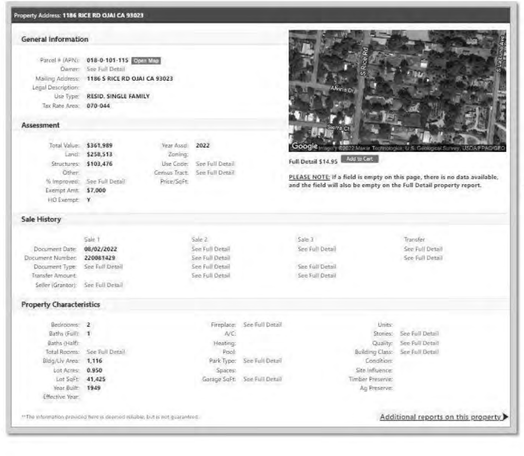
CONSULTANTS

DES GNER
OT S BRADLEY COMPANY, NC.
1673 DONLON STREET #202
VENTURA, CA 93003
310.963.7900

STRUCTURAL ENG NEER Not App cab e
ENERGY Not App cab e
SO LS ENG NEER Not App cab e
SURVEYOR Not App cab e
C V L ENG NEER Not App cab e
WATER Not App cab e
ARBOR ST Not App cab e

SHEET INDEX

Dan Goodwin, County Assessor



OtisBradley.com

OT S BRADLEY COMPANY, NC.
1673 Donlon Street
Ventura, CA 93003
310 963 7900

Custom New Home
&
Remode ng Des gn

REVISION TABLE

NUMBER	DATE	REVISED BY	DESCRIPTION

Oja, California 93023
APN# 018 - 0 - 101 - 115

DATE:
1/18/2023

SCALE:

SHEET:
A 0.1

ELECTRICAL

SEE ALSO MANDATORY MEASURES SUMMARY MF - 1R ON T24 SHEET
OWNER TO SELECT ALL PLUMB NG AND ELECTR CAL F XTURES AND MECHAN CAL SUPPLY AND RETURN A R GR LLS.
ELECTR C AN TO VER FY ALL ELECTR CAL LOCAT ONS W TH THE OWNER AND SET UP A WALK THROUGH.

NDOOR L GHT NG
ALL LUM NA RES NSTALLED N LOW-R SE RES DENT AL CONSTRUCT ON MUST BE H GH EFF CACY. PERMANENTLY
NSTALLED LUM NA RES NCLUDE CE L NG LUM NA RES, CHANDEL ERS, VAN TY LAMPS, WALL SCONCES, UNDER
CAB NET LUM NA RES, AND ANY OTHER TYPE OF LUM NA RE THAT S ATTACHED TO THE HOUSE. PERMANENTLY
NSTALLED LUM NA RES NCLUDE HARD W RED OR PLUG- N LUM NA RES.

A "H GH EFF CACY LUM NA RE" S ONE THAT MEETS THE EFF CAC ES L STED N THE STANDARDS, CONTA NS
ONLY H GH EFF CACY LAMPS OR H GH EFF CACY LED L GHT NG, AND DOES NOT CONTA N A SOCKET WH CH
ALLOWS ANY LOW EFF CACY L GHT NG SYSTEM TO BE USED. ANY LUM NA RE CONTA N NG A MED UM SCREW
BASE SOCKET S CLASS F ED AS LOW EFF CACY, REGARDLESS OF THE TYPE OF LAMP NSTALLED N THAT SOCKET.

THE DEF N T ON OF "H GH EFF CACY LUM NA RES" HAS BEEN EXPANDED TO NCLUDE L GHT NG DENT F ED
AS L NEAR FLUORESCENT, P N-BASED COMPACT FLUORESCENT, GU-24 BASE CFL, H D, NDUCT ON L GHT NG, AND LUM NA RES THAT CONTA N A JA8 COMPL ANT LAMP. SEE THE 2019 CAL FORN A ENERGY
CODE, TABLE 150.0-A FOR A FULL L ST OF H GH EFF CACY LUM NA RES.

ALL PERMANENTLY NSTALLED LUM NA RES W TH NTERCHANGEABLE LAMPS MUST CONTA N LAMPS THAT
COMPLY W TH THE REQU REMENTS OF, AND BE MARKED AS, JA8-2019 H GH EFF CACY LUM NA RES.

L GHT SOURCES MUST BE MARKED JA8-2016-E OR JA8-2019-E F THEY ARE NSTALLED N ENCLOSED OR
RECESSED LUM NA RES. AN ENCLOSED LUM NA RE S DEF NED AS HAV NG VENT LAT ON OPEN NGS < 3-
SQUARE NCHES PER LAMP.

RECESSED DOWNL GHT LUM NA RES W TH SCREW BASED SOCKETS ARE NOT ALLOWED BY THE 2019
CAL FORN A ENERGY CODE.

SCREW BASED LUM NA RES MUST COMPLY W TH E THER JA8-2016 OR JA8-2019 REQU REMENTS. ALL UNDER-CAB NET L GHT NG MUST BE SW TCHED SEPARATELY FROM OTHER L GHT NG N THE HOME. • N GHT L GHTS, STEP L GHTS, AND PATH L GHTS ARE NOT REQU RED TO COMPLY W TH THE 2019 CAL FORN A ENERGY CODE, TABLE 150.0-A, PROV DED THEY ARE RATED TO CONSUME NO MORE THAN 5 WATTS OF POWER AND EM T NO MORE THAN 150 LUMENS.

A R COND T ON NG UN TS
A. PROV DE A R COND T ON NG CONDENSER W TH SE SM C STRAPP NG ON 4 NCH M N MUM CONCRETE SLAB 3 NCHES ABOVE GRADE.
B. PROV DE ONE WATERPROOF GFC OUTLET W TH N 20 FEET OF UN T W TH D SCONNECT SW TCH.

ELECTR CAL RECEPTACLES
ELECTR CAL RECEPTACLES SHALL BE PLACED ON WALL SPACES 24 NCHES OR W DER, NOT MORE THAN 6 FEET FROM OPEN NGS, NOT MORE THAN 12 FEET ON CENTER, K TCHEN COUNTER SPACE OVER 12 NCHES W DE, AT 4 FEET MAX OMAN CENTER AND W TH N 24 NCHES OF AN APPL ANCE.

GROUND FAULT C RCU T NTERRUPTER PROTECT ON - GFC
ALL 125 VOLT, 15 AND 20 AMP RECEPTACLES NSTALLED N BATHROOMS, GARAGES, LAUNDRY ROOMS, OUTDOORS, CRAWL SPACE UNF N SHED BASEMENTS, K TCHEN COUNTERTOP SURFACE, W TH N 6 FEET OF UT L TY, WET BAR S NKS OR BATHTUB/SHOWER STALLS K TCHEN D SHWASHER C RCU T AND LAUNDRY ROOMS SHALL BE PROTECTED BY A L STED GROUND FAULT C RCU T NTERRUPTER. EXCEPT ON: S NGLE OUTLET RECEPTACLES N GARAGES UT L ZED FOR A F XED OR STAT ONARY APPL ANCE

ARC - FAULT/BRANCH C RCU T PROTECT ON - AFC
ALL 120-VOLT, S NGLE PHASE 15 AND 20 AMPERE BRANCH C RCU TS N K TCHENS, FAM LY ROOMS, D N NG ROOMS, L V NG ROOMS, PARLORS, L BRAR ES, DENS, BEDROOMS, SUNROOMS, RECREAT ON ROOMS, CLOSETS, HALLWAYS, LAUNDRY ROOMS OR S M LAR ROOMS OR AREAS SHALL BE PROTECTED BY A L STED ARC-FAULT C RCU T NTERRUPTER, COMB NAT ON-TYPE.

WATERPROOF GFC OUTDOOR RECEPTACLE
PROV DE A M N MUM OF ONE WATERPROOF GFC OUTDOOR RECEPTACLE AT FRONT AND REAR OF STRUCTURE

UNLESS N ACCORDANCE W TH CEC 210.12 (A) EXCEPT ON 1, 2, OR 3, ALL 120 VOLT, S NGLE PHASE, 15 AND 20 AMP BRANCH C RCU TS SUPPLY NG OUTLETS NSTALLED N DWELL NG UN T FAM LY ROOM, D N NG ROOM, L V NG ROOM, PARLOR, L BRARY, DAN, BEDROOM, SUN ROOM, RECREAT ON ROOM, CLOSET, HALLWAY OR S M LAR ROOMS OR AREAS SHALL BE PROTECTED BY A L STED ARC-FAULT/ BRANCH C RCU T NTERRUPTER, COMB NAT ON TYPE, NSTALLED TO PROV DE PROTECT ON OF THE BRANCH C RCU T.

ALL NON-LOCK NG TYPE 125-VOLT, 15 AND 20 AMP RECEPTACLES N A DWELL NG UN T SHALL BE L STED TAMPER RES STANT RECEPTACLES EXCEPT ONS: (1) RECEPTACLES MORE THAN 5'-6" ABOVE THE FLOOR (2) RECEPTACLES PART OF A LUM NA RE OR APPL ANCE (3) A S NGLE RECEPTACLE OR A DUPLEX RECEPTACLE FOR TWO APPL ANCES THAT ARE NOT EAS LY MOVED AND RECEPTACLES USED FOR REPLACEMENTS AS PERM TTED N CEC 406.4-D 2A

SMOKE DETECTORS AND CARBON MONOXIDE ALARMS

SMOKE DETECTORS
PROV DE 120 VAULT, HARDW RED, NTERCONNECTED SMOKE DETECTORS (W TH 10 YEAR BATTERY BACKUP):
A ON THE WALL OR CE L NG CENTRALLY LOCATED N THE AREA G V NG ACCESS TO SLEEP NG ROOM(S) AND W TH N SLEEP NG ROOM(S)
B ON THE CE L NG N CLOSE PROX M TY TO THE STA RWAY OF THE UPPER LEVEL
C WHERE CE L NG HE GHT OF AN ADJACENT ROOM OPENS TO A HALLWAY SERV NG BEDROOMS EXCEEDS THAT OF THE HALLWAY BY 24 NCHES OR MORE, DETECTOR SHALL BY PLACED N THE ADJACENT ROOM AND W TH N 12 NCHES OF THE H GHEST PO NT OF THE CE L NG.
D N THE BASEMENT, W TH ALARM AUD BLE AND SLEEP NG ROOM(S).
E WHEN ADD T ON OR ALTERAT ON VALUAT ON EXCEEDS $1000 SMOKE DETECTORS ARE REQU RED N AREAS PROV D NG ACCESS TO EX ST NG SLEEP NG ROOMS AND W TH N SLEEP NG ROOMS. THESE MAY BE BATTERY OPERATED ONLY SEE PLAN AND LEGEND FOR LOCAT ONS.

CARBON MONOX DE ALARMS
A REQU RED OUTS DE OF EACH SLEEP NG AREA
B ON EVERY LEVEL OF DWELL NG
C HARD W RED W TH 10 YEAR BATTERY BACK UP
D NTERCONNECTED

MECHANICAL

FANS
A BATHROOM FANS W TH 4 NCH DUCTS MAX MUM LENGTH W TH NO ELBOWS S 70 NCHES SUBTRACT 15 NCHES PER ELBOW.
B FANS SHALL BE PANASON C "WH SPER" SER ES
C EXHAUST FANS SHALL BE SW TCHED SEPARATELY FROM L GHT NG SYSTEMS W TH T MER

EXHAUST FANS
BATHROOM FANS W TH 4 NCH DUCTS - MAX MUM LENGTH W TH NO ELBOWS S 70 NCHES SUBTRACT 15 NCHES PER ELBOW.
FANS SHALL BE PANASON C "WH SPER" SER ES
EXHAUST FANS SHALL BE SW TCHED SEPARATELY FROM L GHT NG SYSTEMS
FAN CAPAC T ES
BATHROOM 50 CFM
TO LET ROOMS 50 CFM
K TCHEN 100 CFM

DRYER VENT
DRYER SHALL BE VENTED TO THE OUTS DE (w/ BACK DRAFT DAMPER). THE MAX MUM LENGTH SHALL BE 14 FEET W TH TWO 90-DEGREE ELBOWS. M N. 4 NCH D AMETER, SMOOTH METAL DUCT..

PLUMBING

WATER USAGE
PLUMB NG F XTURES SHALL HAVE THE FOLLOW NG MAX MUM WATER USAGES :
(a) TANK TYPE TO LETS SHALL HAVE A MAX MUM FLUSH OF 1.28 GALLONS PER FLUSH.
(b) WATER SAV NG SHOWER HEADS SHALL HAVE A MAX MUM FLOW OF 2.0 GALLONS PER M NUTE.
(c) WATER SAV NG S NK AND LAVATORY FAUCETS SHALL HAVE A MAX MUM FLOW OF 1.5 GALLONS PER M NUTE.
(d) UR NALS SHALL HAVE A MAX MUM FLUSH OF 1.0 GALLONS PER FLUSH.

ROOM ADD T ONS
ROOM ADD T ONS THAT NCLUDE NEW PLUMB NG F XTURES SHALL RETROF T ALL EX ST NG F XTURES TO THE NEW WATER-EFF C ENT F XTURES.

COPPER L NES
COPPER WATER L NES SHALL BE TYPE "L" M N MUM. REAM ALL COPPER L NES TO FULL .D.

WATER CLOSET SPACE
PROV DE A M N MUM WATER CLOSET SPACE OF 30 NCHES W DE AND 24 NCHES CLEAR N FRONT OF WATER CLOSET.

HOSE B BBS
HOSE B BBS SHALL BE F TTED W TH A NON-REMOVABLE BACKFLOW DEV CE.

PRESSURE REGULATOR
PROV DE A PRESSURE REGULATOR ON WATER SERV CE F THE PRESSURE EXCEEDS 60 ps .

BATHTUB TRAP
PROV DE A PERMANENTLY ACCESS BLE 12- NCH SQUARE BATHTUB TRAP ACCESS OR PROV DE A NON-SL P-JO NT TRAP, AS LARGE AS MOTOR AT JACUZZ TUBS.

TUB AND SHOWER ENCLOSURES:
1. TUB AND SHOWER ENCLOSURES SHALL BE TEMPERED GLASS OR AN APPROVED PLAST C.
2. GLASS ENCLOSURE DOORS AND PANELS MUST BE LABELED CATEGORY SW NG DOOR OUTWARD.
3. NET AREA OF SHOWER RECEPTOR SHALL NOT BE LESS THAN 1,024 SQ. N. OF FLOOR AREA, AND ENCOMPASS 30 NCH D AMETER C RCLE.
4. SHOWER WALLS SHALL BE CEMENT PLASTER, T LE, OR APPROVED MATER AL TO 70 NCHES ABOVE DRA N AT SHOWER OR TUBS W TH SHOWER.
5. MATER ALS OTHER THAN STRUCTURAL ELEMENTS SHALL BE MO STURE RES STANT.

SHOWERS AND TUB-SHOWER COMB NAT ONS
SHOWERS AND TUB-SHOWER COMB NAT ONS SHALL BE PROV DED W TH ND V DUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTAT C M X NG VALVE TYPE. HOT WATER SHALL BE DEL VERED AT A MAX MUM TEMPERATURE OF 120°F.

M SCELLANEOUS NOTES

SLEEP NG ROOMS:
PROV DE A EMERGENCY EX T DOOR OR W NDOW FROM BASEMENT AND/OR SLEEP NG ROOM(S). NET CLEAR W NDOW OPEN NG AREA SHALL BE NOT LESS THAN 5.7 SQ. FT. (EXCEPT AT GRADE FLOOR OPEN NG SHALL BE M N MUM 5.0 SQ. FT.). M N. NET W NDOW OPEN NG HE GHT D MENS ON, 24" CLEAR; M N. NET OPEN NG W DTH D MENS ON, 20" CLEAR. F N SHED S LL HE GHT SHALL BE A MAX MUN 44" ABOVE THE FLOOR.

HALLS:
HALLWAY W DTH SHALL BE NOT LESS THAN 36". CBC 1017.2

SPARK ARRESTERS
THE CH MNEY SHALL BE EQU PPED W TH A SPARK ARRESTER. THE NET FREE AREA OF THE SPARK ARRESTER SHALL NOT BE LESS THAN FOUR T MES THE NET FREE AREA OF THE OUTLET OF THE CH MNEY. THE SPARK ARRESTER SCREEN SHALL BE CORROS ON RES STANT AND SHALL HAVE OPEN NGS LESS THAN 1/2 NCH AND GREATER THAN 3/8" N S ZE.

STA RS
R SER TO BE 4" M N MUM, 7 ¾" MAX MUM
TREADS TO BE 10" M N MUM - W DTH 36" M N MUM - PROV DE 6'-8" M N MUM HEADROOM CLARENCE ABOVE NOSE OF TREAD
SEE LANDSCAPE PLANS FOR EXTER OR STA R

LAND NGS
FLOORS OR LAND NGS SHALL NOT BE MORE THAN ½" LOWER THAN THE THRESHOLD WHEN DOORS SW NG OUT WORD. PROV DE A M N MUM LAND NG OF 36" N DEPTH AT ALL EXTER OR OPEN NGS

STUCCO SCREED
PROV DE A CORROS ON-RES STANT WEEP SCREED BELOW THE STUCCO
A M N MUM OF 4" ABOVE GRADE AND 2" ABOVE A SLAB.

CAL FORN A GREEN BU LD NG CODE 2016 ED T ON

MA NTENANCE
ANNULAR SPACES AROUND P PES, ELECTR C CABLES, CONDU TS OR OTHER OPEN NGS N PLATES AT EXTER OR WALLS SHALL BE PROTECTED AGA NST THE PASSAGE OF RODENTS BY CLOS NG SUCH OPEN NGS W TH CEMENT MORTAR, CONCRETE MASONRY OR S M LAR METHOD ACCEPTABLE TO BE ENFORC NG THE AGENCY.

WASTE REDUCT ON D SPOSAL AND RECYCL NG
RECYCLE AND/OR SALVAGE FOR REUSE A M N MUM OF 50% OF THE NON HAZARDOUS CONSTRUCT ON AND DEMOL T ON WASTE N ACCORDANCE W TH ONE OF THE FOLLOW NG:
1. COMPLY W TH A MORE STR NGENT LOCAL CONSTRUCT ON AND DEMOL T ON WASTE MANAGEMENT ORD NANCE; OR
2. A CONSTRUCT ON WASTE MANAGEMENT COMPANY, PER SECT ON 4.408.2; OR
3. E GHT WASTE MANAGEMENT COMPANY, PER SECT ON 4.408.3; OR
4. THE WASTE STREAM REDUCT ON ALTERNAT VE, PER SECT ON 4.408.4.

BU LD NG MA NTENANCE AND OPERAT ON
AN OPERAT ONAL AND MA NTENANCE MANUAL SHALL BE PROV DED TO THE BU LD NG OCCUPANT OR OWNER.

POLLUTANT CONTROL
A) 4.504.1 DUCT OPEN NGS AND OTHER RELATED A R D STR BUT ON COMPONENT OPEN NGS SHALL BE COVERED DUR NG CONSTRUCT ON.
B) 4.504.2.1 ADHES VES, SEALANTS AND CAULKS SHALL BE COMPL ANT W TH VOC AND OTHER TOX C COMPOUND L M TS.
C) 4.504.2.2 PA NTS, STA NS, AND OTHER COAT NGS SHALL BE COMPL ANT W TH VOC L M TS.
D) 4.504.2.3 AEROSOL PA NTS AND COAT NGS SHALL BE COMPL ANT W TH PRODUCTS WE GHTED M R L M TS FOR ROC AND OTHER TOX C COMPOUNDS.
E) 4.504.2.4 DOCUMENTAT ON SHALL BE PROV DED TO VER FY THAT COMPL ANT VOC L M T F N SH MATER ALS HAVE BEEN USED.
F) 4.504.3 CARPET AND CARPET SYSTEMS SHALL BE COMPL ANT W TH THE VOC L M TS.
G) 4.504.4 80% OF FLOOR AREA RECE V NG RES L ENT FLOOR NG SHALL COMPLY W TH THE VOC EM SS ON L M TS DEF NED N THE COLLABORAT VE FOR H GH PERFORMANCE SCHOOLS (CHPS) H GH PERFORMANCE ACAULKS DATABASE THE OR BE CERT F ED UNDER THE RES L ENT FLOOR COVER NG NST TUTE (RFC) FLOORSCORE PROGRAM; OR MEET CAL FORN A DEPT OF PUBL C HEALTH, "STANDARD METHOD FOR THE TEST NG AND EVALUAT ON OF VOLAT LE ORGAN C CHEM CAL EM SS ONS FROM NDOOR SOURCES US NG ENV RONMENTAL CHAMBERS", VERS ON 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPEC F CAT ON 01350.)
H) 4.504.5 PART CLEBOARD, MED UM DENS TY F BERBOARD (MDF) AND HARDWOOD PLYWOOD USED N NTER OR F N SH SYSTEMS SHALL COMPLY W TH LOW FORMALDEHYDE EM SS ON STANDARDS.

NTER OR MO STURE CONTROL
A) 4.505.2 VAPOR RETARDER AND CAP LLARY BREAK S NSTALLED AT SLAB ON GRADE FOUNDAT ONS.
B) 4.505.3 MO STURE CONTENT OF BU LD NG MATER ALS USED N WALL AND FLOOR FRAM NG S CHECKED BEFORE ALL ENCLOSURE.

ENV RONMENTAL COMFORT
DUCT SYSTEMS ARE S ZED, DES GNED, AND EQU PMENT S SELECTED US NG THE FOLLOW NG METHODS:
1. ESTABL SH HEAT LOSS AND HEAT GA N VALUES ACCORD NG TO ANS /ACCA 2 MANUAL J -2004 OR EQU VALENT.
2. S ZE DUCT SYSTEMS ACCORD NG TO ANS /ACCA 1 MANUAL D -2009 OR EQU VALENT.
3. SELECT HEAT NG AND COOL NG EQU PMENT ACCORD NG TO ANS /ACCA 3 MANUAL S - 2004 OR EQU VALENT.

QUAL F CAT ONS AND VER F CAT ONS
A) 702.1 HVAC SYSTEM NSTALLERS ARE TRA NED AND CERT F ED N THE PROPER NSTALLAT ON OF HVAC SYSTEMS.
B) 702.2 SPEC AL NSPECTORS EMPLOYED BY THE ENFORC NG AGENCY MUST BE QUAL F ED AND ABLE TO DEMONSTRATE COMPETENCE N THE D SC PL NE THEY ARE NSPECT NG.
C) 703.1 VER F CAT ON OF COMPL ANCE W TH TH S CODE MAY NCLUDE CONSTRUCT ON DOCUMENTS, PLANS, SPEC F CAT ONS BU LD NG OR NSTALLER CERT F CAT ON, NSPECT ON REPORTS, OR OTHER METHODS ACCEPTABLE TO THE ENFORC NG THE AGENCY WH CH SHOWS SUBSTANT AL CONFORMANCE.

GENERAL NOTES
DES GN SHALL COMPLY W TH THE 2016 CRC, CMC, CPC, CEC, CEBC, CGBSC AS AMENDED BY C TY ORD NANCE AND THE 2016 T TLE 24 ENERGY REGULAT ONS

1. CODES
ALL CONSTRUCT ON, NCLUD NG MATER AL AND WORKMANSH P, SHALL CONFORM TO THE PROV S ONS OF THE FOLLOW NG CODES:
2019 ED T ON OF THE "CAL FORN A RES DENT AL CODE" (CRC)
2019 CAL FORN A PLUMB NG CODE (CPC)
2019 CAL FORN A MECHAN CAL CODE (CMC)
2019 CAL FORN A ELECTR CAL CODE (CEC)
W TH THE GOVERN NG AGENCY AMENDMENTS, AND STANDARDS REFERENCED THERE N. WHEREVER CODE OR CAL FORN A BU LD NG CODE (CBC) S REFERENCED N THE FOLLOW NG GENERAL NOTES OR OTHER NOTE SECT ONS, T SHALL MPLY THE CBC CODE W TH GOVERN NG AGENCY AMENDMENTS.

2019 T TLE 24 - PLANS SHALL COMPLY W TH T TLE 24 ENERGY EFF C ENCY REQU REMENTS AND ALL MANDATORY MEASURES

2. ALL ASTM STANDARDS L STED HERE N, SHALL BE AS REFERENCED N THE LATEST SSUE OF THE ANNUAL BOOK OF STANDARDS OF THE AMER CAN SOC ETY FOR TEST NG AND MATER ALS.

3. THE CONTRACTOR SHALL VER FY ALL D MENS ONS, ELEVAT ONS AND S TE COND T ONS BEFORE START NG WORK. THE DES GNER AND STRUCTURAL ENG NEER SHALL MMED ATELY BE NOT F ED, N WR T NG, OF ANY D SCREPANC ES.

4. ALL OM SS ONS AND/OR CONFL CTS BETWEEN THE VAR OUS ELEMENTS OF THE WORK NG DRAW NGS AND SPEC F CAT ONS SHALL BE BROUGHT TO THE ATTENT ON OF THE F ELD NSPECTOR, AND A SOLUT ON G VEN BY, THE DES GNER AND STRUCTURAL ENG NEER PR OR TO PROCEED NG W TH ANY WORK AFFECTED BY THE CONFL CT OR OM SS ON.

5. N CASE OF CONFL CT, NOTES AND DETA LS OF THESE STRUCTURAL DRAW NGS SHALL TAKE PRECEDENCE OVER THE "GENERAL NOTES" AND/OR "STANDARD DETA LS". TYP CAL DETA LS SHALL BE USED WHENEVER APPL CABLE.

6. F A SPEC F C DETA L S NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCT ON SHALL BE THE SAME AS FOR S M LAR WORK.

7. WORK NG D MENS ONS SHALL NOT BE SCALED FROM PLANS, SECT ONS OR DETA LS ON THESE STRUCTURAL DRAW NGS.

8. THE CONTRACTOR SHALL PROV DE AND MA NTA N ADEQUATE ERECT ON SHOR NG AND BRAC NG AS REQU RED FOR STAB L TY OF THE STRUCTURE DUR NG ALL PHASES OF CONSTRUCT ON. THESE DRAW NGS REPRESENT THE F N SHED STRUCTURE AND DO NOT ND CATE THE METHOD OF CONSTRUCT ON.

9. P PES, DUCTS, SLEEVES, OPEN NGS, POCKETS, CHASES, BLOCK-OUTS, ETC., SHALL NOT BE PLACED N SLABS, BEAMS, G RDERS, COLUMNS, WALLS, FOUNDAT ONS, ETC., NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR SUCH TEMS, UNLESS SPEC F CALLY DETA LED ON THESE STRUCTURAL DRAW NGS. (F ANY P PES, DUCTS,ETC., DO OCCUR, THAT ARE NOT SHOWN ON THESE STRUCTURAL DRAW NGS, THE DES GNER AND STRUCTURAL ENG NEER SHALL BE NOT F ED.) SEE PARAGRAPH 4, ABOVE.

10. ANCHOR BOLTS OR NSERTS FOR EQU PMENT ANCHORAGE OR NSTALLAT ON SHALL BE DES GNED FOR SE SM C ZONE 4 BY A C V L ENG NEER OR STRUCTURAL ENG NEER REG STERED N THE STATE OF CAL FORN A AND SHALL BE SHOWN ON THE MECHAN CAL OR ELECTR CAL SHOP DRAW NGS.

11. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONS B L TY FOR JOB S TE COND T ONS DUR NG THE COURSE OF CONSTRUCT ON OF TH S PROJECT, NCLUD NG SAFETY OF ALL PERSONS AND PROPERTY. TH S REQU REMENT SHALL APPLY CONT NUOUSLY AND NOT BE L M TED TO NORMAL WORK NG HOURS. THE CONTRACTOR SHALL DEFEND, NDEMN FY, AND HOLD THE DES GNER AND THE STRUCTURAL ENG NEER FREE AND HARMLESS FROM ALL CLA MS, DEMANDS AND ALL L AB L TY, REAL OR ALLEGED, N CONNECT ON W TH THE PERFORMANCE OF WORK ON TH S PROJECT, EXCEPT FOR L AB L TY AR S NG FROM THE SOLE NEGL GENCE OF THE DES GNER OR THE STRUCTURAL ENG NEER.

12. F ANY SUBST TUT ON S PROPOSED BY THE CONTRACTOR, NEW CALCULAT ONS MAY HAVE TO BE PREPARED, THE DETA LS MAY HAVE TO BE ALTERED, AND NEW DRAW NGS MAY HAVE TO BE SUBM TTED TO THE BU LD NG DEPARTMENT. THE CONTRACTOR SHALL PAY THE STRUCTURAL ENG NEER'S FEES TO ALTER THE APPROVED PLANS. THE CONTRACTOR SHALL ALSO PROCESS THE REV SED PLANS REFLECT NG ALL SUBST TUT ONS THROUGH THE APPROPR ATE OFF CE OF ALL GOVERN NG AGENC ES.

13. ADDRESS:
1. THE ADDRESS SHALL BE V S BLE AND LEG BLE FROM THE STREET OR FRONTAGE ROAD.
2. THE ADDRESS NUMBERS SHALL BE A M N MUM OF FOUR NCHES [4"] N HE GHT.
3. THE ADDRESS NUMBERS SHALL BE OF A CONTRAST NG COLOR TO THE R BACKGROUND.
BRASS OR GOLD NUMBERS SHALL NOT BE POSTED. ADDRESS NUMBERS ON CURBS ARE NOT ACCEPTABLE.
4. PERMANENT ADDRESS NUMBERS SHALL BE PROV DED ON THE MA L BOX OR ON A PERMANENT S GN OR POST ADJACENT TO THE DR VEWAY ENTRANCE OF A FLAG LOT.

14. PERM TS:
A SEPARATE PERM T S REQU RED FOR ELECTR CAL, PLUMB NG AND MECHAN CAL AS APPL CABLE.

ABBREVIATIONS

&	And	MAX	Maximum
∠	Angle	MECH	Mechanical
@	At	MISC	Miscellaneous
Ç	Centerline	MET	Metal
[	Channel	MC	Medicine cabinet
#	Diameter	MFR	Manufacturer
'	Foot; Feet	MIR	Mirror
"	Inch	MIN	Minimum
%	Percent	MLDG	Moulding
#	Pound; Number	MTG	Mounting
Ø	Diameter	MTD	Mounted
		MUL	Mullion
A/C	Air Conditioning	MTL	Material
AB	Anchor Bolt		
ADJ	Adjustable	NOM	Nominal
APF	Above Finished Floor	NO or #	Number
AL	Aluminum	NIC	Not In Contract
ALT	Alternate	NTS	Not to Scale
APPROX	Approximate		
ARCH	Architectural	OPP	Opposite
ANOD	Anodized	OFC	Office
ACCU	Air Cooled Condensing Unit	OFCI	Owner Furnished - Contractor Installed
BM	Beam	OFOI	Owner Furnished - Owner Installed
BLK	Block	OC	On Center
BLKG	Blocking	OVHD	Overhead
BOT	Bottom	OA	Overall
BD	Board		
BTW	Between		
BLDG	Building	PNL	Panel
BITUM	Bituminous	PR	Pair
BW	Bottom of Wall	PREFAB	Prefabricate
BR	Bedroom	PREP	Preparation
		PROP	Property
CAB	Cabinet	PT	Paint
CEM	Cement	PLYWD	Plywood
CBB	Cement Backer Bd.	PLAS	Plaster
CBU	Cement Backer Unit	PL	Plate or Property Line
CLG	Ceiling		
CLR	Clear	PLAM	Plastic Laminate
CT	Ceramic Tile	PTD	Painted
CMU	Concrete Masonry Units		
COL	Column	RM	Room
CONSTR	Construction	RWD	Redwood
CONT	Continuous	RO	Rough Opening
CONC	Concrete	R/F	Refrigerator/Freezer
CONN	Connection	REV	Revised/Revision
COND	Condition	REQD	Required
CONTR	Contractor	RESIL	Resilient
COORD	Coordinate	REINF	Reinforced or Reinforcing
CTR	Center	REFR	Refrigerator
CJ	Control Joint	REC	Recessed
D	Deep, Depth, Dryer	RD	Roof Drain
DEMO	Demolition	RB	Resilient Base
DBL	Double	RAD	Radius
DEPT	Department	REF	Reference
DET	Detail	R	Riser
DIA	Diameter		
DIM	Dimension	SHTG	Sheathing
DW	Dishwasher	SL	Slope
DN	Down	SLDG	Sliding
DR	Door	SIM	Similar
(D)	Demolish, Demolition		
DWG	Drawing	SCHED	Schedule
DWR	Drawer	SECT	Section
		SQ	Square
EA	Each	SPKR	Speaker
E	East	SPEC	Specification
EL	Elevation	SHT	Sheet
ELEC	Electrical	SH	Shelf
EW	Each way	SF	Square Foot
EQ	Equal	SC	Scale or Solid Core
EQPT	Equipment	STD	Standard
EXIST	Existing	SYS	System
EX	Existing	SYM	Symmetrical
EXT	Exterior	SVC	Service
EFS	Exterior Finish System	SUSP	Suspended
EJ	Expansion Joint	STRUC	Structure
EXP	Expansion	STRL	Structural
		STOR	StorageE
FCU	Fan Coil Unit	STN	Stain
FL	Floor	SS	Stainless Steel
FLASH	Flashing	SD	Smoke Detector
FLUOR	Fluorescent	ST	Stone Tile
FIN	Finish	SP	Start Point
FIXT	Fixture	SSD	See Structural Drawings
FOF	Face of Finish	SG	Safety Glass
FT	Foot or Feet		
FURR	Furring or Furred		
FOS	Face of Stud, Face of Structure	TEL	Telephone
		TEMP	Tempered
FR	Fire Rated	T & G	Tongue and Groove
FRZ	Freezer	THK	Thick or Thickness
		THR	Threshold
GA	Gauge	THRU	Through
GALV	Galvanized	TEB	Top & Bottom
GL	Glass	TJI	Truss Joist
GYP.U	Glasmensh Mortar Unit	TRD	Tread
GWB	Gypsum Wall Board	TV	Television
GYP	Gypsum	TYP	Typical
		TW	Top of Wall
H	High or Height		
HC	Hollow Core	UON	Unless Otherwise Noted
HD	Head		
HR	Hour		
HDWD	Hardwood	VERT	Vertical
HORIZ	Horizontal	VTR	Vent Through Roof
HDWE	Hardware	VIF	Verify In Field
IN	Inch	WD	Wood
INCL	Inclusive, Included or Including	WDW	Window
		W	With
INSUL	Insulation	WC	Water Closet
INT	Interior		
IMP PLS	Imperial Plaster	W	Wide, Width, West
JB	Junction Box	WO	Where Occurs
JT	Joint	WO	Without
JST	Joist	WP	Waterproof
		WR	Water Resistant
LF	Linear Foot	WT	Weight
L	Length or Long	WM	Water Meter
LAM	Laminate or Laminated		
LAV	Lavatory		
LB	Pound		

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Custom New Home
&
Remode ng Des gn

NUMBER	DATE	REVISED BY	DESCRIPTION

REVISION TABLE

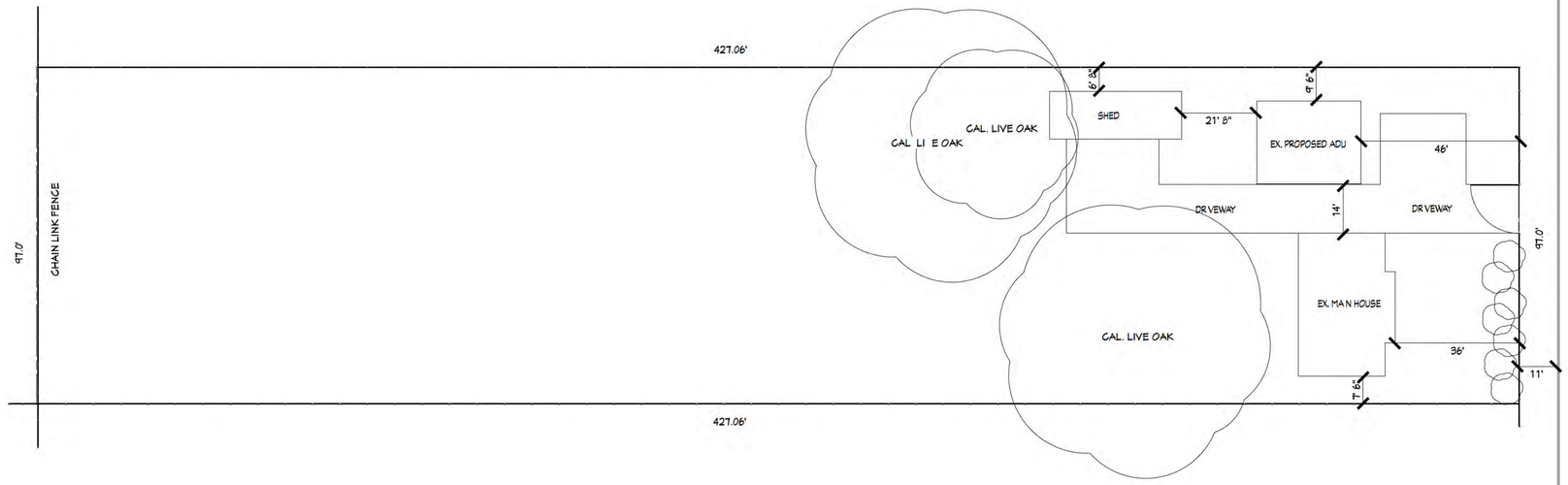
1186 Rice Road
Ojai, California 93023
APN# 018 - 0 - 101 - 115

DATE:
1/18/2023

SCALE:

SHEET: 1

A 0.2



1186 Rice Road, Ojai

NOTES
POLLUTANTS
THE DISCHARGE OF POLLUTANTS TO ANY STORM DRAINAGE SYSTEM IS PROHIBITED. NO SOLID WASTE, PETROLEUM BYPRODUCTS, SOIL PARTICULATE, CONSTRUCTION WASTE MATERIALS, OR WASTEWATER GENERATED ON CONSTRUCTION SITES OR BY CONSTRUCTION ACTIVITIES SHALL BE PLACED, CONVEYED OR DISCHARGED INTO THE STREET, GUTTER OR STORM DRAIN SYSTEM.

N

PLOT PLAN

1" = 20'

OtisBradley.com

OTIS BRADLEY COMPANY, INC.
1673 Donlon Street
Ventura, CA 93003
310 963 7900

Custom New Home
&
Remodeling Design

REVISION TABLE

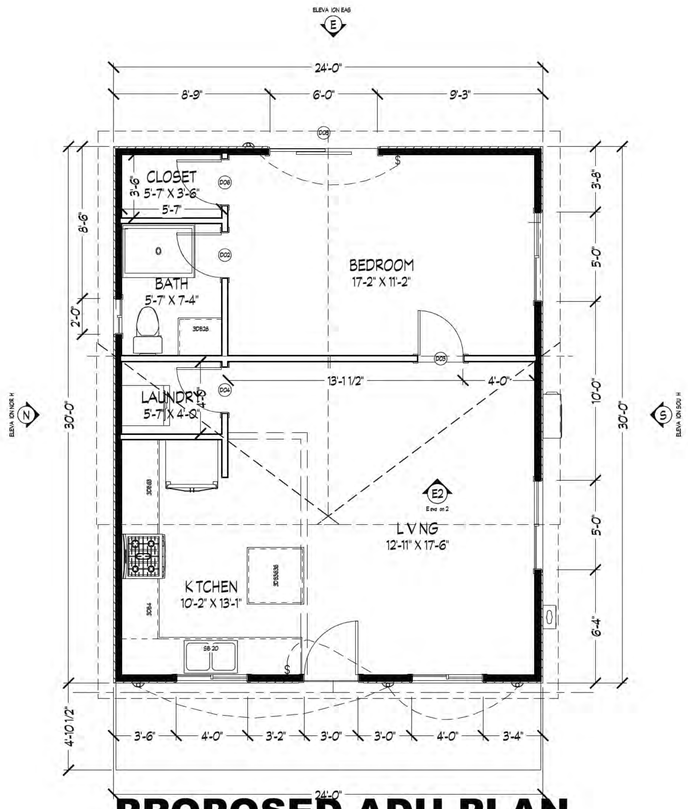
NUMBER	DATE	REVISED BY	DESCRIPTION

1186 Rice Road
Ojai, California 93023
APN# 018 - 0 - 101 - 115

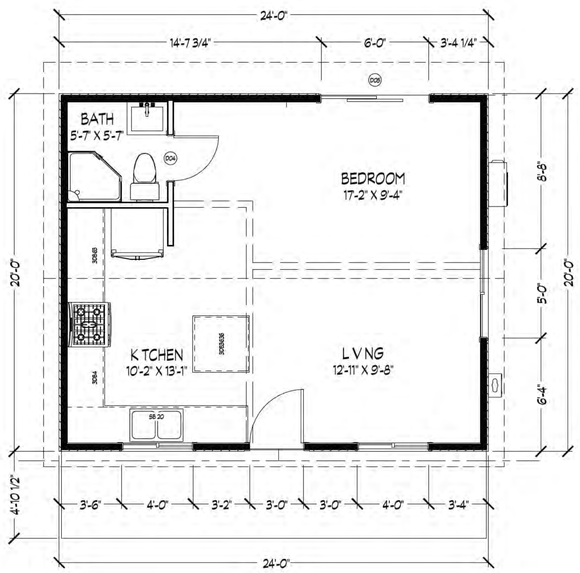
DATE:
1/18/2023

SCALE:

SHEET:
A 0.3



PROPOSED ADU PLAN



AS BUILT ADU

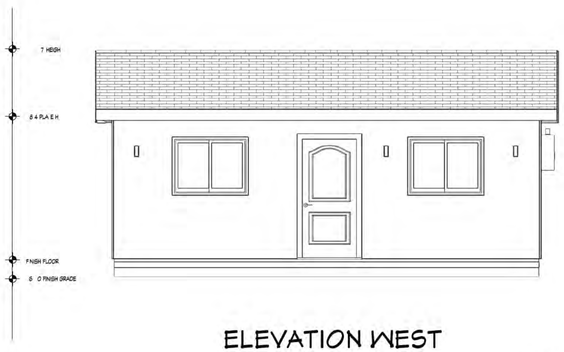
FIRE RESISTANCE
R337
HAZARD SEVERITY ZONE OR WILDLAND INTERFACE AREA SHALL COMPLY WITH ALL SECTIONS INCLUDING THE FOLLOWING;

ANY EXPOSED FRAMING SHALL BE A MIN. SIZE OF 4X4
ALL EXTERIOR SIDING SHALL BE OF FIRE RESISTANT MATERIAL
EXTERIOR WINDOWS AND EXTERIOR GLAZED DOOR ASSEMBLY REQUIREMENTS
EXTERIOR WINDOWS AND EXTERIOR GLAZED DOORS ASSEMBLIES SHALL COMPLY WITH ONE OF THE FOLLOWING REQUIREMENTS:
BE CONSTRUCTED OF MULTI PLAIN GLAZING WITH A MINIMUM OF ONE TEMPERED PANE MEETING THE REQUIREMENTS OF SECTION R308 SAFETY GLAZING, OR
BE CONSTRUCTED OF BLOCK GLASS UNITS, OR
HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 20 MINUTES WHEN TESTED ACCORDING TO NFPA 257, OR
BE TESTED TO MEET THE PERFORMANCE REQUIREMENTS OF SFM STANDARD 12-7A-TWO
CRC R337.8.2.1

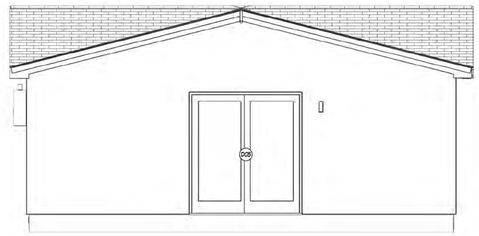
ROOFING COVERING MATERIALS - ROOFS SHALL BE COVERED WITH MATERIALS AS SET FORTH IN SECTIONS R904 AND R905. A MINIMUM CLASS A ROOF SHALL BE INSTALLED IN ALL AREAS OR WHERE THE EDGE OF THE ROOF IS LESS THAN 3 FEET FROM A LOT LINE. CLASS A ROOFING SHALL BE TESTED IN ACCORDANCE WITH UL 790 OR ASTM E108
CRC R902.1

ROOF COVERINGS
THE ENTIRE COVERING OF EVERY EXISTING STRUCTURE WHERE MORE THAN 10% OF THE TOTAL ROOF AREA IS REPAIRED OR REPLACED WITHIN ANY ONE YEAR, THE ENTIRE ROOF COVERING OF EVERY NEW STRUCTURE AND ANY ROOF COVERING APPLIED IN ALTERATION, REPAIR OR REPLACEMENT OF THE ROOF OR EVERY EXISTING STRUCTURE, SHALL BE A FIRE RETARDANT ROOF COVERING THAT IS AT LEAST CLASS A
CRC R903.1.3

SIDING
EXTERIOR SIDING TO BE 7/8" THREE COAT CONVENTIONAL STUCCO



ELEVATION WEST



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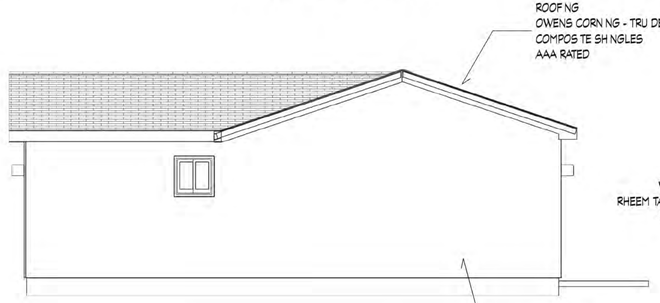

ELEVATION NORTH

ELEVATION SOUTH

NOTES

LAUNDRY
PROVIDE DRYER VENT

EXHAUST FANS
BATHROOM FANS WITH 4" INCH DUCTS - MAXIMUM LENGTH WITH NO ELBOWS IS 70 INCHES SUBTRACT 15 INCHES PER ELBOW.
FANS SHALL BE PANASONIC "WHISPER" SERIES
EXHAUST FANS SHALL BE SWITCHED SEPARATELY FROM LIGHTING SYSTEMS
FAN CAPACITIES
BATHROOM 50 CFM
TOILET ROOMS 50 CFM
KITCHEN 100 CFM

DRYER VENT
DRYER SHALL BE VENTED TO THE OUTSIDE (w/ BACK DRAFT DAMPER). THE MAXIMUM
LENGTH SHALL BE 14 FEET WITH TWO 90-DEGREE ELBOWS. MIN. 4" INCH DIAMETER,
SMOOTH METAL DUCT. REDUCE LENGTH 2-FEET FOR EVERY ELBOW IN EXCESS OF TWO.

LANDINGS
FLOORS OR LANDINGS SHALL NOT BE MORE THAN ½" LOWER THAN THE THRESHOLD WHEN DOORS SWING OUTWORD. PROVIDE A MINIMUM LANDING OF 36" IN DEPTH AT ALL EXTERIOR OPENINGS

ROOF NOTES

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CRC R902.1

ROOF COVERINGS
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CRC R903.1.3

N

PROPOSED ADU PLAN & EXISTING ADU

4 0 4 8 12
1/4 Inch = 1 Foot

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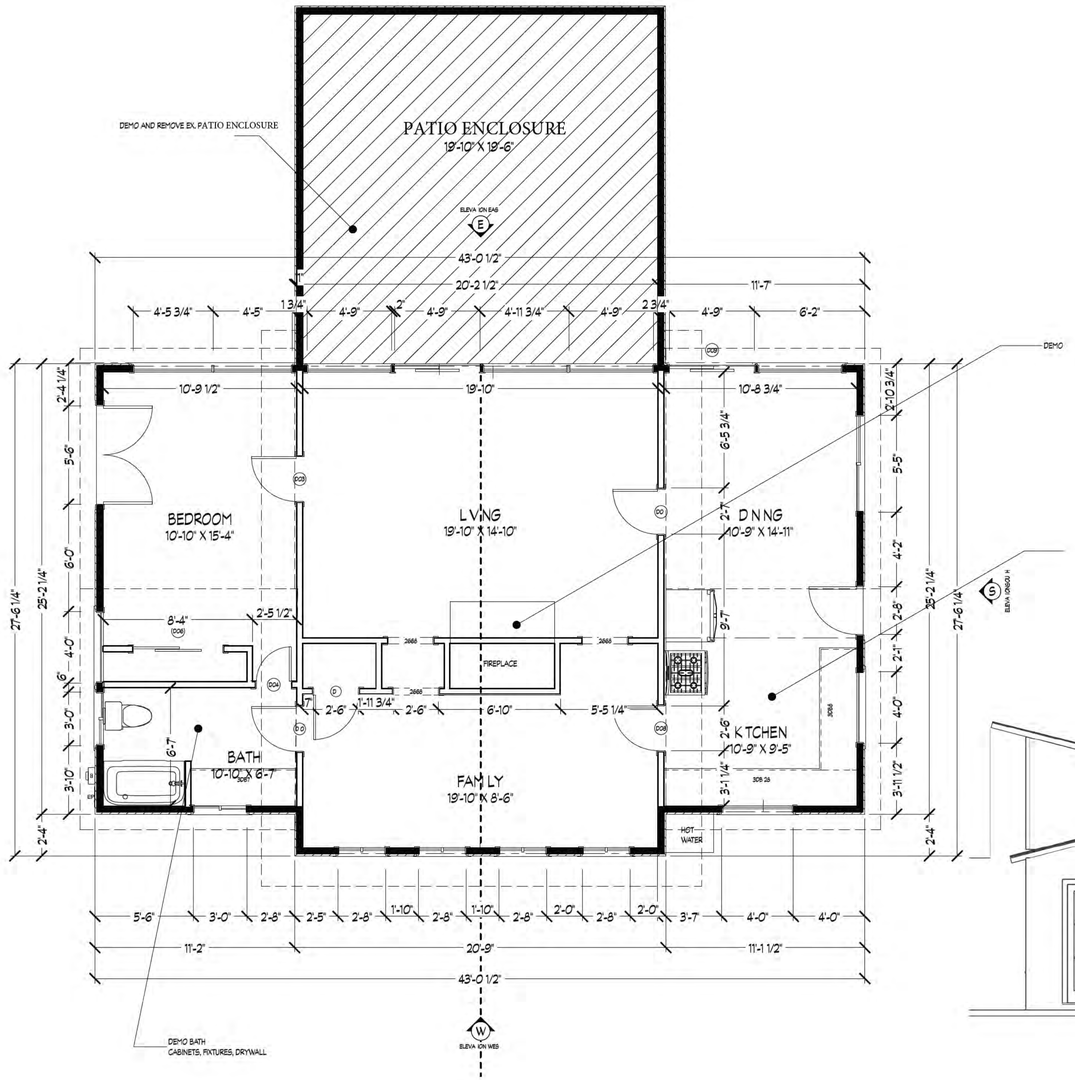

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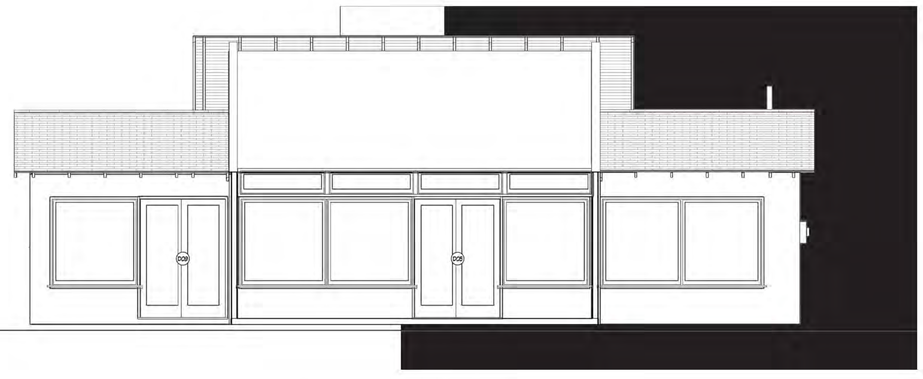

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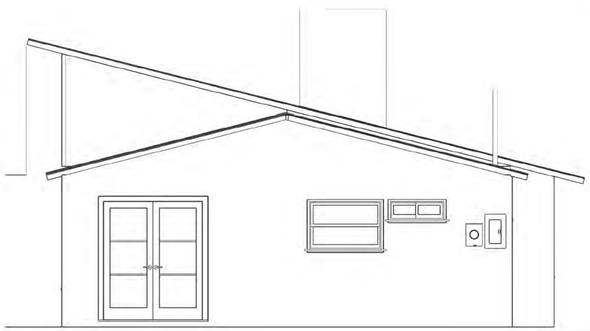
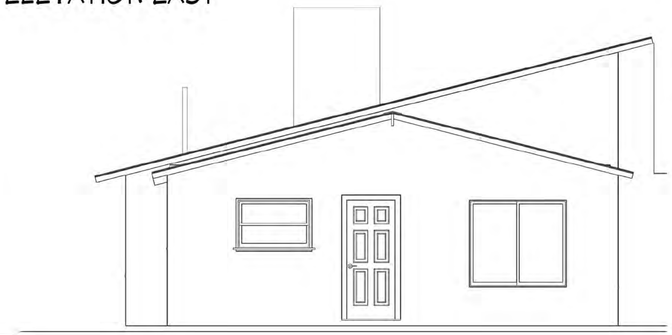


ELEVATION NORTH



ELEVATIONSOUTH

N

EXISTING MAIN HOUSE PLAN

4 0 4 8 12

1/4 Inch = 1 Foot

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